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VESICAL OUTLET OBSTRUCTION

By CLYDE W. COLLINGS, M.D., F.A.C.S., NEW YORK, N. Y.

ELLEVUE HOSPITAL, in New York, is a large city hospital containing no provisions for private patients and providing general, no private nursing. Dr. Keyes collected the statistics of prostatic mortality at this pital from 1916 to 1924. He found that of patients entering the urological service suffer- from benign enlargement of the prostate, per cent died in the hospital or shortly after harge.

During this period, gas oxygen was the anesic of choice (except for cystotomy which usually done under local anesthesia).

ince 1924 our practice has changed in several iculars, viz: 1. Spinal is now the anesthetic choice for cystotomy as well as for prostaomy—and we attribute no death to this anesic.

. Preliminary vasectomy has become a routine cedure—in spite of the fact that three patients eloped epididymitis following prostatectomy

. One stage suprapubic prostatectomy has ived more and more preference over the twoe operation—the mortality is less, the wound plications are less frequent and less severe, sistent fistulas are fewer.

here were 187 operations; one cystoscopy was owed by death; 6 died following vasectomy; died after cystotomy; 1 died after cystotomy s a Young punch; 10 died after a two-stage statectomy; 7 died after a one-stage prostaomy; 2 died after perineal prostatectomy; died after perineal drainage of an abscess of prostate superimposed upon an enlarged state.

One hundred and five patients had a supraic cystotomy preliminary to a prostatectomy; per cent died following the cystotomy; 8 reed or were refused prostatectomy; 67 reached statectomy; and 57 candidates survived.

Of the one-stage suprapubic prostatectomy 51 of 58 survived. Of the perineal, 7 out of urvived.

From the Department of Urology, Bellevue Hospital.

We wish to present at this time our surgical results in relieving vesical outlet obstruction in the urologic service of Bellevue Hospital during the past five years. We will consider the following types of obstruction—benign hypertrophy of the prostate gland, carcinoma of the prostate, fibrous contractures of the bladder neck, obstructing scar following prostatectomy, calculus in the prostatic urethra and tumor of the bladder neck.

Symptoms: Over half of the benign enlargement patients (60 per cent) were admitted with acute complete retention; seven others had overflow from retention; the others had the usual symptoms of prostatism—frequency, burning, dysuria, pain in bladder region, and urgency.

On physical examination one patient in four had the bladder distended to or above the umbilicus. After rectal examination, the prostate was described as being *slightly* enlarged, regular and elastic 17 times, *moderately* enlarged 101, and *markedly* 39 times.

Diagnosis: We do not routinely cystoscope every patient with benign enlargement. This examination, at the wrong time, may be just enough to push the patient over the Great Divide. The cystoscopic appearance of lateral and median lobe intrusion need not be described here.

A spinal tap is *always* done when any change in the reflexes is found. I operated upon a tabetic for prostatism this past year. Needless to say the patient was not benefited. All patients have a roentgenogram taken before operation.

We rarely see a normal phthalein test on admission to the hospital. We regard a red test of 35 per cent as excellent for the first two hours after intramuscular injection. Our average test shows 15 per cent. A number of the patients excreted less than 10 per cent in two hours. Such extreme diminution of function has not dissuaded us from operating.

Likewise, there is almost always a retention of the blood constituents, the non-protein nitrogen between 31 and 100 mgms. per 100 c.c., and creatinin 2.0 to 4.5.

One week after operation the nitrogenous products in the blood usually diminish to slightly above normal—in the very sick mounting until just before death the N.P.N. 180 to 300 and creatinin 2.4 to 6.6.

Types of Operation: Of the 187 patients operated upon, 31 per cent had a one-stage prostatectomy, 36 per cent a two-stage prostatectomy, 19 per cent a suprapubic drainage only, 8 per cent a bilateral vasectomy only, 5 per cent a perineal prostatectomy, and 1.5 per cent required a secondary operation for closure of a persistent suprapubic fistula. Seventy-seven patients had a preliminary bilateral vasectomy. In spite of our care in excising a section of the vas, two to three cm. long with all of the surrounding lymphatics and blood supply, three patients developed epididymitis after prostatectomy. However, the swelling and tenderness of the epididymis was slight, lasting for only two or three days. Four patients had vesical calculi complicating the enlarged prostate. These patients were operated upon in two stages because of the more severe infection accompanying calculi.

Up to 1926 it was our custom to tie an indwelling catheter in a prostatic, as soon as he came in the ward. If he tolerated the catheter, we would do a preliminary drainage during the next few days. If the patient was intolerant an emergency suprapubic cystotomy would be performed at once. In ten days to three months, depending upon the patient's condition, the second stage would be done. We consider the functional tests of importance. Equally important is the patient's ability to walk up and down the ward without tiring. This is a true index of the cardiac reserve strength, which is so essential.

A disconcerting complication of the two-stage operation has caused us to abandon it where possible. The suprapubic wound being open for a long time, gives rise to more persistent suprapubic fistulas.

During the past three years we have been doing a bilateral vasectomy as soon as the patient is admitted. An indwelling catheter tied in for from one to three weeks. A one-stage prostatectomy is performed, a Pilcher bag being used for hemostasis. The bag is removed the next morning and a retention catheter put in the urethra at once. With continuous suction on the catheter, the fresh wound heals very quickly; very little infection results, and it is rare indeed we have to operate upon a persistent fistula.

As stated, we have also replaced general anesthesia by spinal (using 100 mgms. of Novocain crystals) during this latter period. We find spinal highly satisfactory and preferable to gas-oxygen. We have not had a prostatic die from spinal anesthesia. However, it is all important that the proper technique be used. We keep the patient on the side, and the head lower than the body. We use ephedrin exclusively to comb the fall in blood pressure.

Of the 135 prostatectomy patients, 9 (6 per cent) had a severe secondary hemorrhage fo lowing operation. Five died two to six days aft the hemorrhage. Six were given a blood tran fusion, 1 died in 20 minutes, apparently fro anaphylaxis.

Record of Deaths: One hundred eighty-eig patients were operated upon, or cystoscoped f an enlarged prostate. One hundred and twen were discharged from the hospital as relieve There were 58 deaths, 1 patient died after cystoscopic examination only, 30 died follo ing a suprapubic drainage, 10 after a two-sta prostatectomy, 7 after a one-stage prostatecto 6 after vasectomy only, 2 after perineal prost tectomy, 1 after drainage of a prostatic absc superimposed upon an enlarged prostate, 1 aft suprapubic cystotomy and a Young punch.

Four patients refused to have the second sta and 6 patients were transferred to another ho pital because it was thought they would n survive the second operation.

The fact that 30 patients died after the cy totomy and only 10 after the second stage illu trates the *relative safety* of prostatectomy up a patient properly prepared as compared to th more or less emergency character of cystoton

Cause of Death: The usual cause of death w renal insufficiency, so-called uremia (22 of patients); 16 died of acute cardiac failu (myocarditis); 6 of pneumonia; 2 of hem rhage and shock; 1 of hemorrhage and urem 4 of septicemia; 1 of pulmonary embolism; 1 h hemorrhage from the rectum and stomach; n from anaphylaxis after transfusion; 1 of php bitis; 1 of pelvic cellulitis; 1 of diabetes and sch ticemia, and 1 of hemorrhage following vas tomy and drainage of an abscess of the gro

Twenty-one patients were operated upon carcinoma of the prostate. More than half patients entering the hospital with this diagnos complained of frequency, inability to urinate, pa in the lower back, perineum or urethra. A f complained of difficulty, hematuria or urgenc

Seven times the prostate was described normal in size, irregular and stony hard; elev times as twice normal size, and three times thrice normal.

The blood constituents in the 19 recorded ca showed an average retention of 47 mgms. N.P.N. and 2.4 of creatinin before operati The N.P.N. averaged 58, and the creatinin after operation. The phthalein ran a para course.

We have used many types of operation up the obstructing carcinomatous prostate. But various treatments proved quite ineffective.

Two patients had a suprapubic cystotomy on

a perineal implantation of radium and deep -ray therapy; 3 had radium by the perineum, suprapubic cystotomy and a Young punch; a transurethral electric excision of the carnomatous bar plus radium through the perum; 2, suprapubic prostatectomy plus radium; perineal prostatectomy; 1, suprapubic prostatomy; 1, had two suprapubic cystotomies for sical calculi due to the recurring carcinomatous ır. This patient also had two radium implantions and finally died of renal insufficiency after ing under our observation for two years. nother interesting case had two kidney operaons for hydroureter and hydronephrosis caused an unsuspected infiltrating carcinoma of the ostate. The autopsy showed the lower end of oth ureters almost completely blocked off.

Deaths: Seven of these 21 patients died; 5 uremia; 1 of uremia and wide-spread metaasis, and 1 of sepsis. Another patient with etastasis to the pelvic bones, was transferred another hospital and would probably have died our ward in a few months.

Where it is possible we like to relieve the tention as a result of carcinomatous infiltration the bladder neck by some type of transureral operation. Any kind of surgical treatment at will keep a patient away from a suprapubic ening is to be greatly desired. Once a suprabic tube is anchored in place, the patient conlers himself an invalid and is a care to everyone comes in contact with.

Several of the members of the staff are using e cutting current through the urethroscope. We ve been able to reduce the residual urine to l or two or three ounces in six instances; the tient previously being in complete retention or ving a residuum of ten to fourteen ounces. a few months or a year, the carcinomatous sue will probably fill in the furrow and the ocedure must be repeated.

The prostate was diminished in size after dium implantation in four of the fourteen cases which it was tried. My personal view of dium in this connection is,—I use it to ease y conscience—it may do some good in a palative way.

Obstructing Fibrous Bar and Scar at Bladder eck: Fifty-eight patients were operated upon this group. As would be expected 43 per cent ere in the sixth decade; 30 per cent in the th, and the other patients about equally divided tween the third, fourth and seventh. One of e patients was fourteen years of age.

The chief complaints were, frequency 36 times, fficulty 19, painful urination 17, complete retenon 13, urgency 12, overflow 5, and hematuria 4.

After rectal examination the prostate was deribed as small, irregular and firm throughout in) per cent of these patients; slightly enlarged in 45 per cent, and moderately enlarged in 5 per cent.

Cystoscopic examination showed a median bar and bas fond in 23 patients, a contracture of the entire bladder neck in 7 patients, slight intrusion of the lateral lobes plus a bar in 6, diverticulum and a bar in 6, and bar plus vesical calculi in 2.

The residual urine before operation varied from 15 c.c. to 600 c.c., average 240 c.c. There were 14 patients in complete retention and 3 with overflow.

Types of Operation: Twelve patients had a Young punch. Eighteen patients had a Young punch under vision through a suprapubic cystotomy wound; 12 had an electric excision of the bar through the urethroscope; 2 electric excision through the suprapubic wound; 6 suprapubic excision with a cold knife; 2 had suprapubic drainage only; 2 resection of diverticulum plus Young punch; 1 had a Fuller punch through a suprapubic wound; 1 perineal prostatectomy plus a Young punch, and 1 perineal prostatectomy. This last patient had a persistent perineal fistula. Obstructing scar tissue at the vesical outlet was electrically excised and the fistula closed. Two of the Young punch patients were operated upon a second time.

Results of Operation: Thirty-three patients had some type of Young punch operation. Of these, 8 died—a mortality of 24 per cent. The cause of death—2 sepsis, 3 of uremia, 2 of hemorrhage and uremia, and 1 with acute abdominal distention. Sixteen of this group were discharged as "improved"; 4 had persistent fistulas (1 closed later following electric urethral excision), 1 discharged with an indwelling catheter, and 5 were discharged with a residual urine of one, two, four, eight, and nine ounces, respectively. Among the twelve electric excision of bar patients there were no deaths; 10 were discharged as free from residuum after operation; 1 with three ounces, and 1 with a persistent suprapubic fistula when transferred to another hospital. Two patients were relieved of their tight bladder neck by electric excision through a cystotomy wound (urethral instruments would not pass).

Four patients had a suprapubic excision of the bar with knife or scissors, 2 of them had a suprapubic fistula on discharge, the other 2 were discharged as improved in 25 and 41 days. Two patients had a suprapubic drainage only—1 died and the other was transferred to another hospital on account of a cardiac condition. One patient was relieved by a Fuller punch through an open operation.

A summary of two of obstructing scar cases following prostatectomy are of interest—Case 1; aged 78, was admitted to the hospital in August, 1926, with a suprapubic fistula following a prostatectomy performed elsewhere. Cystoscopy

tal phenomena in terms of diseased structure, especially of the brain. Thus the organic point of view came to dominate the field and the diagnosis of hysteria was frowned upon, so that the treatment of these cases was left to cultists, quacks and ministers.

The first modern conception of the neuroses was introduced by Charcot, who discovered that hysterical manifestations could be produced by a "pathogenic idea." Further studies by Bernheim showed the tendency of the human mind to accept without proof, and, even contrary to reason, assertions made by others, provided the recipient was in a suitable mood. This native capacity for suggestion was the cause of hysteria. Pavlov formulated a biologic approach to the mental phenomena, while Freud's idea was purely a psychologic concept of the etiology, development, and treatment of the neuroses. According to Wechsler, it is quite probable that some day the neuroses will be explained in terms of neurophysiology, or by further studies in biophysics, or perhaps more knowledge of the endocrine glands.

There is no uniformity in the theories concerning the etiology of the neuroses, although practically all writers agree there is some sort of constitutional predisposition and perhaps some hereditary factors. The *biological* theory holds that neuroses are instinctive reactions of an individual in relation to the social group as a means of protection. These are primary instincts, regarded as inherited reflexes, in which every individual will react in a definite manner to given situations without having had previous experience. There is also a constant reaction for self-preservation and in times of great stress, as seen in wars, neurotic symptoms become an unconscious defense reaction in which imaginary sickness represents a great gain and thus spares the neurotic from the danger of destruction or the accusation of cowardice. Similarly. the struggle for everyday existence with its economic battles exposes the predisposed individual who cannot face reality and who seeks protection, perhaps involuntarily, by means of the neuroses.

The *organic* theory represents a physical or biochemical change in the cerebrospinal and vegetative systems induced by endogenous or exogenous toxins produced by exhaustion, infection, or local trauma. However, only a small percentage of persons exposed to these conditions develop neuroses so that they can only be regarded as exciting or precipitating causes superimposed upon a suitable or impressionable subject.

The *physiologic* theory suggests a "functional" disturbance of the brain, such as a breach at the synaptic junctions with consequent dissociation at different levels of the neuraxis. Paralyses and anesthesias are the result of the interruption at those levels which prevents the passage of centrifugal or centripetal stimuli. There may be a raising or lowering of the threshold in nervous stimuli due to various factors.

The *behavioristic* theory implies that all behavior is but a series of physiologic responses or conditioned reflexes. Experience and training alone account for the reactions. If one can direct the formation of those reflexes, that is, establish the conditions, one can create physioligic pathways and make and also unmake neuroses. Danger and fright can call forth instinctive reactions and establish behavior patterns. The most common view in this theory is that neuroses are caused by or are the result either of auto- or hetero- suggestion.

The *glandular* theory bases the production of neuroses on the dysfunction of the endocrine glands. For example, the gonads, influencing sexual function, play an important part in the production of neuroses. There are also other evidences that the endocrines play a part as seen in the "lump in the throat," tremors, salivation, sweating, and diarrhea in the early cases of hyperthyroidism. Then there are headaches, nausea, and apathy in cases of hypo-adremia.

A classification of the neuroses is as diverse as the theories of their production. However, Dercum separates them into four groups:

(1) Psychasthenia (2) Hypochondria (3) Neurasthenia and (4) Hysteria.

(1) Psychasthenia is defined as a condition where there is a preexisting neuropathy plus nervous exhaustion, so will not be considered in this paper.

(2) Hypochondria is the suffering from a fixed conviction of illness without existence of functional or organic disturbances. The patient fixes his attention to some "internal" ailments and constantly gives some somatic expression to them without any real pain sensation. His bowels do not work, his stomach does not digest properly, his gonads do not function. The essential thing is that the hypochondriac is forever busy with his bodily functions, doing something to make his organs work, always seeking medical or quack relief and never getting it.

(3) Neurasthenia is a fatigue neurosis. The cardinal symptom is ready exhaustion, either mental or physical. Perhaps due to modern civilization with its undue expenditures of energy there results an over fatigue which if long continued results in a condition in which the normal amount of rest and food no longer suffices to restore the organism to the normal equilibrium. A symptom complex established is undue irritability, ready exhaustion and exaggerated response to outside stimuli. The symptoms may also be divided into (1) *Motor,* as ready fatigue irritability, increased reflexes; (2) *sensory,* as fatigue sensations, aches and pains, ready exhaustion; (3) *psychic,* as incapacity for sustained mental effort, diminution in concentration, lessening in spontaneity of thought,

and diminished self-control; (4) *somatic,* in which symptoms everywhere indicate deficient innervation and deficient inhibition. This last group concerns us most in considering the visceral neuroses. As functions of every organ of the body are governed by centres in both the spinal and cortical level to and from which impulses are transmitted to these centres, it naturally follows that such disturbances of the nervous system as are found in neuroses should give rise to disturbances in these functions. The centres which have been localized in the cortex are the motor, sensory, vasomotor, trophic for skin bones and points, cardiac, respiratory, laryngeal, gastric, mascitory, intestinal pancreatic, hepatic, salivary, renal, vesicle, genital, lachrymal, speech, visual, auditory, smell, taste, psychic, and possibly for temperature and metabolism. The centres whose disturbances are concerned in this paper are those which preside over the functions of the internal organs and the vasomotor, which regulates the circulation in them. Impulses pass to and from these centres by two paths. Those for *function* pass through both the pneumogastric and spinal centres and thence by the former nerve or spinal nerves through their sympathetic branches to the organs. Those for *impulses* from the cortical vasomotor centres pass downward to the centres in the spinal level and thence by the branches of the spinal nerves to the organs. These latter branches of the spinal nerves form what was previously known as the sympathetic system.

It is not surprising, then, that any mental disturbance which disorders the control of the psychic centres over those centres which control the functions of the internal organs, should result in disturbances of their functions. Striking examples are vomiting or indigestion from fear or disgust, urinary disturbances due to emotion, rapid heart action in excitement, contracted pupils in anger, etc. In this connection it is interesting to note how the mind can influence the course of *organic* disease by the production of depressing emotions, which lower resistance and hasten the invasion of bacteria, or of the pleasing emotions such as belief in cure, which tend to hasten recovery. The physical effect of disturbances of psychic control over the cortical centres of various organs of the body shows itself by disturbances of their function and changes in their circulation. A few instances are the paralyses, muscular tremors and spasms, anesthesias, parasthesias, hyperesthesias, phyeresthesias, local anemias and hyperemias, edemas and perspiration. In neurasthenia, the irritable weakness of these centres manifests itself in a feebleness of function and unnatural reaction from slight causes. Examples are the habitual cold, clammy skin, easily induced flushing and perspiration, unsteady pupils, easily exhausted reflexes, and easily induced muscular fatigue.

Circulatory neurasthenia is characterized by rapid feeble heart action, pulse 100-160, orthostatic tachycardia, palpitation so violent as often to cause oppression, pain, suppressed voice, pallor, and syncope, cyanosis, and absence of radial pulse. There may be functional murmurs, urticaria and dermographia.

The *gastro-intestinal tract* in neurasthenia may show a loss of digestive power, pain following meals, gaseous fermentation, gastric distension, often vomiting, due to altered secretion and muscular relaxation. Enteroptosis and constipation are common findings, and the patient complains of anorexia and eats just from sense of duty. He may associate certain foods with gastric disturbances and often eliminates them from his diet, and because he is afraid of a recurrence of these disturbances these articles are permanently dropped, so, that often his food is reduced to just milk or soup. Anemia, acidosis, and emaciation frequently are seen following such a dietary restriction by the patient.

The *respiratory system* presents feelings of choking, stitch in side, or pains in the chest. There may be an increased rate of respiration but no true dyspnea.

In neurasthenia the *genito-urinary system* is often affected. There may be large amounts of urine of low specific gravity or small amounts with high concentration. The laboratory findings may show traces of albumen, occasionally slight glycosuria, but no casts. In the male there may be faulty erection, premature ejaculation, diminution of the sexual appetite. In the female —irregular menstruation, pains in the back, and tenderness in the ovaries are common findings.

The *eyes* may be affected as loss of power of the muscles of accommodation resulting in blurring of vision, fatigue of the retina causing narrowing of visual field, photophobia, pain in the eyes. The *auditory mechanism* may be impaired by subjective sensations of noise.

The other main group to be considered is (4) Hysteria, and it should be regarded as a real clinical disease because of the general uniformity and character of its symptoms. It is defined as a disease of suggestion, but it is often found in persons who are ignorant of such a thing as hysteria and who frequently will simulate a disease which they have never seen or heard of. The condition is usually the result of some profound mental shock or emotion and is most often seen in persons with impressionable nervous systems. There is hardly a sign or symptom of organic disease that hysteria cannot simulate. The hysteric subject may present moods, anxiety, character or personality disturbances, and somatic manifestations. Of these latter conditions hysteric *pain* is the most common, and it may be "neuralgic," "migrainous" or "rheumatic" and may occur anywhere in the head, body or limbs.

The pains may be diffuse as to include a large area of body surface or an arm or a leg. Or it may be localized to a small area of the scalp, the tip of the coccyx, or the little toe. Pains in the abdomen may present the picture of a peptic ulcer, an appendix, gall bladder disease, or renal calculus. Pains in the limbs are often accompanied by anesthesias, paresthesias, etc.

Hysterical paralyses, partial or complete, flaccid or with contractures, may occur. Usually there is no atrophy at first, no loss of reflexes, no reaction of degeneration. The gait may simulate most any ataxia. Often a patient will be unable to walk but may swim, crawl, or even run. Aphonia is the most common form of psychogenic paralysis and may be sudden in onset, following great emotional stress.

In the *gastro-intestinal tract* hysteria may produce anesthesia of mouth, lips, tongue and pharynx, with absence of gag reflex. Hysteric coughing, yawning, belching and hiccoughing are common—the latter being caused by spasms of the diaphragm, and is usually crowing in character.

Globus hystericus, esophagospasm, dysphagia, and pylorospasm are common manifestations. Some cases pretend to refuse all food for the purpose of exciting interest and when accompanied by persistent vomiting may result in extreme emaciation and inanition. Vomiting may represent a pregnancy phantasy or may be the result of some disgusting dominating obsession. On the other hand, some of the "pernicious" vomiting cases seen in true pregnancies are hysteric in origin. Hysterical edema of the stomach, with or without transudation of blood, may cause indigestion, vomiting, epigastric pain, tympanites and abdominal pulsation. Abdominal distension at the time of the menopause may simulate a pregnancy (pseudocyesis), especially when accompanied by amenorrhea, usually common at this time. Aerophagy, or swallowing of air is common, as are borborygmi, or abdominal noises, and often startling expulsions of flatus. Hysteric constipation is very common, which leads to the self-gratifying habit of daily enemas for the neurotic. Diarrhea may be the result of a nervous mucous colitis due to disturbance of both the secretory and motor functions of the intestine and are frequently diagnosed as enteritis.

Paroxysms of rapid shallow respiration unaccompanied by dyspnea, may be seen. Other *respiratory affections* are occasional paralysis of the vocal cords and edema of the glottis.

Paroxysmal tachycardia with precordial distress may result in a picture of pseudo-angina pectoris. Vasomotor disturbances may produce blanching or blushing of the skin, cyanosis or edema, dermographia, rectal or vaginal pruitis.

The *renal system* presents a wide variation of conditions. There may be polyuria, due to dilatation of the renal vessels causing a secretion of a larger amount of urine of low specific gravity. A renal edema may be present with this dilatation resulting in small amounts of albumen appearing in the urine. The opposite condition of anuria may result from the contraction of renal vessels causing a diminution or temporary suppression of urine. Incontinence may result from hyperesthesia of mucous membrane of the urinary tract, or there may be retention due to anesthesia. The genital system may show excessive, prolonged, or too frequent menstruation due to vascular dilation, or scanty or suppressed flow because of vascular spasm. Hyperesthesia or anesthesia of the mucous membrane of the vagina frequently is the cause of marital incompatibility.

Hysterical fever resists all antipyretics and, being continuous, or irregular, often simulates typhoid, tuberculosis or meningitis.

Muscular spasm, strabismus, hysterical corneal anesthesia may affect any organs of sight. There may be hyperthesia of hearing and occasionally loss of auditory memory.

The diagnosis of the neuroses is most important because herein rests the prognosis and treatment of the patient. Four points must be borne in mind: first, the differentiation of psychogenic from organic diseases; second, the differentiation of one neurosis from another; third, the differentiation of the neuroses from the psychoses; and fourth, of the neuroses from malingering. The profession, in general, regards the diagnosis of neurosis as a dangerous one, and it should not be made on exclusion alone. It should be made with caution on a patient over forty whose nervous mechanism has previously been sound, because the history of a neurotic is usually traceable to infancy, adolescence, or perhaps an inherited instability. Also a patient with definite organic disease may have neurotic symptoms engrafted upon it. The absence of Babinski's sign, unequal reflexes and the like does not necessarily speak for a neurosis, and again, incipient organic conditions as latent carcinoma of the spine, postencephalitic tic or spasm, or early cerebral arteriosclerosis may lead to the erroneous diagnosis of neurosis because of the temporary absence of physical signs.

In practice, clinics and hospitals, one seldom meets with hysteric paralyses, blindness, anesthesias, gait anomalies, etc., but most commonly one sees the anxiety neuroses, phobias, and neurasthenia. The age is most common within the years of greatest stress, as between thirty and fifty. As Bassler says, "Cases of true neurosis are seen in individuals old enough to care for themselves and others, and young enough to engage in the many activities of life. While not exempt in the child, or the aged, the nervous

organism is less impressionable to the establishment of neuroses in the first, while the waning digestive power, less activity of life, or discretion from years of experience seem to form a sort of immunity in the second." As to social status, no group is exempt, but neurotics are more frequent among brain than hand workers. Exciting causes may be stated as overwork, emotional stress, trauma, infective fevers, chronic intoxications such as lead or arsenic, and exhausting conditions as seen in cases of hemorrhage or starvation.

Hyperthyroidism may have only symptoms of anxiety in its early stages and a careful search must be made for an enlarged thyroid gland, ocular signs, and increased basal metabolic rate.

Multiple sclerosis must be carefully considered, but the presence of true nystagmus, absent abdominal reflexes, pallor of the optic discs should exclude hysteria.

Epilepsy usually can be ruled out because in hysteria there is no true unconsciousness, tongue biting, absent pupillary reflexes, incontinence, or history of injury during falls in attacks

Brain tumor must be borne in mind in cases of prolonged headache, but careful observation over an appreciable length of time should establish the diagnosis.

Caries of the spine is occasionally mistaken for hysteria so that careful *x*-ray studies should be made.

Encephalitis lethargica often stimulates hysteria in its incipient stage.

Pernicious anemia must be ruled out in cases of pains in limbs accompanied by paresthesias, hyperesthesias. Often hysteria will have these dysthesias together with dysthesia of the tongue and mucous membrane of the mouth so that a picture of pernicious anemia may be presented.

Gastro-intestinal neuroses often present difficulties in diagnosis. Pain, anorexia, gaseous eructations may simulate organic disease, but usually the vomiting is not related to meals, is unaccompanied by definite pains, and *x*-rays of the gastro-intestinal tract should rule out ulcers or neoplasms. A good point to bear in mind, since neuroses are conditions of middle life, is that in the two extremes of ages, digestive disturbances are more commonly due to dietetic errors in the young, or in the old to neoplasms or waning digestive power.

The *renal system* with urinary symptoms often presents a picture of nephritis, but lack of casts and practically normal kidney function tests rule it out.

Respiratory system hysteria may present a classical case of pulmonary tuberculosis with cough, anorexia, loss of weight, nocturnal sweating, and even pulmonary hemorrhage. Here again a correct diagnosis should be established with the help of the laboratory and *x*-ray.

Briefly in differentiating neuroses from psychoses one must note the following points: The neurotic seeks adjustment, while the psychotic is anti-social. In neuroses the symptoms are *real* to the patient, while the malingerer *purposely simulates* a disease for some gain. The malingerer usually resents frequent physical examinations, while the neurotic welcomes them.

Treatment must depend upon the individual case and conditions appertaining to it. The patient must be taken seriously and should never be told that his ills are imaginary. A patient with neurotic headaches or indigestion is really ill and it is useless to tell him to "forget it," that there is nothing wrong with him. In fact it only tends to make him worse because he is sure that he has some rare disease that defies present day diagnosis or treatment. If no organic condition is found, the patient should be assured of the fact, but also be told that this does not mean he is not sick. It is best to explain to him how shock, sex, social conflicts, worry and present day mode of living may be capable of causing nervousness, and that mental upsets may be responsible for all kinds of physical ailments. Then one can explain plausibly to him that if these mental upsets can be remedied, the physical conditions will then be cured. However, care must be taken not to preach to the patient or assume the role of a moralist.

Foci of infection should be carefully removed. Rest with an occasional change of surroundings, or "milk cures," especially in emaciated subjects, may be beneficial. Suggestion has met with some success, particularly in cases of anxiety and phobias. The use of the endocrines is in its infancy. Electr d massage are often be exercised in the us hypnotics for insomnia, laxatives for constipation, and enemas play into the patient's hands. In general the less medication the better, and usually a bitter tonic or some other placebo is best. Always bear in mind that a patient who has the native capacity for suggestion and the development of a neurosis, has that same receptive mood for accepting suggestions that may effect a cure.

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MEDICAL AND SURGICAL ASPECTS OF ACUTE BACTERIAL INFECTIONS

PAPERS PRESENTED DURING THE THIRD GRADUATE FORTNIGHT OF THE NEW YORK ACADEMY OF MEDICINE, ABSTRACTED BY FREDERICK P. REYNOLDS, M.D., MEDICAL SECRETARY, COMMITTEE ON MEDICAL EDUCATION

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DR. FRANK L. MELENEY

Surgery, application of heat, blood transfusions, and continued research in the use of the ultra-violet ray were advocated as promising methods of dealing with skin infections by *Dr. Frank L. Meleney,* Assistant Professor of Surgery at Columbia University, in a paper entitled "Infections of the Skin and Subcutaneous Tissue —Including Infections of the Fingers and Hand."

"In recent years," he said, "ultra-violet light has been given a great deal of credit for improving the general body resistance. We do not know how it acts; the subject is a relatively new one but it offers an encouraging field of research which in the future will almost certainly rationalize this method of treatment. Still more recently the question of vitamin deficiency, as a predisposing factor to infections, has been given a considerable amount of attention both by clinical and laboratory observers. Vitamin B, has been considered the most important vitamin element, the ingestion of which increases the body's resistance to infections. Here again the question has not been settled, but the popular use and abuse of yeast is one of the results of this investigation. It has been said that the normal diet of man has an excess of this vitamin, but where the patient can not take the normal diet, it is possible to increase to a considerable extent the intake of vitamin B.

"Transfusions are being used more and more in the treatment of infections, but there is no unanimity of opinion with regard to their real virtue inasmuch as protective antibodies are not present in serum and the relatively small number of leucocytes transferred could not be expected to have any particularly favorable action. In anemic cases resulting from the prolonged infection of hemolytic organisms, transfusion is of real value but I have seen transfusions used repeatedly in the acute stages of infection without any definite improvement in the condition of the patient and certainly transfusion should never be made a substitute for the proper surgical procedure. On the other hand during convalescence, after the acute process is under control, transfusions do a striking amount of good, perhaps boosting the patient more than any other form of treatment. The use of medicines in these infections is of very little avail.

"In our treatment of well established infections, our resources are limited. We are reduced to two main methods of treatment,—namely, surgery and the application of heat both used with painstaking care and the soundest surgical judgment available.

"A clear knowledge of the anatomy of the skin as well as the tissues just beneath the skin is necessary for the understanding of the development and progress of these acute infections, for the anatomy as well as the physiology of the skin, affects in no small measure the course of events.

"After the initial signs of inflammation appear, the course of events depends upon the balance of the forces pitted against one another and the structure of the battleground over which they struggle. The battle may exhibit any degree of intensity.

"While we have been considering how the bacteria spread from the site of the original focus, what has the infected host been doing to combat this spread? The less resistant bacteria are destroyed and the less resistant cells are destroyed. Here we have a survival of the fittest so that as the bacteria which survive proliferate, the more resistant qualities are propagated from generation to generation.

"It is of importance for the surgeon to know the organism causing the infection. At times the site of the lesion and the nature of the injury will enable one to predict, with some degree of certainty, the species of organism which has been introduced and the type of infection which may develop. For example, the infections which arise following a human bite are known to carry a mixture of mouth organisms which produce a fairly characteristic initiation and course of infection. Lacerated wounds, produced by fragments of shell in war time, carrying in clothing and soil, are known to frequently result in an infection with the organisms of the soil and feces, gas-gangrene, tetanus and the like. Infections which develop after operation, particularly where the tissues have been uncontaminated before, are known to yield the organisms which are common in the air or in the nose and throat of the operating personnel.

"In general it may be said that when a wound is infected with two or more different varieties of organisms the infection is more severe than if only one of these types is represented.

"With the foregoing general principles in mind, how shall we treat infections of the skin and subcutaneous tissues? The purpose of the surgeon in his treatment of all of these conditions should be to restore the part to its normal form and function as soon as may be. The ideal result

would be a resolution of the part without any evidence of destruction of tissue but more often than not when an infection is well under way, the surgeon's knife may be called upon to destroy superficial tissues in order that there may be a cessation of further destruction of the deeper structures.

"Prophylactic measures with regard to those infections which appear to be more or less spontaneous but which arise from organisms entering through hair follicles and sebaceous and sweat glands, consist in frequent washing of the skin with hot water and soap particularly after the exposure of the body to known sources of contamination. This especially applies to doctors and nurses who frequently handle infected wounds. The prophylactic treatment of infections which arise in wounds has of course been given great consideration by countless doctors in times past. This is more important and more difficult than that which we apply to avoid spontaneous infections because of the variability of the depth and extent of the wound and the variety and number of the organisms and other foreign bodies which are introduced into the wound. Our whole surgical aseptic technique is prophylactic against these infections in operative wounds. When wounds have occurred from injury, we must assume that organisms have been introduced and from our experience we may estimate to some degree the number and kind if we know the conditions under which the injury took place. The chief prophylactic measure is the removal, as completely as possible of these organisms and other foreign bodies from the wound Likewise, any injured tissue which the part can safely spare and which might favor the growth of those bacteria which remain, should be excised. The former can frequently be carried out to a considerable extent by the patient himself or the lay members of the family, if a doctor is not immediately available but the doctor must review this preliminary treatment and carry it further if necessary. Certain life insurance companies have circularized the public with regard to this important step in the prevention of wound infection and have particularly advocated cleansing rather than the use of antiseptics for fear too much reliance should be placed upon the latter and the cleansing be neglected. This emphasis on the cleansing can not be too greatly stressed but with the wound as clean as possible, antiseptics may be used and in my experience, Dakin's solution, bichloride of mercury, mercurochrome or iodine locally do more good than harm, and their efficiency probably rates in the order named.

"Vaccines have been used more extensively than sera in the treatment of these cases and have been given the credit for marvelous cures for which there is little evidence.

DR. HANS ZINSSER

Dr. Hans Zinsser, Professor of Bacteriology and Immunology at Harvard University Medical School, Boston, delivered the Carpenter Lecture of the year. His subject was: "Immunity—General and Local."

Discussing the physiological significance of immunity, natural and acquired, and the relationship between the significant chemical constituents of the bacteria and cells in antibody formation, Dr. Zinsser said that "the principles that govern resistance to bacterial infection in general are applicable to a limited degree only in tuberculosis and syphilis, and are still less so in the protozoan diseases and infections caused by filtrable agents. One of the developments of modern immunology is the recognition of a number of variants of the defensive mechanism about which we cannot generalize from our knowledge of immunity in the bacterial diseases."

Discussing the enhancement of the natural defenses of the body against diseases, Dr. Zinsser said that immunology like other branches of knowledge has had alternating periods of rapid advance and apparent stagnation.

"Immunity in its broad connotation is the study of the reactions of animal and plant tissues to foreign materials which can neither be utilized for nutrition nor excreted without alteration. The various responses which are initiated by the entrance of foreign materials constitute inflammation, and this term—though usually applied to the local reactions—should be physiologically extended to include the deeper consequences which take place in remote regions of the body. Conceived in this way, inflammation is the consideration of natural immunity by which all animals and plans, not previously infected, defensively respond. The forces of natural resistance are normal reactions, and physiological emergency apparatus, called into play when foreign materials enter the tissues. The chief difference between natural immunity and acquired immunity to infectious disease is that which results from the antigenic properties of the bacteria and their poisons. In regard to the mechanism of specific antibody production, we are quite as much in the dark as we have ever been."

Dr. Zinsser said that observations "strengthen a growing impression that we must look upon the skin as a special organ, with individual functions and reaction capacities considerably more

far reaching than its mere significance as integument.

"We must accept as a fact that the injection of many substances—particularly bacterial proteins, foreign sera, etc., may exert a profoundly beneficial, sometimes curative effect upon a variety of acute and chronic infections, provided dosage and activity of the chosen substance are appropriate to the physiological responsiveness of the patient. By this we mean too large a dose may be as harmful as an appropriate dose may be beneficial and that a material and dosage likely to give excellent results in a vigorous patient may perhaps be harmful in a patient already considerably enfeebled. It is, therefore, a therapeutic procedure not without danger, but it cannot be ignored as an important field of study.

"As a natural corollary to studies on methods of reinforcing natural resistance there is developing a growing interest in problems of host susceptibility. There are many infections to which man is so highly and uniformly susceptible that practically all previously uninfected individuals contract them, if thoroughly exposed. Thus there are no significant differences in human susceptibility to measles, mumps, small pox, influenza, cholera, plague and some other diseases, and the supposedly greater susceptibility in childhood can be shown to be fictitious and attributable to the fact that exposure and consequent immunization is sure to have occurred before adolescence.

"There is no other class of disease in which the average resistance of the normal human being is relatively so high and in which infection occurs, as a rule, in the training of predisposing diseases or of fatigue, exposure to sudden changes of surface temperature and other accidentally depressing factors which let down the bars that ordinarily prevent penetration.

"There has been much evidence in the post-war increase of tuberculosis in certain European countries which has suggested direct relationship between the incidence of tuberculosis and fat deficiency. The time honored used of cod liver oil may depend upon its fats—or more probably upon its vitamins—but there seems to be little doubt of its actual beneficial influence. The suggestion of dietetic relationship to susceptibility is not a recent one. That nutritional disorder predisposes to infection seems likely.

"The protective serum body is not an antibody in the usual sense. It persists in the blood of convalescents for years, and it cannot be increased by hyperimmunization to anything like the extent that this can be done with bacterial antibodies."

Dr. Zinsser concluded that of all the biological branches of medicine no other is more deeply involved with the problems of the clinic than immunology.

DR. WILLIAM H. PARK

Reviewing the use of serums in combating contagious diseases like diphtheria, tetanus, scarlet fever, erysipelas, meningitis, poliomyelitis and pneumonia, *Dr William H. Park,* Director of Laboratories of the Department of Health of New York City, reviewed the marked progress in the field and declared that he doubted "whether any case of diphtheria has ever developed within a week after a person has received 1,000 units of antitoxin."

He discussed the therapeutic use of various sermons and methods of administering them. Among other things he said:

"The first disease I shall touch upon is diphtheria. There is probably little new that I can say to you on the use of antitoxin in this disease.

"The use of antitoxin to produce passive immunization against diphtheria is exceedingly successful. I doubt whether any case of diphtheria has ever developed within a week after a person had received a thousand units of antitoxin. We must remember that this passive immunity is not lasting. It is quite different from that which develops after toxin-antitoxin or toxoid. It is interesting to note that in the 35 years which have elapsed since the discovery of antitoxin and the twelve years since the general use of toxin-antitoxin or toxoid, that the death rate has been reduced from 150 to about 5. Undoubtedly, the severity and mortality of diphtheria would have lessened considerably during these 35 years, owing to general health measures, but the most careful scrutiny of the facts makes us confident that much of it is due to diphtheria antitoxin and to toxin-antitoxin.

"The next disease that I wish to discuss is tetanus. Every clinical case of tetanus is a late one. There is in the infected wound no suggestion of tetanus. It is only when the nervous and muscular systems have become involved that we realize that tetanus texin has been acting for some time. There are only two proper methods of administering antitoxin in tetanus. One is through intravenous injections, the other through intraspinal injections. These should be combined. Experimental evidence shows us that an animal can be saved by an intraspinal injection when it cannot be saved by an intravenous injection, and the majority of those who have had most to do with the treatment of tetanus, believe that that the same is true for the treatment of human beings. We have just stated that in diphtheria we only give one dose of antitoxin. In tetanus

we give several doses. We have some evidence that is advisable to keep the antitoxic content of the spinal fluid and of the blood at a high level. It is possible that the first injection of the antitoxin both intraspinally and intravenously accomplishes nearly all the good that successive treatments accomplish. However, the disease is such a dreadful one that we want to do everything that seems to be of possible avail. We must remember that in the severe and rapidly advancing cases, that antitoxin will probably be given too late to do any good. It is the moderate cases which would probably be fatal without treatment that antitoxin shows its best effect.

"Scarlet fever infection is due to strains of hemolytic streptococci. These produce injury through both extracellular and intracellular toxins. Scarlet fever antitoxic serum is obtained from horses injected with a strain of maximum range of toxin production. The horse should respond markedly to all the different toxins. Such a serum has a marked neutralizing effect on the toxin in the patients during the first few days in the great majority of cases of infection.

"In erysipelas the streptococci are more variable than in scarlet fever. We have had very little personal experience with the use of the antitoxin serum, but from the literature and from personal communications, we believe that good results are obtained from its use. The antitoxin must match the toxin. This is secured by injecting the toxin obtained from several types. The dosage is the same as in scarlet fever.

"It is well known that antimeningococcic serum has been used in the treatment of meningococcic meningitis intraspinally for about 23 years. For the past twenty years, its use has been very general. Earlier than this, in 1905-6, a serum was produced at the Research Laboratory which was administered intramuscularly without definite results. The value of the antimeningococcic serum intraspinally is almost universally accepted.

"It has been repeatedly reported to us by physicians in the army overseas, that while poor results were obtained by the use of many sera, uniformly good results were obtained by the use of the serum from the Pasteur Institute in Paris and from the Research Laboratory in New York City.

"During the past twenty years, fashions have changed from time to time in the method of administering the serum. In the earlier days, the serum was given intraspinally once in 24 hours for four doses and for a longer time if the fluid did not become sterile. A rather moderatly sized dose of serum, about 20 cc., was advised at that time. Since then certain workers have advocated a more intensive method of treatment. They have administered the serum intraspinally every twelve, eight, six or even four hours. It has also been recommended that the serum be given intravenously or intramuscularly or both in all cases in addition to the intraspinal administration. This intensive method of treatment was greatly in vogue during and shortly after the war, but a study of the mortality in certain institutions where this method was carried out, has been very unconvincing as to its value. Indeed, the mortality of cases thus treated has been generally much higher than those treated more conservatively.

"The Meningitis Division of the Research Laboratory has quite consistently followed a conservative method of treatment. The physicians of this division as a rule administer 20 cc. of serum intraspinally every 24 hours until at least two spinal fluids are free from organisms both by smear and culture. Additional doses of serum may be given if after the serum has been discontinued for a short time, the patients fail to continue to improve or if spinal fluids withdrawn to relieve pressure, show a return of the organisms. While it is generally accepted that the meningococci invade the blood stream for a short time before localizing in the meninges, it has not been the experience of the Meningitis Division that it is advisable to give serum intravenously except in those cases where there is a prolonged septicemia as shown by repeated positive blood cultures or by a persistence or recurrence of the hemorrhagic rash. Occasionally a case of true meningococcemia is seen without the development of a meningitis. In such cases, serum intravenously is indicated.

"The serum treatment of other purulent forms of meningitis has been discouraging.

"Three different sera have been used in the treatment of poliomyelitis.

"Convalescent serum has been used quite extensively and certain observers claim that it is very valuable if administered in the preparalytic stage."

DR. ERNEST E. IRONS

Dr. Ernest E. Irons, Clinical Professor of Medicine at the Rush Medical College at the University of Chicago, in an address on "Facts and Fancies Concerning Vaccines and Non-Specific Therapy" said that "the present wave of popularity of injection of foreign proteins for diseases of all descriptions is likely soon to pass as have all modes and styles.

"In matters of dress, which vary from long skirts to short and back again, the original object of clothing to protect the body from cold and injury seems at times to be lost sight of, and in

medicine newly observed or striking effects lead to the revival or popularization of remedies without due regard to ultimate results, on the assumption that these effects are necessarily beneficial to the patient," he continued. "The occurrence of the changes is evident; their value to the patient requires careful consideration. The ease of use of the hypodermic needle which makes possible the parenteral introduction of proteins into the body has led to widespread and often uncritical use of this method in the treatment of all manner of conditions and to the drawing of clinical conclusions often without consideration of the natural history of the diseases treated.

"In the study and attempted therapy of infectious disease of the past 40 years, chief emphasis has been on the specific relationship of cause of the disease and its proposed remedy. The early success of diphtheria antitoxin, and the conceptions of most workers, influenced greatly by the teachings of Ehrlich, tended to direct therapeutic efforts along specific lines, and when treatment by antisera or vaccines was attempted, the causative organism of the disease was used. When specific vaccines failed to yield results expected, it was thought that perhaps by using a vaccine prepared from the identical organism causing the disease in the patient (autogenous) better results might be obtained.

"The verdict of 1,500 jurors selected alphabetically and only on the basis of their willingness to serve, indicated that the great expectations of 1906 to 1912 for the general usefulness of vaccines, had not been fulfilled, as shown by the fact that in all but 5 of 63 different disease conditions for which vaccines had been recommended, the percentage of physicians not using or no longer using them was nearer 100 than 90 per cent.

"The span of the rise and fall of the cycle of vaccine popularity was about 15 years. About the time when vaccine therapy in general had passed the peak of its popularity attention was directed anew to some of the reactions which occur in the animal body following the parenteral introduction of foreign protein whether of bacterial or other origin. While non-specific protein therapy has come into prominence in the past 10 years it has been used in some form or other for many decades.

"Even a brief survey of the literature of non-specific protein therapy will reveal an amazing list of different diseases and conditions in which this method has been used and more or less enthusiastically recommended. Included in the list are acute and chronic arthritis, pneumonia, typhoid fever, sepsis, erysipelas, gonorrheal infections, peptic ulcer, bacillary, dysentery, encephalitis, general paresis, dermatological conditions, diseases of the eye especially iritis, thromboangeitis obliterans, arteriosclerotic gangrene, Raynaud's disease, and nephritis. The length of the list does not make a favorable impression on a follower of Ehrlich and it is reminiscent of the still longer lists of commercial vaccine makers of some years ago and suggests that the clinician is already feeling the lack of laboratory control and guidance which, when available, is so steadying and helpful.

"That the intravenous injection of foreign protein produces profound changes in the body is shown both by laboratory tests and by clinical observation. The question we have to answer is not whether such changes occur, but whether they are of advantage to the patient and if so whether the advantage gained offsets any possible disadvantages. We have also to determine whether such improvement as it noted is actually due to the remedy, or whether in the disease in question, similar improvement may occur spontaneously.

"Acute arthritis, due to acute or chronic localized infections elsewhere in the body, frequently heals spontaneously. The swelling, pain and disability disappear and in a few days the joint may function as well as before. In some cases, treatment with foreign protein is said to hasten the return to normal, but whether so treated or not there may be recurrences of the arthritis in the same or other joints. The clinical question here is whether the benefit of hastened cure, by a few days in some instances, is offset by the failures and possible attendant dangers of the treatment in the others.

"The evaluation of the results in relief of pain, disability and deformity, which usually pass under the clinical term chronic arthritis is still more troublesome. There may be present the element of infection, but often the immediate cause of disability is mechanical as in osteoarthritis, or in the damage to cartilage of atrophic arthritis, or in referred pain from nerve irritation or pressure.

"Early reports of treatment of disease by any new method are likely to be over-enthusiastic because pioneering requires enthusiasm and further, because the investigator often is entering a new field, inspired by a theory and lacks any considerable background of knowledge of the clinical course of the disease when untreated or treated by other methods.

"Even in the more favorable reports of results of treatment of arthritis and iritis there is now and then a note of caution. One of the foremost proponents of protein shock therapy in arthritis finds 'that if no benefit is derived after two or three injections it is not probable that further treatment will be beneficial.' This would indicate either that the method works only part of the time, or that it is useful only in a selected group of cases. If the latter, then the treatment should be limited to this group, if it can be defined, and a like group of controls furnished.

"In the patient with chronic arthritis there are usually more than one and often several factors contributing to his pain, deformity and disability.

The chronic feature of the arthritis may be due to the recurrence of acute exacerbations. Such cases are often associated with chronic local infections, and constitute the group of chronic arthritis which affords examples of relief by the eradication of infection.

"The arthritis may be of the atrophic type with swelling and later loss of cartilage and atrophy of muscles, or of the hypertrophic type with proliferation of joint margins and but little muscular atrophy. While infection is believed by some to be one of the chief factors responsible for the former of these two, in both groups other factors including heredity, poor nutrition, metabolic disturbances, impaired local blood supply, trauma resulting from hard work and from increased weight bearing, to mention but a few, play a large part in the production and progress of joint disease and disability. Pain may result from mechanical causes as in hypertrophic or osteoarthritis and may subside spontaneously.

"The permanent relief of pain and disability in chronic arthritis whose otiology is varied and whose course is characterized by spontaneous remissions and exacerbations at intervals of months, seems unlikely to result from the use of one remedy such as foreign protein injections or vaccines, and when improvement occurs following treatment, it seems necessary to reserve some credit for other possible factors.

"Striking results including numerous instances of clinical improvement have been noted following the use of protein shock therapy. For the most part these have been seen in acute conditions rather than in those of long duration. As a routine and sole method of treatment the case for protein therapy has not been proved. It is necessary here to distinguish from this large group, methods of specific immunization and desensitization employed to relieve the symptoms of sensitiveness to specific known proteins such as those of some pollens and foods. Whenever it is proposed to use protein shock therapy, in a special case, due consideration should be given to possible serious and unexpected outcomes. The present wave of popularity of injections of foreign proteins for diseases of all descriptions is likely soon to pass, as have other modes and styles.

"Even though we as a jury may fail to reach an agreed verdict as to the value of foreign proteins on each count and disease, we shall, I believe, agree that the evaluation of clinical evidence requires caution, and shall continue the care and study of patients with honesty of purpose and with due regard to the natural history and progress of disease."

DR. HOMER F. SWIFT

Dr. Homer F. Swift, member of the Rockefeller Institute for Medical Research, speaking on "Rheumatic Fever" declared that it was one of the most important diseases economically, not only because of its acute manifestations but because of its role in the production of between 30 and 40 per cent of chronic heart disease in the latitude of the North Atlantic states. He stated that the disease was often present between the periods of acute attack and that effective treatment of it must take these periods as well as the acute stages into account.

"A number of factors appear to have causative relationships. Climatic conditions such as exist in temperate zones in winter favor its development, while sunny, dry summers and tropical weather inhibit or prevent its evolution! Among the poorer classes it is from 15 to 20 times more prevalent than in persons better housed and fed. Malnutrition and mild toxic states are frequent precursors of characteristic attacks. Most patients, both children and adults, give a history of repeated non-specific infections of the respiratory tract, tonsils, sinuses, or middle ear, extending over several years, before a typical attack of rheumatic fever is ushered in by a severe focal infection. Hence there seems to be a distinct contagious factor favoring its spread. Because chronicity and relapses are so frequent, and crippling cardiac damage is of such gradual evolution, and finally because laboratory tests often reveal activity in periods between attacks, it seems justifiable to consider the infection to be characterized by long periods of preparation or sensitization of the tissues, the result of repeated mild infection before a more intense focal infection sets off the violent explosion recognized as acute rheumatic fever.

"Similar mild infections, moreover, apparently favor the continuation of true rheumatic activity in viscera already involved. It seems logical, therefore, to regard these preparatory periods and mild chronic infections between acute outbreaks as essential parts of the morbid process. Hence our therapeutic and prophylactic efforts should be directed against these chronic conditions as well as against the more acute manifestations of the disease."

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CONGENITAL SYPHILIS, ITS MANIFESTATIONS AND TREATMENT*

By EARL D. OSBORNE, M. D., AND EDWARD D. PUTNAM, M.D., BUFFALO, N. Y.

IN THIS symposium on syphilis, time does not permit a complete and detailed description of all the numerous and varying manifestations of congenital syphilis. We will confine ourselves to a brief and concise description of the principal manifestations, their frequency and importance in the diagnosis, and finally a survey of approximately 300 cases seen and treated at the Children's Hospital of Buffalo, Buffalo City Hospital, and in private practice. Two hundred and sixty-four of these cases were seen at the Children's Hospital of Buffalo.

In general, the rule can be formulated that the nearer the time of conception is to the time of infection, the greater is the danger of infection of the embryo, or fetus. In view of the fact that 90% of infections occur between the 17th and 25th years of life, which corresponds to the period of greatest reproductive activity, it is not surprising that 40 to 50% of all pregnancies in syphilitic mothers result in miscarriage or stillbirth. Generally speaking, 3 to 5 years of adequate treatment is sufficient to prevent further syphilitic pregnancies in a syphilitic mother. In contradistinction to older views, however, we have 3 syphilitic women who have been giving birth to syphilitic infants for from 12 to 15 years. Although time is an attenuating factor, it should not be relied upon to prevent the birth of a syphilitic infant. The method of transmission of syphilis to the fetus has been a bone of contention for a number of years. There are 3 theories: (1) paternal origin, (2) maternal origin, and (3) mixed origin. At the present time it is admitted by most syphilologists that the syphilitic mother is the chief if not the universal source of infection of the child, by way of the placenta. The symptomless condition of many mothers, who give birth to syphilitic children, has been in the past a stumbling block to complete acceptance of the maternal infection of the fetus. With the improvement in serologic technique it has now been effectively demonstrated that syphilis is present in the large portion of apparently healthy mothers of newborn syphilitic children. The animal experiments of Brown and Pearce,[1] and careful serologic study of the mothers of syphilitic children, have shown that pregnancy exerts an inhibiting effect upon an acute syphilitic infection which is sufficient to keep the mother apparently symptom free, even though the child may develop obvious signs of the disease. We are aware that successful inoculations of rabbits with semen from syphilitic patients have been made by Finger and Landsteiner,[2] and by Eberson and Engman,[3] but until a rest form or granular form of the spirocheta pallida is demonstrated, there is no absolute proof of the paternal transmission of the disease.

Fetal Syphilis

Theoretically, the embryo of the fetus may be infected at any time during its development in utero. Infection of the embryo during the first 2 or 3 months results in abortion in the 3rd to the 5th month of pregnancy. Infection of the fetus after the 3rd month leads to fetal congenital syphilis, with all the cutaneous mucous membrane and visceral lesions, with death of the fetus in utero, or a living syphilitic infant. Maceration of the fetus is probably the most diagnostic sign of fetal congenital syphilis. The heart and liver, and other viscera are severely involved. The abdomen is protuberant because of the enlarged liver and spleen, and the skin of the fetus may be very pliable and covered with coalescing bullae. In recent years, the pathologists have had considerable success in finding the spirocheta pallida in organs of the syphilitic fetus. The diagnosis of syphilis in the dead fetus is frequently of momentous importance. The various diagnostic procedures should include the following: (1) gross examination of the fetus, (2) pathologic study of the viscera, with a careful search for the spirocheta pallida, (3) careful investigation of the family, (4) paternal and fetal Wassermann and Kahn tests, (5) examination of the placenta by a pathologist.

Early Congenital Syphilis

Early congenital syphilis appears a few days to 3 or 4 weeks after birth. In our experience, infants presenting signs of early congenital syphilis at birth, or 2 or 3 days following, almost always succumb to the disease, in spite of treatment. Signs of early congenital syphilis practically always appear during the first 3 months of life, or not at all. The appearance of a syphilitic infant at birth is very suggestive. The child is weak, puny, debilitated, the skin is wrinkled, and there is an "old mannish" expression to the face. Frequently, the child is unable to nurse from the breast; the child is unable to sleep, and cries almost constantly. Very frequently there is a rhinitis, rapidly becoming purulent, which gives rise to "snuffles." As the nasal passages become obstructed, the child is unable to nurse, and loss of weight ensues. Frequently, there are cutaneous and mucous membrane lesions, which, together with the above symptoms should give rise to a strong suspicion of early congenital syphilis. It is a reflection upon the medical profession that a higher per cent of these cases are not recognized early, and properly treated. Clinicians should not have to wait for corroborative serologic evidence in a

* Read at the Annual Meeting of the Medical Society of the State of New York, at Rochester, N. Y., June 4, 1930.

child or in the parents before starting treatment Many lives would be saved if earlier diagnoses were made and treatment instituted at once

Cutaneous Lesions

The cutaneous eruption of early congenital syphilis closely resembles that of the acquired form This point needs to be emphasized, because most practitioners and students have the idea that the cutaneous manifestations of early congenital syphilis differ widely from those of acquired lues There are several features of early congenital cutaneous manifestations that need to be emphasized First, a marked tendency to involve the palms, soles and genital region, and around the mouth and adjacent cheeks Secondly, the macular or roseolar eruption is less common than in acquired syphilis Third, the maculo-papular eruption is the most common eruption of early congenital syphilis and fourthly, the pemphigoid or bullous syphilide occurs in approximately 10% of cases This, of course, practically never occurs in acquired syphilis The sites of predilection are the palmar and plantar surfaces, the thighs, and buttocks Papular and papulo squamous syphilides are common and as characteristic as in the acquired form of syphilis Around moist surfaces such as the mouth, nares, ano-genital region, these lesions become eroded, with resultant fissuring, which is called rhagades These lesions heal, leaving scars which are practically pathognomonic of congenital syphilis Bullous syphilides are very characteristic They usually appear shortly after birth, but sometimes later. The pellicle breaks after a few hours, and forms a crust, or the skin may remain eroded In our experience, an infant with a bullous syphilide practically never recovers, at least, we have never seen one do so A persistent erythema with scaling of the palms and soles is very suggestive of early congenital syphilis, and should stimulate further search for evidence of the disease In some instances there may be a generalized, mildly exfoliative dermatitis As a general rule, however, the eruption is very similar to that occurring in early acquired syphilis Bullous syphilides must be differentiated from bullous impetigo or impetigo neonatorum The latter condition affects principally the face, neck, and trunk, and almost never the palms and soles early in its course The lesions are less infiltrated In early congenital syphilis, other manifestations of syphilis are not difficult to find

Mucous patches and condylomata occur in about the same frequency as in the acquired form of the disease A persistent rhinitis in a child under 3 months of age, and especially if hemorrhagic, is almost diagnostic of early congenital syphilis This rhinitis is due to mucous patches on the nasal mucous membrane and spirochetes are present in the discharge

Late Cutaneous Lesions

As a general rule, the late cutaneous lesions of congenital syphilis are comparable to the lesions occurring in the course of late acquired syphilis Gummatous lesions are the most common Superficial, serpiginous, nodular lesions are very rare as well as squamous syphilides of the palms and soles Gummatous lesions appear usually near joints, or involve the cranium, and nose They are usually periosteal or osteo-periosteal and may cause considerable destruction Onychia, and paronychia occasionally occur, as well as thinning of the hair of the scalp, eyebrows and eyelashes

Bone Lesions

In general, the lesions of the bones, joints, muscles, and bursae in congenital syphilis are similar to those occurring in the acquired form of the disease There is, however, one exception, and that is osteochondritis, or epiphysitis, which is so characteristic of congenital syphilis Various observers differ as to the frequency of this condition In our experience, it occurs in *about 20% of cases of early congenital syphilis*, and in somewhat less of late congenital syphilis Pain is the predominating symptom manifested by crying day and night, more marked when the child is handled, and causing a functional pseudoparalysis of the lower extremity known as Parrot's pseudoparalysis Frequently, there is a palpable swelling at the epiphyses of the long bones We have been able by routine *x*-ray examination of the long bones to diagnose osteochondritis that was not otherwise apparent *X*-ray examination reveals a thickening and irregularity of the epiphysial line

Periostitis and osteitis occur in 2 to 5% of patients with early congenital syphilis

Visceral Lesions

The heart and liver are frequently and severely involved in early congenital syphilis, and the spleen less frequently From a treatment standpoint the liver presents the most important problem upon which success or failure usually depends

Neurosyphilitic manifestations are extremely difficult to recognize in the young babies The commonest signs are palsies and convulsions

The eye and ear changes are the same as in early acquired syphilis

Late Congenital Syphilis

As in acquired syphilis there is a period of latency in congenital syphilis following the resolution of the early manifestations This period may be from 2 to as long as 30 or more years in duration The longer a child goes without developing late manifestations the less likelihood there is of his so doing However, we have recently seen an untreated woman 48 years of age, present her first attack of interstitial kera-

titis. She had other undoubted stigmata of late congenital syphilis. Many children with late manifestations give no history of earlier signs or symptoms, although some are unrecognized in infancy. Better social service follow-up, combined with routine serologic tests of families in which there is a congenital syphilitic child has led to the recognition of many cases long before late manifestations have appeared. Thirty-five per cent of our patients, during the past 5 years, fall into this group. Because of this fact, the frequency of occurrence of the various manifestations of late congenital syphilis has materially dropped. We believe that this is one of the greatest fields for effective social service work, and should be an integral part of every syphilitic treatment service. The majority of these children range in age from 1 to 6 years, and if the disease is recognized at this time, the state and community are saved a future huge economic and monetary loss.

Chart I presents a summary of the principal signs of late congenital syphilis arranged in order of frequency. A comparison with Stokes'[4] figures shows our percentages to be materially less, with the exception of the blood Wassermann which was positive in 95% of our own cases as compared with 66% of Stokes'. These discrepancies are readily explained by the fact that 75% of our patients were under 10 years of age, and 50% under the age of 6 years. From Stokes' comparative chart, in which no figures are given, about two-thirds of his patients were over 9 years of age. This apparent discrepancy illustrates nicely the tendency of congenital syphilis to heal itself as the age of the individual progresses, due to the gradual increase in immunity. Our lower percentages are also explained by the large number (35%) of children detected in the latent period, between the ages of 1 and 6.

As shown in the chart, the most important manifestations of late congenital syphilis are interstitial keratitis, Hutchinson teeth, bossing of the skull, facies, high-arched palate, sabre shins, scaphoid scapulae, saddle nose, eighth nerve deafness, osteitis, periostitis, osteochondritis, mulberry molars, cutaneous gummata, and visceral lesions.

CHART I.

Chief Signs of Late Congenital Syphilis in Order of Frequency

	Authors'	*Stokes'*
BloodWassermann	95%*	66%*
Interstitial Keratitis	20%	52%
Hutchinson Teeth	18%	32%
Bosses	10%	44%
Facies	8%	21%
High Arched Palate	8%	19%
Sabre Shins	7%	43%
Mentally Defective	6%	25%
Neurosyphilis	6%	26%
Scaploid Scapulae	5%	20%
Saddle Nose	4%	30%
Nerve Deafness	4%	10%
Bilateral Hydrarthrosis	3%	3%

* First blood Wassermanns only.

The Hutchinsonian triad is composed of interstitial keratitis, characteristic teeth, and eighth nerve deafness. Each manifestation has been regarded as pathognomonic of congenital lues although in recent years some doubt has been expressed regarding the last-named member of the triad. Seldom do these three signs occur together in the same individual. The first two are frequently present together.

Interstitial keratitis is the most common and distressing manifestation of late congenital syphilis. Most children lose from 1 month to 3 years of school, and about 25% are permanently handicapped economically. The vast majority of cases begin between the ages of 5 and 16. The first symptom is a mild ciliary congestion followed by a faint, grayish infiltrate near the centre, or at times the periphery of the cornea. The deposit spreads until the entire cornea is involved and has a cloudy appearance. New blood-vessels grow out from the ciliary vessels and the deposit becomes pinkish, giving rise to the term "salmon patch." The patient complains first of smarting, followed by distressing photophobia and lacrymation. The process may continue for a few weeks or several months before healing occurs. If mild, the visual impairment is slight, but if severe or recurrences take place the impairment may amount to total blindness. The process usually begins in one eye, and in a few days or weeks, and exceptionally after several years, the other eye may become involved.

Iritis frequently, but not invariably, accompanies interstitial keratitis. Scleritis, choroiditis, and retinitis may also occur.

Next to interstitial keratitis the teeth are of greatest importance from a diagnostic standpoint. The first or milk teeth are usually late in arriving, undergo early necrosis and fall out several weeks or months before the usual time. The second or permanent teeth may be late in appearing. The changes, occurring only in the upper central incisors of the permanent teeth, are characteristic. They are known as Hutchinson's teeth. It is well to bear in mind the description of Jonathan Hutchinson,[5] as given in his book on syphilis after a lifetime of medical practice. "The more closely we keep to the peculiarities displayed by the upper central incisors, the less will be our risk of error. All the other teeth are liable to lead us astray. If the upper central incisors are dwarfed, too short and too narrow, and if they display a single central crest in their free edge, the diagnosis of syphilis is almost certain. If the crest is present, and the dwarfing absent, or if the peculiar form of dwarfing be present without any conspicuous

crest, the diagnosis may still be made with much confidence Usually, the conditions are symmetrical, but now and then they are notably one-sided" This description coincides with our observations very closely He points out concisely that the dwarfing may be absent, or the crest or notch may be absent In our experience the two most important factors are First, narrowing of the tooth from the gum margin towards the free edge, and second, thickening of the tooth anterio posterially The notching may or may not be present in one or both teeth If the upper central incisors are unerupted and this frequently occurs between the ages of 4 and 6, the characteristic malformations can be shown by means of the *x*-ray, as Stokes and Gardner have pointed out Fournier's mulberry molars are also characteristic, although not pathognomonic The six-year molars undergo necrosis on the surface, and with the serrations around the border, the appearance is that of a mulberry All of the other teeth, especially the lateral incisors, may be poorly spaced, show aplasic changes and undergo early necrosis We have never believed that the tubercle of Carabelli[6] was diagnostic

Eighth nerve deafness is the third member of Hutchinson's triad It occurred in only 4% of our series, probably because such a large percentage of our cases were detected before the sixth year of life The onset of this condition is usually between the 9th and 15th years of life

Bone changes are among the most important marks of late congenital syphilis They are the result of osteitis, and periostitis in the earlier months of life, producing thickening and roughening, especially of the shaft of the long bones The tibiae and clavicles are the most commonly affected The sabre tibia derives its name from an apparent anterior bowing which is due to a fusiform thickening, usually of the middle third of the shaft The sharp anterior edge as well as the flat medial surface of the tibia is rounded *X*-ray examination should differentiate the anterior bowing of rickets from the periosteal thickening of congenital syphilis Enlargement of the frontal and parietal bosses has some significance Bilateral hydrarthrosis of the knee joints known as Clutton's joints is almost pathognomonic In addition to the actual bone involvement there are certain developmental changes such as high arched palate, scaphoid scapula venous ectasia of the scalp and the facies which are very suggestive To the experienced eye, the facies are extremely valuable in picking out suspicious cases and in focusing attention on a possible congenital syphilis The facies, or facial expression, is the impression produced on the examiner by a combination of syphilides and developmental dystrophies including corneal scars depressed nasal bridge, increased breadth and height of the forehead, upward and outward flare of the nostrils, and in addition a dreamy tired, apathetic expression

CHART II

Results of Intensive Combined Sulpharsphenamine and Bismuth Therapy

Patients treated	129
Patients died	2
Patients lost through change of residence	22
Patients treated with malaria	5
Patients negative more than 1 year	19
Patients negative more than 6 months	14
Patients negative less than 6 months	10

Visceral lesions in late congenital syphilis are not as common as one would expect from the overwhelming number of organisms present in all organs at birth The child survives the intense infection and the resulting fibrosis We believe that a congenital syphilitic child that has survived the first year of the disease has a much higher resistance to the infection than an adult with an acquired infection of the same duration

Neurosyphilis in our series occurred in 6% of the cases Juvenile paresis is the predominant manifestation, and juvenile tabes one of the rarest of clinical manifestations A routine spinal fluid examination is absolutely essential in spite of negative blood serology

Treatment of Congenital Syphilis

There are certain general principles regarding familial syphilis that should be mentioned before considering the treatment of the child, namely

1 Every pregnant woman should have a routine blood Wassermann and Kahn test early in pregnancy

2 Adequate treatment of a pregnant woman with syphilis should be given from the earliest possible moment Very few syphilitic children are born from adequately treated mothers

3 After the third month of pregnancy, the dosage of the drugs employed should be approximately two thirds the adult dose

4 Multiparas, who are serologically positive, or who are known to have had syphilis and have become serologically negative, should have at least one full course of treatment during pregnancy

In considering the treatment of the child we will confine our remarks to our own experience because time does not permit an exposition of all the drugs and systems of treatment employed by various workers in this field We will admit that, prior to 1925, we had a pessimistic attitude toward the effectiveness and curability of congenital syphilis by any system of treatment Our attitude has changed considerably since then to one of restrained optimism The success of any system of treatment depends upon the following factors

1 Early diagnosis and the prompt institution of treatment
2 Adequacy of treatment with effective drugs
3 Persistent therapeutic effort in spite of serology

4. Short rest intervals.
5. Routine spinal fluid examination.
6. Serologic and clinical check-ups over a long period of years.

From our experience with arsphenamine, neoarsphenamine, and sulpharsphenamine, we believe that the latter is the drug of choice and since 1925, have employed it in every case. We have had only one treatment accident of any account, namely, a moderate exfoliative dermatitis. Since starting the use of sulpharsphenamine intramuscularly or subcutaneously, we have had more cooperation from the parents and fewer absences from treatment than ever before. The dosages employed have been as follows:

First 4 weeks of life	.05 grams
1 to 3 months old	.1 grams
3 to 6 months old	.1 to .15 grams
6 to 12 months old	.15 grams
1 to 2 years old	.15 to .2 grams
2 to 3 years old	.2 grams
3 to 6 years old	.2 to .3 grams

Frequently, we have noted that subcutaneous injection, although more painful at the moment, produces less after-pain than intramuscular injection.

During the past 5 years, bismuth has almost entirely supplanted mercury in our system of treatment. We heartily agree with Schamberg and Wright,[7] and more recently Wright,[8,9] in the effectiveness of bismuth over mercury in the treatment of congenital syphilis. In view of this it hardly seems rational to continue the use of mercury when active manifestations are present. We have recently limited the use of mercury to mercurial inunctions over long periods of time in children who are serologically negative, or who cannot come to the clinic regularly. A word of warning is necessary regarding the preparation of bismuth employed. The physician should know the content of bismuth metal in each ampule or cubic centimeter and the dose should be computed on a basis of 100 mgr. of bismuth metal to the average adult dose. The dosages of bismuth metal employed are as follows:

First 4 weeks of life	.02 grams
1 to 3 months old	.03 grams
3 to 12 months old	.05 grams
After 1 year according to weight up to	.1 grams

Iodides are seldom of value in congenital syphilis. They should be used in late visceral lesions, keratitis, neurosyphilis, and osseous lesions.

We believe absolutely in the value of combined therapy, that is, the simultaneous use of sulpharsphenamine and bismuth until there are no active symptoms, or until the blood serology is persistently negative. After this, treatment need not be so intensive, but should be continued with longer rest intervals for several years. In cases that are Wassermann-fast after 6 or 8 courses of treatment, periodic courses of bismuth over long periods of time are indicated. It is surprising how many of them finally become negative.

A few special problems in the treatment of congenital syphilis should be mentioned.

1. In active syphilis of the newborn with enlarged liver and spleen, it is best to begin treatment with bismuth for at least 6 to 8 weeks. Arsphenamine should be used cautiously or not at all.

2. Interstitial keratitis requires the cooperation of the ophthalmologist and the syphilologist. Intensive combined treatment is indicated from the beginning with no rest intervals until the disease is thoroughly controlled. In 30 consecutive cases of interstitial keratitis we have not had a single failure nor a relapse, nor has the second eye become involved after therapy was started. The vast improvement in the response of interstitial keratitis to intensive, combined sulpharsphenamine and bismuth therapy is the most encouraging development in the treatment of congenital syphilis.

3. We have treated 5 cases of juvenile paresis with malaria. The result was excellent in 3. Our impression is that the cases must be gotten early before too much parenchymatous destruction has taken place, in order to get a good result.

Our routine system treatment consists of 8 subcutaneous or intramuscular injections of sulpharsphenamine combined with bismuth, followed by 10 bismuth injections, then 1 month rest, and a repetition of the first course. At least 3 or 4 such courses are given before lengthening the rest interval or discontinuing the combined method of administration. Providing the spinal fluid is negative, we give as many as 6 to 8 courses and if the blood serology is still positive, long courses of bismuth are given with rest intervals of 3 to 6 months between courses.

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For list of officers of County Medical Societies, see December 15 issue, advertising page xxi

Next Annual Meeting, Hotel Syracuse, Syracuse, N Y, June 1, 2, 3, 1931

OUR NEWS DEPARTMENT

When each JOURNAL is completed the editors wonder how the next fortnight will develop enough material to make a news department of respectable size, but the medical societies of New York State are active, and abundant records of their work are always forthcoming The news department of this issue fills ten pages

It is gratifying that the leaders in the county medical societies are overcoming their inferior complexes and are sending records in increasing amounts But there is yet room for improvement Only one-half of the county medical societies sent records of their activities during the past year, and the list of those who did not send records includes some of the largest and most active of all the societies However, the indications of improvement are gratifying, and the secretaries are acquiring a proper sense of the value of their reports

PRESIDENTIAL COMMENTS ON CURRENT EVENTS—NO. 13

As the year advances, the study of the medical activities of the counties gives a better understanding of the existing medical relationships. It brings into relief certain outstanding county societies. Since human nature is about the same everywhere, one wonders why there is a difference until a little closer study shows that it is simply the result of leadership,—true leadership that inspires men to follow. Partly to illustrate how an activity initiated by leadership is carried on by the entire profession, and partly to tell the profession of what has been done in one of the counties of the State, I shall comment on the observations of a two-day visit in Tioga County.

On November 24th your President had the privilege of speaking to the medical profession of Tioga County and vicinity on the occasion of the opening of the Tioga County General Hospital, and on the following day of speaking to the lay organizations and citizens of the county.

Three thousand, two hundred people, which is eight per cent of the population of the county, contributed the money to build the seventy-bed hospital. It is a four-story fireproof building, that for detail of planning for efficient and economic administration, and for perfection of equipment and for modernity, I have not seen surpassed.

This hospital is located in a county having twenty-six thousand population.

In the first ten days after opening the hospital, there were fifty-one admissions and nine of them major surgical operations.

The striking thing about the hospital is its economy in non-essentials and its remarkable planning for ease of administration. It is intended to administer this hospital without financial deficits. While its obligation is to give the best professional service to the end that the patient may be restored to health quickly and surely, there is no intention of otherwise making it a dispenser of luxury in non-medical service. For meeting the expense of caring for the indigent, the Welfare Commissioner of the County will be depended upon, and since he is one of the Board of Directors, it seems likely that the hospital will be paid for its care of all the indigent entitled to it. This hospital, both in its professional and loyal general support, is one of the finest examples of civic effort and a contribution to the solution of the great problems now interesting the leaders of medicine and the leaders of public health opinion.

To go back a little way in the medical history of Tioga, about six years ago the county was chosen as a demonstration county for rural prenatal care. After the matter had been considered and unanimously approved by the County Medical Society, the demonstration was financed by the Shepard-Towner funds. There were two nurses at first and later four. The result of the work was highly satisfactory to the physicians and to the public. Its educational effect was apparent in teaching expectant mothers to seek earlier and regular prenatal care. At the end of two years, the County Medical Society and the lay organizations jointly applied to the Board of Supervisors for an appropriation to carry on the work and for the creation of a Public Health Committee. The appropriation was made,—the State paying half. The Public Health Committee was established, made up of two supervisors, three physicians, two from the lay health organizations, and one citizen. Two nurses are employed at present, each having thirteen thousand people. A third one is under consideration.

The present cooperating factors in health work in this county are the Tioga County Medical Society, the Tioga County General Hospital, the Tioga County Public Health Committee, the State Charities Aid Association, and the State Department of Health. These organizations, each doing something that the other cannot and working cooperatively, stimulated by the civic health spirit that has grown in that county as the result of their own accomplishments, become an illustration of the value of the right kind of public relations. It seems to be an answer to the problems of public health and medical care.

The fact that a county has enough civic pride to initiate an effort to meet health problems, shows that it can be done elsewhere or anywhere. There were just as many difficulties to overcome in the rural county with a small population and no great wealth, as in any other county in this State. If what has been done by the local profession who created public opinion, aroused its interest, and gave it leadership were done all over the State, there would be no need to waste time on a discussion of State Medicine, socialization of medicine, interference with private practice or economic conditions.

I do not know of any better illustration of how to essentially meet the problems confronting medicine today than has been done in Tioga County. This is a simple story of fact, I am relating, partly for its practical interest,—(no one in Tioga seems to think it unusual, however),—and partly because the local profession has access now to a hospital splendidly equipped in which to do their work and receive in return the benefit of continuous education in their own environment, and with the further result of advancing community standards of practice.

There are other counties in the State with a conception of how to meet present-day problems of medicine and who have advanced the essential principle of cooperative relationship of health influences, guided by medical leadership. The only reason that these are not discussed is lack of space at present.

WILLIAM H. ROSS, M. D.

NINETEEN THIRTY-ONE

The organization of the Medical Society of the State of New York, which was consummated just a quarter of a century ago, is the standard form of nearly every State Medical Society of the United States. Even the standing committees of the several State Societies perform similar duties, although they have a diversity of names; and the leaders all over the country are actuated by the same high motives of service to their brother practitioners and to the public.

The principal work of past years has been to arouse an interest in the practice of those forms of medicine which depend on the collective action of individual doctors. But since the movement has started, the same inertia which formerly impelled doctors to stand still, will now carry them forward in the support of the policies of the societies.

The year 1931 opens auspiciously for the medical profession, not only of New York State, but also of the entire nation.

LOOKING BACKWARD

This Journal Twenty-five Years Ago

Consolidation:—The union of the Medical Society of the State of New York, and the New York State Medical Association was consummated on December 9, 1905, by a Court order, and the Journal of January 1906 devotes considerable space to the consolidation. It is surprising how soon a knowledge of bitter disputes fades from memory, and it was therefore with real difficulty that the facts regarding the formation of the rival societies were obtained.

The Medical Society of the State of New York was formed in 1807, as the result of a law passed on April 4, 1806, authorizing the formation of medical societies of the counties and of the State, for the purpose of licensing practitioners of medicine.

The State Medical Society adopted a "New Code" of ethics in 1882, one paragraph of which read:—

"II. Rules governing consultations.

"Members of the Medical Society of the State of New York, and of the medical societies in affiliation therewith, may meet in consultation legally qualified practitioners of medicine. Emergencies may occur in which all restrictions should, in the judgment of the practitioner, yield to the demands of humanity."

The "legal practitioners" to which this section referred were Eclectics and Homeopaths, neither of whom were recognized by the American Medical Association; and the State Society therefore ceased to be affiliated with the A.M.A.

Section 1 of Article IV of the code of ethics of the American Medical Association, which conflicted with the New York code, appeared as follows in the editions of 1875 and 1899—

"A regular medical education furnishes the early presumptive evidence of professional abilities and requirements and ought to be the only acknowledged right of an individual to the exercise and honors of his profession. Nevertheless, as in consultations, the good of the patient is the sole object in view, and this is often dependent on personal confidence, no intelligent regular practitioner who has a license to practice from some medical board of known and acknowledged respectability recognized by the American Medical Association and who is in good moral and professional standing in the place in which he resides, should be fastidiously excluded from fellowship or his aid refused in consultation when it is requested by the patient. But no one can be considered as a regular practitioner or a fit associate in consultation whose practice is based on an exclusive degree, to the rejection of the accumulated experience of the profession, and of the aids actually furnished by anatomy, physiology, pathology, or organic chemistry."

When the State Medical "Society" met on February 5, 1884, about one hndred members, failing to secure a vote to rescind the objectionable paragraph, seceded, and on the next day they formed the Association. The reports of the discussion at the organization meeting seem humorous today with their abuse and their predictions of calamity; but strangely, the two systems of medicine were not mentioned.

The two State organizations existed side by side for twenty years and many physicians belonged to both. When the two societies united on December 9, 1895, the Association accepted the "New Code" of Ethics, and the Society adopted the modern form of organization of the Association. Thus each side won, and both sides forgot what the trouble had been

The present codes of the A. M. A. and that of New York both omit all reference to "Regular practitioners and schools of medicine.

MEDICAL PROGRESS

Special Fields in Physical Therapy.—In a report of the Committee of Standardization of Physical Therapeutic Measures of the American Physical Therapy Association, William Benham Snow states that the use of physical therapy applied for the relief of human suffering and disease has not been properly appreciated by the medical profession at large. The Council on Physical Therapy have been disposed to place physical therapy in the rôle of an adjunct measure, which it is not. As appears in the triangle—medicine, surgery and physical therapy—physical therapy is placed at the base of the triangle, supporting the other lines. This is where it belongs. There are many indications for its employment that should be given proper consideration. The *treatment of focal infection* by diathermy, light and *x*-rays has advanced to a degree of practical accomplishment that has established its importance. The time has passed for operations on the *sinuses,* because surgical intervention is unnecessary except in cases that have been so neglected that necrotic changes have taken place in the bone, which the *x*-rays will differentiate. Equally certain is the result of treatment for *gallbladder infection.* There are few cases of this type of infection that require operation under the present possibilities of the complete relief afforded by diathermy. In certain appendix cases—those upon which the conscientious surgeon hesitates to operate—radiant light and heat properly employed, diathermy and *x*-rays bring about a prompt recovery. With the present improved methods of operation—desiccation, coagulation, the use of *x*-rays and diathermy—there are few *tonsils* that cannot be put in order without removal and the patient so relieved of any danger of focal infection. The most advanced cases of *Graves' syndrome,* in which the surgeon will not operate, can be restored to the normal by skillful treatment with physical therapy. *Diabetes* in the early stages can be readily cured by physical therapy applied to the dilated splanchnic area. In the treatment of *hypertension,* autocondensation and mechanical vibration play a very important part. There are few patients with *arthritis* in the early stages that cannot be fully restored by physical therapy. *Bronchitis, pleurisy, pneumonia,* and *asthma* are so amenable to this form of therapy that few additional measures need be considered in order to abort these diseases in their early stages. In *poliomyelitis* no other method offers the prospect of prompt relief and early cure after paralysis that the static current and radiant light and heat do. The pelvic diseases of men and women are markedly benefited by physical modalities. Mechanical vibration in the treatment of cardiovascular, pulmonary, gastric, pelvic, gastroenteric and other conditions will accomplish much that cannot be attained by other measures.—*Physical Therapeutics,* November, 1930, xlviii, 11.

Achlorhydria and Anemia in Advancing Years.—Daniel T. Davis and T. G. Illtyd James examined 100 persons over 60 years of age and in normal health to determine their response with respect to acid gastric secretion. The most striking departure from normal was the high frequency of achlorhydria—32 per cent of all cases. The fact that achlorhydria was found in this large percentage of healthy persons minimizes its diagnostic value in carcinoma of the stomach. Of the 32 cases 27 were submitted to histamine stimulation a few days after the ordinary gastric examination. In 13 of these cases there was hydrochloric secretion after the injection of histamine, while in 14 cases achlorhydria persisted, showing that in these cases there was true achlorhydria. Thus the incidence of true hydrochlorhydria was about 15 per cent. A slight degree of anemia was found more frequently in cases showing a true hydrochlorhydria than in those showing a normal acid secretion. Anemia was found to be more common in cases showing a diminished pepsin secretion than in those showing a good secretion of pepsin. It is well known that changes in the mucous membrane of the tongue are found in pernicious anemia and that soreness of the tongue is often one of the symptoms, sometimes the earliest, observed by the patient. Of the 68 cases in this series that showed some secretion of acid, a smooth tongue was found in only two, but was present in seven of the 32 showing achlorhydria. Of the seven cases showing atrophic changes in the tongue four were in the true hydrochlorhydria group. A smooth tongue is therefore found more often in cases showing a deficient gastric secretion than in cases with a normal secretion; this emphasizes the fact that atrophy of the mucous membrane of the tongue and an abnormal or deficient gastric secretion may occur together.—*The Lancet,* October 25, 1930, ccxix, 5591.

The Antagonistic Action of Liver and Spleen.—F. Högler, in the *Klinische Wochenschrift* of November 1, 1930, points out, on the basis of three illustrative cases, certain phenomena suggesting that in the pathogenesis of pernicious anemia and of erythremia the leading rôle is played by the antagonistic action between liver and spleen. The liver appears to produce a substance which increases the number of red cells circulating in the blood stream, while the spleen, on the other hand

seems to elaborate one that decreases their number. Thus in the normal organism the constancy of the red cell count would rest on a finely adjusted regulatory mechanism between these organs. It is impossible as yet to determine whether the effect of the hypothetical substances consists more in an increase or in a restraint of erythropoiesis, or in a restraint or increase of hemolysis, and hence in a lengthening or shortening of the life span of the red cells. It can be readily understood that these relations are not revealed so clearly in the normal organism by experimental splenectomy or administration of liver or spleen, since here the antagonistic regulatory activity begins at once, its intensity varying in the individual case according to the degree of formation of accessory spleens. Strong support is given to this theory of antagonistic action by the fact that in most cases of pernicious anemia the red cell count is restored to normal or even supernormal by administration of liver and the further fact that in erythremia the enormously increased red cell count is reduced to normal or subnormal values by administration of spleen. Finally the circumstance that in pernicious anemia we can increase the red cell count by splenectomy in so far as this is not thwarted by new growth of accessory splenic tissue, and that administration of liver in splenectomized cases of pernicious anemia can transform these into typical erythremia, offers further evidence in the same direction.

Relationship between Measles and Whooping-Cough.—Wladimir Mikulowski points out the frequency with which a whooping-cough epidemic comes on the heels of an epidemic of measles, suggesting that it is in reality a recurrence caused by concealed measles. It is significant that most cases of whooping-cough occur in the months of March, April, and May, which are the same months in which measles prevails. The statistics concerning region, age, and social status, as well as atmospheric conditions, which exert an influence on measles infection and mortality in children under five resemble those of whooping-cough. In large cities a measles epidemic is as a rule accompanied by an epidemic of whooping-cough. Clinical observation shows that in those children who have been having whooping-cough an infection with measles causes a recurrence of whooping-cough, in the form either of a new pulmonary focus or of a flaring up of old anatomic changes or lung complications. The symptoms of a whooping-cough focus that has been rendered acute by measles may appear either at the very outset of the measles or at the close of an attack of the latter. In the first case, measles in the incubation stage often begins with lung symptoms which cause the child with whooping-cough to be taken back to the hospital. When such a child returns during a measles epidemic the physician should look into the cause of the recurrence. If he cannot exclude the possibility of measles he must regard the child as a measles suspect. If such a child dies all the children in that ward should be isolated as if they had been exposed to measles. In the second case, the old lung focus in the child with whooping-cough becomes acute again after an attack of measles and often causes complications. The cough breaks out with fresh intensity and suggests a new case of whooping-cough. It is difficult to determine whether measles with whooping-cough complications or whooping-cough with measles complications predominates as a cause of eventual death. This close epidemic and clinical affinity explains why the morbidity statistics of the two infections show almost the same figure and also why the mortality figures are often nearly the same.—*Schweizerische medizinische Wochenschrift*, October 18, 1930.

New Treatment of Morphine Addiction.—M. Sakel says that for two years he has been treating the abstinence symptoms in morphine addiction with rather large doses of insulin. In order to check these symptoms of abrupt withdrawal he gives the patient during the first 6-8 days doses of insulin amounting to 80 units in 24 hours without glucose. The insulin treatment is instituted as soon as the abstinence symptoms appear. Thus far he has used the method in 15 cases, and in all he succeeded in cutting short both psychic and somatic symptoms, such for example as vomiting, diarrhea, and refusal to eat. In the first cases thus treated (1929) he administered glucose at the same time, fearing hypoglycemic shock. He also gave small amounts of barbituric acid, on the basis of experience at the Charcow Clinic, which had demonstrated that animals which had received this preliminary treatment tolerated doses of insulin many times as large as animals not so treated. Gradually he observed, however, that the effect of insulin was much greater without administration of glucose, and that it was altogether exceptional for any untoward hypoglycemic symptoms to appear. Most of the individuals treated were confirmed addicts who had already been treated in many institutions. In all the cases not only did he have success with minimum trouble, but in addition nearly all the patients had begun to take on weight by the end of the first week. They could sleep with scarcely more than the customary medication, and only in a few cases was any other sedative necessary. The therapeutic results obtained were naturally limited to those related to abstinence symptoms; permanent cure of morphine addiction is of course left for after-treatment in the form of psychic influence, as always.—*Deutsche medizinische Wochenschrift*, October 17, 1930.

LEGAL

HUSBAND AND WIFE—COURT'S REFUSAL TO ANNUL MARRIAGE ON GROUND OF EPILEPSY

By LORENZ J. BROSNAN, ESQ.
Counsel, Medical Society of the State of New York

The Court of Appeals of this State recently handed down an extremely interesting decision in an action brought by a husband against his wife, seeking an annulment of their marriage on the ground that the wife was incapable of entering into the marriage state as she was suffering from epilepsy and fraudulently concealed that fact from her husband. Judgment was rendered in favor of the defendant in the Supreme Court, from which judgment the plaintiff appealed to the Appellate Division. That court reversed the judgment of the lower court and directed judgment in favor of the plaintiff, annulling the marriage. From the decision of the Appellate Division the defendant appealed to the Court of Appeals. The case arose on the following state of facts:

The defendant wife was thirty-five years of age at the time of her marriage. For fifteen years prior to her marriage she had been a teacher in the public schools, and the official records of the Board of Education disclosed that her attendance had been very regular, and the principal of her school testified that she was considered an able teacher.

During the period of courtship which lasted for many months prior to the marriage, the plaintiff saw the defendant many times every week and finally the parties were married. They lived together as man and wife, the defendant fulfilling all the obligations, duties or privileges usually accompanying that position. The wife became pregnant some four months following the marriage, and at that time resigned her position as a school teacher. About that time the wife lost her engagement ring. The loss of the ring was attended by great excitement. In the language of the court: "The wife became unconscious, fell to the floor, was put to bed, neighbors came in, relatives were sent for, even the policeman. It is said that she had a fit of some kind, that her eyes rolled, that she foamed at the mouth. Apparently there was no privacy. Dr. X had been treating the wife, or consulting with her during the previous months of pregnancy. He was sent for. Another doctor, Dr. Y, came in. The husband again describes the scene: 'When I came back I found Dr. Y attending to her, and just as soon as I entered the apartment, Dr. X came running in from the outside, and he said to Dr. Y, "She is my patient." And during that time they pulled her into the bedroom—here was the kitchen and there was the bedroom, and they pulled her right on, and Dr. X said, "She is my patient, leave her alone, and I am taking care of her." Dr. Y went away, and Dr. X went into the bedroom, took her mother and sister Mollie into the bedroom, shut the bedroom door, put a curtain on top of the bedroom and he kept—he said nobody should enter the bedroom, and he kept everybody out. Then a little later—pardon me, then a little later, Dr. X came out from the bedroom, and he rushed right out'."

Shortly after this the wife had double pneumonia, and later gave premature birth to a child which lived less than a month. About two months after the birth of this child, the husband claims that while they were eating breakfast the wife got up from the table, went out of the room into her bedroom, where she fell on the floor, blood coming from her mouth, her eyes bulging; she was unconscious.

A physician testified that the husband with his lawyer called upon him, and he told them he thought the attacks were epilepsy. Thereupon the husband left the wife, and brought this action to annul the marriage on the ground that the wife was incapable of entering into the marriage state, as she was suffering from epilepsy, and that she fraudulently concealed the fact.

The court first took up the proposition as to whether there had been any fraudulent concealment by the defendant, if at the time of the marriage she was suffering from epilepsy, and in finding that there was no such evidence the court said:

"Conceding that the spells in November of 1926 and April of 1927 were epileptic seizures, there is no probative evidence to show that the wife ever had such attacks before. Two school children were called by the plaintiff to prove that as a teacher she occasionally held her head in her hand as though she were tired, and a workman said that once when hanging curtains, the defendant fell to the floor. Hypothetical questions based upon the testimony of the husband and the neighbors were asked of experts who gave it as their opinion that the attacks in November and in April must have been epileptic spells.

Upon a physical examination these same doctors could find nothing the matter with the defendant A gynecologist from the Z Hospital, consulting obstetrician, said that the attacks were due to a toxemia frequently occurring during pregnancy and for several weeks thereafter. There is no evidence in the case sufficient to support a finding that the defendant had epilepsy prior to June, 1926. Neither does the proof show that a person having an epileptic fit must always have suffered from epilepsy. On the contrary, there is evidence from the plaintiff's expert that it may start at thirty-five years of age. Assuming, therefore, that the defendant had epileptic seizures in October, and that in April, as above related, six months and more after she was married, there is no credible evidence to show that she had any such attacks prior to marriage or knew that she had epilepsy. A Mr B, a stranger whom the defendant had never met, testified that after the defendant was put to bed on the November occasion, he asked her how she felt and how long she had been sick, 'with the sickness,' and that she replied 'quite a time—from childhood.' Such a statement from such a source without any corroborating background was at most insufficient to justify the reversal of the Special Term. Judgment in favor of the plaintiff on the ground of the defendant's fraudulent concealment was, therefore, without evidential support, and must be reversed."

The court then went on to discuss whether epilepsy in and of itself would justify the annulment of a marriage. Section 7 of the Domestic Relations Law provides that a marriage is void from the time its nullity is declared by a court of competent jurisdiction if either party thereto is incapable of entering into the marriage state from physical cause, or if either party consents to such marriage by reason of fraud; for example, it has been held that a person suffering from a venereal disease is incapable of entering into the marriage state. In distinguishing that rule from the facts in the case at bar the court said:

"Epilepsy, however, is not to be classed with any such loathsome contagious disease. The record in this case is barren of any evidence as to the nature of epilepsy or its general effect upon the physical or mental capacity of the person afflicted. Medical treatises inform us that it is a term applied generally to a nervous disorder characterized by a fit of sudden loss of consciousness attended with convulsions. There may, however, exist manifestations of epilepsy much less marked than this, equally characteristic of the disease, while on the other hand, many other attacks of a convulsive nature have the term 'epileptic' applied to them. In some persons the epileptic fit may only occur once in a lifetime or once in the course of many years. (Encyclopædia Britannica, 'Epilepsy.') No incapacity from becoming a wife or performing the functions of the married state necessarily results from epilepsy. The general health and bodily vigor may remain unimpaired.

"Epilepsy, in and of itself, is no ground for the annulment of a marriage in this State. There must be something more than a mere fit or a spell of 'epilepsy' The nature of the disorder may have progressed to such a degree as to be extremely dangerous for the person to marry or to have sexual relations. Concealment of such a condition might amount to a fraud, as it is almost impossible to conceive of its success without some intentional deception or disguise.

"Shall we say, however, that any person subject to epilepsy, or to fainting spells, or to bad temper, bordering on insanity, is incapable of marrying? While the law books may treat marriage as a civil contract, yet it is a contract which the public is interested in preserving. The fraud which may dissolve the marriage tie must relate to something vital. Mere nondisclosure as to birth, social position, fortune, good health and temperament cannot vitiate the marriage contract. The man and woman who marry take each other for better or worse, richer or poorer, to cherish in sickness or in health. If this be old-fashioned according to some moderns, it is still the hope and joy of the pledged loyalty. The law of this State affords no relief to subsequent disappointment. Sickness and misfortune are common to mankind and must be borne with courage and resignation. Most people have something to contend with."

The court then went on to point out (citing a Connecticut case) that some States have provided by statute that no man or woman, either of whom is epileptic, imbecile or feeble-minded, shall intermarry or live together as husband and wife when the woman is under forty-five years of age. Other States, Virginia for example, have provided for sexual sterilization of inmates of institutions supported by the State, who shall be found to be afflicted with an hereditary form of insanity or imbecility. The constitutionality of the Virginia statute in that respect was challenged, but was upheld by the Supreme Court of the United States. After discussing these various statutes of other States already referred to, the court said:

"In the absence of some such legislation in this State, the courts are not justified in establishing a system of eugenics. We would be trespassing upon very delicate and dangerous ground indeed, should we judges, fallible like other men, undertake to say who should and should not marry. It is time enough for the courts to act when it is proved that one of the parties to a marriage was at the time incapacitated from entering into the marriage state by reason of physical deformities or diseases."

DEATH CLAIMED DUE TO NEGLIGENCE IN CÆSARIAN SECTION

In this case the patient consulted the defendant physician who specialized in gynecology and obstetrics. Based upon the examination and history of the patient, it was determined that she was about six weeks pregnant.

Arrangements were made for pre-natal care, confinement, delivery and aftercare. Pursuant to instructions, the patient called at stated intervals for examination by the attending physician. Some time after the first examination, the doctor observed that the patient had a contracted pelvis. She was told at that time and subsequently that it might be necessary to perform a caesarian section, but that nothing could be done about it at that time.

In due course the doctor was notified that the patient was in labor. She had last been seen about four days previously. Pursuant to instructions, the patient was immediately taken to a hospital where she was examined early in the morning by the attending physician who found four fingers dilatation. She was left in bed and instructions given to call the attending physician when necessary. Two hours later the doctor returned to the hospital and found complete dilatation but no advancement of the head. The head was found to be in L. O. P. position.

The husband was then notified that it would be necessary to perform a caesarian section, to which he verbally consented, and the patient was sent to the operating room, prepared and anæsthetized, the customary incision was made and the patient delivered of a living child. The afterbirth was also removed. The abdomen was then closed and the patient put to bed. She recovered from the anæsthesia in due course. She was seen daily by the attending physician during the following week, at which time the wound was healing nicely and the patient was in excellent condition.

Due to illness in the attending physician's family, it was necessary that he leave the jurisdiction and accordingly the doctor arranged with the patient that the usual aftercare would be administered by the house physician and that for any unusual developments the chief obstetrician of the hospital would be called. Both mother and child were in good condition at that time and consented to the termination of the relationship between the patient and the physician. The physician never saw the patient thereafter.

Three days later the patient advised the house physician that she had difficulty in breathing and before anything could be done she became cold and clammy, her pulse became imperceptible and she went into a semi-coma. The chief obstetrician was immediately called but before he could arrive the patient died. During the interval before the chief obstetrician called, adrenaline and caffein-sodium benzoate were administered. Approximately three hours before the patient died she had been seen by the house physician and appeared to be in good condition.

The caue of death was thrombosis of the iliac vessel.

Some six months thereafter an action was commenced by the patient's administrator against the first attending physician and the chief obstetrician of the hospital, charging first, that he performed an operation without consent; second, that he did not give the patient the proper opportunity to advance sufficiently in labor to have a normal delivery; and third, abandonment, and fourth, negligent aftercare. The action duly came on for trial and at the close of the plaintiff's case, the plaintiff having failed to establish a prima facie case in law, the complaint was dismissed, thus terminating the action in favor of the defendant physician without making it necessary for defendant to introduce any testimony.

DEATH OF CHILD ALLEGED TO HAVE BEEN CAUSED BY DOCTOR'S NEGLIGENCE

In this case the defendant doctor was called to the residence of a family where he was asked by the mother of a five-month-old child whether it would be all right if she were to take the baby to the home of her relatives over Christmas, in a town about twenty-five miles away.

The doctor upon examining the baby found her to be active and generally in good condition, with normal temperature and all physical signs negative with the exception of snuffles. The doctor told the mother that if it was a warm day and the baby was wrapped well and taken in a closed car, he could see no harm in taking the child on this trip.

About 6 o'clock on Christmas morning, the doctor received a telephone message from the mother saying that the child was acting queerly and insisting that he call at the home of these relatives to examine the baby. He advised that they call a local doctor, but the parents were in-

sistent and he consented to make the trip. Upon arrival he found the baby in a very cold room and it was necessary for him to take the child into the kitchen so that it would be warm enough to examine her.

He learned that the parents instead of following his instructions had waited until the evening to make the trip instead of during the day. Upon examination the baby appeared acutely ill, pale and somewhat toxic. Her temperature was 103.8; pulse was extremely rapid but of good quality. There were symptoms of bronchial pneumonia in the chest. The abdomen was extended. There was no rigidity and no masses. The doctor told the parents that as they were so far away from his office and as the baby was too sick to be moved, he could not be responsible for the care of the baby and that they should call upon some local physician, and he assisted in calling and arranging for such physician. By way of treatment until the other doctor should arrive, the defendant doctor directed that they keep the child near the fire so that she would be warm and to apply warm applications to the abdomen to reduce the distension and to give the child a small quantity of whiskey. As there was a woman present who said that she was a trained nurse the defendant left the baby in her care and rendered no further treatment in this case.

The second doctor arrived within a short time and found the baby again in a cold room, in a very serious condition. He examined the child with a stethoscope and he likewise concluded that the child was suffering from bronchial pneumonia. He caused a mustard plaster to be prepared, whiskey to be given to the child and administered a hypodermic of digitalis, but in a very short time the child died.

The child's father brought an administrator's action against the first doctor, alleging that due to the negligent treatment rendered this child, the death of the baby was caused, for which large damages were demanded.

The case finally appeared upon the calendar for trial. The defendant appeared in court with all his witnesses, ready to try the case, but because of the failure of the plaintiff to appear the case was dismissed and judgment entered in favor of the defendant.

ALLEGED NEGLIGENT TREATMENT OF MASTOID WOUND

In this case a parent brought a child of five years of age to an ear specialist, complaining of pain in his right ear. The doctor examined him and diagnosed the ailment as acute mastoiditis, and caused an *x*-ray to be taken which confirmed the diagnosis. The child was then ordered hospitalized and under a general anaesthesia a mastoid operation was performed. During the procedure the doctor removed the hemorrhagic granulations and bleeding vessels in the periosteum and deeper layers of skin and tied them with catgut ligatures to prevent further hemorrhage. This catgut with which the blood vessels had been tied off was intentionally permitted to remain in the wound after the skin was sutured over with silk thread.

The patient came out of the operation satisfactorily and the doctor personally attended to dressing the wound for about ten days at the hospital, and then from time to time at his office for about four months further. During all that time the patient progressed extremely well. The wound healed uneventfully with the exception of a furuncle that developed above the scar which was opened and drained after which it rapidly healed. When the doctor terminated his treatment of the patient there was a scab over the scar, and the child was in excellent condition in every way.

Suit was thereafter instituted by the father on behalf of the child. It was claimed that the catgut used did not absorb but kept the wound from healing for many months until the father took the child to another physician who pulled out the piece of catgut which had come to the surface and told the father that this catgut was interfering with the healing process. The plaintiff's pleadings set forth that the child had, because of the negligence and unskillfulness of the defendant, an open, running and festering wound at the point where the operation was performed. Large damages were demanded.

The plaintiff in this case failed to comply with the demand for a bill of particulars, made on behalf of the defendant, as to the charges in the complaint, and failed to bring on the case for trial. A motion to dismiss the suit for lack of prosecution was successful and finally terminated the matter in the doctor's favor.

NEWS NOTES

THE COUNCIL

The Council of the Medical Society of the State of New York met at 2 o'clock on Thursday, December 11, 1930, in the rooms of the Society in the building of the New York Academy of Medicine, at 2 East 103rd Street, New York, with twenty-nine members present. The Council is the legislative body of the State Society when the House of Delegates is not in session, and its membership is made up of 32 members as follows:

The elected officers.

The chairmen of the Standing Committees.

The Presidents of the eight District Branches.

The Editor-in-Chief of the Journal.

The retiring President.

Twenty-nine of the members attended the meeting, and the President, Dr. W. H. Ross, presided.

A communication from the Secretary of the Otsego County Medical Society requested a ruling of the Council regarding the recognition of members of the staff of a hospital which offers to provide medical service to anyone paying a certain sum to the hospital annually. The Council reaffirmed its general position regarding contract practice, and requested the Committee on Public Relations to investigate conditions in Otsego County. (See page 37).

The Council considered a request from a member for information regarding the liability of a physician for supplying an insurance company with information regarding a deceased person in addition to that required in the death certificate.

It was suggested that this was a proper subject for the Counsel of the Society to discuss editorially in the Legal department of the Journal.

Dr. Heyd discussed the "anti-vivisection" bill now before Congress forbidding the use of living dogs for biological experiments. This bill affects every State Society, and was discussed at the A. M. A. conference of State Secretaries and Editors on November 15, (see this Journal, December 1, 1930, page 1434). On motion the Secretary was authorized to draw up a protest against the bill, and forward it to the Committee on Legislation of the American Medical Association, which has charge of the medical opposition to the bill.

Dr. O. S. Wightman, editor-in-chief, reported that the advertising receipts of the Journal were nearly equal to those of last year—the greatest in the history of the Journal—the drop being only two and three-tenths percent, while periodicals generally had lost from twenty to fifty percent of their advertising income because of the business depression.

Dr. W. H. Ross reported on the relation of the Medical Society of the State of New York to the New York State Health Commission, of which he is a member. (See page 39).

The chairman of the Committees of the State Society gave formal reports enumerating their major activities during the year.

Several routine items of business were discussed and actions on them were authorized.

Adjournment at 4.30 P.M.

COMMITTEE ON PUBLIC RELATIONS

1. ABSTRACT OF REPORT TO THE COUNCIL, DECEMBER 11, 1930

The Public Relations Committee is encouraged in its efforts by many very apparent evidences of co-operation in health work which is noted in our county medical societies, and in letters of inquiry received relating to the work of the State Committee and its County Units. It is worthy of note that very few controversial measures have come before your committee for adjustment.

The members of this committee have been actively at work addressing County Societies, District Branch meetings and various medical gatherings with reference to the necessity of vigorously carrying on the work of the County Medical Society Public Relations Committees, thus endeavoring to activate county committees to as great an extent as possible.

Health surveys from eighteen counties in the State have been received and published in the NEW YORK STATE JOURNAL OF MEDICINE.

Bulletins and letters relating to the work to be performed by the County Units have been regularly submitted to the County Society Committees on Public Relations and others interested in the activities of this State Committee. We aim to keep the County Society Committees informed of the activities of the State Committee and of what is expected of them as County Committees, and have stressed the point that our County Society Public Relations Committee must

be made up of leaders in the medical profession; that they must be aggressive and co-operative, for their success will depend upon the ability of the members to impress the public with the viewpoint of organized medicine and secure active co-operation of other Public Health agencies.

A conference of the chairmen of the Public Relations Committees of the County Medical Societies of this State was held in Albany, September 18, 1930. (See this Journal, October 1, 1930, page 1179.)

The discussion, participated in by twenty-two of the thirty-two members present, was intensive and inspiring, demonstrating that in many of the counties real progress is being made far in advance of what we could have anticipated for the limited period of time that these committees have existed. Furthermore, this conference demonstrated that the personnel of the County Committees had been well selected, as the chairmen present were in most instances the leaders in their respective county societies, men who recognize that there is an issue at stake and will seek out its solution. To those of us who have been hoping to see definite leadership by our County Public Relations Committees, it was most encouraging to note the personnel and intensity of those present.

Your committee has given much time, thought and consideration to the rules and regulations to govern the developing county hospitals that are to receive State aid. These hospitals are general hospitals and the one at Warsaw in Wyoming County is in active operation. The second one in Lewis County is in the course of construction.

The following rules and regulations were recommended by your committee and received the sanction of the executive committee:

"All duly registered physicians of the county may be members of the medical staff.

"From their number they shall nominate for election by the Board of Managers a medical board of five members.

"The medical board shall make recommendations to the Board of Managers for appointments for the necessary, efficient and adequate surgical, medical and special services of the hospital; shall amplify the rules and regulations for the conduct of the professional work of the hospital; and shall formulate whatever By-Laws seem necessary for the efficient conduct of its (Medical Board's) business. Before such rules, regulations and by-laws shall become operative, they must be approved by the Board of Managers."

As indicated by this resolution, the committee was unanimous in feeling that every provision should be made to guarantee the privileges of these county hospitals to every practicing physician in the county.

A study of the Health Services in colleges and universities of New York State by one member of our committee, Dr. O. W. H. Mitchell, of Syracuse, has been made and published in the NEW YORK STATE JOURNAL OF MEDICINE of November 1, 1930. This represents a piece of work which will be invaluable in its influence in leading to better education in health matters, and in instilling into the minds of the youth of our State a proper appreciation of health and disease prevention. Reprints of this study have been obtained and will be distributed widely.

2. REPORT OF MONTHLY MEETING

The regular monthly meeting of the Committee on Public Relations of the Medical Society of the State of New York was held on December 15, 1930, in the Society rooms in Albany, with Chairman, Dr. James E. Sadlier, of Poughkeepsie, presiding.

Dr. Sadlier reported on a conference with Dr. Thomas Parran, Jr., State Commissioner of Health, regarding the Commissioner's approval of the rules and regulations for the staffs of county hospitals receiving State aid. Some of the local physicians in the counties felt that the "closed" hospital was necessary to insure the best grade of medical service. However, both the Commissioner and the members of the Committee on Public Relations favored the principle that the hospital should be "open" to every physician practicing in the county, but that standards of service should be adopted and maintained by the voluntary action of the members of the medical staffs. The following recommendations for rules and regulations governing State Aided County Hospitals were approved at the conference:

1. All registered physicians residing in the county shall be eligible to membership on the staff. Physicians residing outside of the county may use the hospital, but cannot become voting members of the staff.
2. From their number they shall nominate for election by the board of managers a medical board of not less than five members.
3. The medical board, subject to the approval of the board of managers and the State Commissioner of Health, shall have supervision and control of all medical service in the hospital. This shall include appointments for the necessary, efficient and adequate surgical, medical, special and nursing services of the hospital; the preparation of rules and regulations for the conduct of the professional work of the hospital; and the formulation of whatever by-laws seem necessary for the efficient conduct of its (medical board's) business.

A sub-committee, consisting of Drs. Fisher and Hambrook, reported on the Welfare and the

Crippled Children's Laws, and recommended that the following procedure be adopted:

The State Departments of Health, of Education, and of Social Welfare, should help in finding the children who are in need of medical service, and should then give the local physicians the opportunity to supply the service, both medical and surgical. The Committee on Public Relations considered a statement of this principle to be necessary because some crippled children had been sent to State hospitals for operation and care, when they could have been treated in their homes or in local hospitals by local physicians. The excuse of lack of funds for local treatment has been answered by the Welfare Law requiring county superintendents to supply medical care to those who otherwise would be unable to obtain it.

The committee also discussed the general medical service offered to the people of the village of Cooperstown by means of paid membership in the Bassett Hospital Guild. This subject had been assigned to the committee on December 10 by the council, for study and observation. A description of the Guild will be found on page 37.

The committee recognized the fact that a new method of giving medical service is offered to the people of an entire village by an endowed hospital of high standing, and its members decided to observe the Guild in operation, and to judge its methods and results after it has had time to justify its existence and the expectations of its promotors. The experiment may have a special value as a contribution to the study of the cost of medical care.

The Committee will meet in conference with the chairmen of the public relations committees of the five counties of Greater New York, January 8, 1931, at 10 A. M., in the State Society Rooms, Academy of Medicine, 2 East 103rd Street, New York, the object being to discuss the problems relating to public relations in the Metropolitan district.

PUBLIC HEALTH AND MEDICAL EDUCATION COMMITTEE

REPORT TO THE COUNCIL, DECEMBER 11, 1930

The Committee's program for graduate education has consisted of eight postgraduate courses and one clinical day arranged for the following counties. (The subject of the courses with the number of lectures in each course are given after each county).

Wayne County (with Ontario) Heart Course..5 lectures
Seneca County Heart Course .....5 lectures
Rockland County Heart Course.....5 lectures
Tioga County Periodic Health Examinations..4 lectures
Cortland County General Medicine.....6 lectures
Washington County Clinical Day.....5 lectures
Monroe County (with Livingston) Tuberculosis .....5 lectures
Genesee County (with Wyoming and Orleans) Tuberculosis .....5 lectures
Sullivan County Traumatic Surgery .....6 lectures

A summary of this work follows: (The figures for the preceding year also appear).

	1930	1929
Total number of courses.....	9	9
Total number of lectures.....	41	49
Number of county medical societies before which courses were given	13	12
Total attendance of all courses.	1,192	1,623
Largest attendance for one course	566(Monroe)	841*
Smallest attendance for one course.	59(Tioga)	57**
Total cost of all courses.....$1,871.31		$1,745.38
Average cost per course.....	207.92	193.93
Average cost per county.....	143.95	145.45
Average cost per attendance....	1.57	1.08

*Monroe County
**Rockland County

Inasmuch as there are still some lectures to be given in the Sullivan County Course, and also because the committee has not received vouchers for the expenses of all the lecturers, some of the figures in the above summary are based on estimates. While Monroe County had the largest attendance, namely 566, this, however, represents only 25 per cent of its membership. However, in Tioga County, which is recorded as having the smallest attendance, 71 per cent of the county's membership attended the lectures. The attendance in Washington County was much lower than the attendance in Tioga County. As this was a clinical day consisting of five lectures it is hard to compare it with the results in the counties where weekly courses were given. The small attendance in Washington County was due to many factors. Several medical meetings were held in that county within short intervals of the time of the clinical day of lectures; the location at which the lectures were given, while most suitable because of the arrangements, was nevertheless a poor one from the standpoint of convenience and accessibility to the county membership; and some criticism might be made of the effort made to acquaint the members regarding the lectures. Despite these conditions it would seem that the experience with the clinical day of several lectures was not satisfactory, and that the plan of weekly single lectures is undoubtedly more satisfactory.

All of the county societies which had graduate courses this fall with the exception of Cortland and Seneca Counties had had courses in the fall

of 1929. A comparison of their attendance is herewith given:

	Percentage of Attendance 1929	1930	
Wayne County	36%	35%	
Rockland County	30%	39%	
Tioga County	78%	71%	
Monroe County	38%	25%	
Genesee County	43%	51%	
Sullivan County	75%	51%	this is an average
Washington County	35%	27%	

A graduate course was given in Seneca County this fall for the first time since this work has been completely under the direction of the State Society. The attendance at this course consisted of 75 per cent of the membership and the course was very well received.

Outlines for new courses have been furnished by Dr. Luther Warren of Brooklyn and Dr. Burton Simpson of Buffalo on the subject of Internal Medicine and Cancer, respectively.

Arrangements have been made for a course to be given during the spring in Chemung and Steuben Counties. These two counties for the first time will enter into a joint arrangement whereby the same course will be given in Steuben County during the afternoon and will be repeated in Chemung County in the evening. Tentative arrangements with several other counties are pending.

Other activities in which the committee is interested are: a study of the Health Survey made in Steuben County by Dr. Allen Freeman, preparation of articles for publication on Preventive Medicine and work in Cancer Prevention. The work in Cancer Prevention is under the direction of a special committee which is a sub-committee of the Committee on Public Health and Medical Education. This committee held its first meeting on October 10th in the State Society rooms in New York City. Its activities will be directly concerned with the educational aspect of cancer among the medical profession.

Since the last meeting of the committee the chairman has attended all the meetings of the Executive Committee, several of the district branches, conferences of the various officers of the State society, and the meetings of the various committees. On November 13th he was the guest of the Chemung County Medical Society at which meeting he discussed the subject of graduate medical education.

Respectfully submitted,

THOMAS P. FARMER, *Chairman.*

December 11, 1930.

THE BASSETT HOSPITAL GUILD OF COOPERSTOWN

A unique plan of supplying medical service to the people of a large village has been evolved by the managers of the Mary Imogene Bassett Hospital in Cooperstown, Otsego County, New York. The village has a population of 2,725. The medical directory of 1930 lists eleven physicians practicing in the village, eight of whom are on the staff of the Bassett Hospital under pay for full time service.

The managers of the hospital have been planning for some months to establish a system by which the members of the hospital staff will supply the people with medical service along all lines, except obstetrics and chronic diseases, at a fixed price per year. Solicitors have made a canvass of the inhabitants and have distributed copies of a four-page pamphlet entitled "The Purposes and Regulations of the Bassett Hospital Guild." An unlimited amount of medical service of the hospital will be given to those who subscribe to the Guild at $25.00 annually for an individual, or $100.00 for a family of any size. The details of the service to be given by the Guild are set forth in the pamphlet, as follows:

THE BASSETT HOSPITAL GUILD, COOPERSTOWN, NEW YORK

1. *What is the purpose of the Guild?*
   The purpose of the Guild is to reduce the cost of sickness for those needing medical or surgical care. It aims to divide up the cost of sickness among the sick and the well, so that a prolonged illness or a surgical operation will not be a financial calamity for people of moderate means.
2. *Who may join the Guild?*
   Any individual residing in or near Cooperstown who is not suffering from some chronic illness at the time the application for membership in the Guild is made. Whenever it seems advisable, a physical examination by a member of the Hospital Staff will be required.
3. *Is membership in the Guild open to individuals residing outside of the village limits of Cooperstown?*
   Yes, any individual not chronically ill at the time application for membership is made, and living in or near Cooperstown, is eligible. Those whose place of residence is not easily accessible will not be entitled to receive free of charge any house calls from members of the Hospital Staff.
4. *How much does it cost to join the Guild?*
   $25 a year for each individual.
   $100 a year for an entire family of any size.
   The dues may be paid in monthly instalments if the member so desires.
5. *What period of time is covered by such a membership?*
   From January 1, 1931, to January 1, 1932.
   Memberships will become effective one month after an application has been accepted.
6. *What privileges are accorded members of the Guild?*
   The Mary Imogene Bassett Hospital, through its Staff, will take care of Guild members in case of

any illness, either medical or surgical, without additional charge. Depending upon the severity and the kind of illness, the doctors of the Hospital Staff will care for the patients at home, in the doctors' offices at the Hospital, or as ward patients in the Hospital.

7. *Are accident cases, surgical operations and, when necessary, ambulance service, included in Guild service to members?*
   Yes.

8. *Is there any type of medical or surgical service not rendered to Guild members?*
   Care of obstetrical cases is not included in this service.

9. *What is to be done about cases coming under the Workmen's Compensation Act?*
   Such cases are to be handled as heretofore.

10. *If a member of the Guild carrying an accident policy in an Insurance Company, or entitled to money from an Insurance Company because of injury by another person who is insured, is the Hospital entitled to any of the money paid by the Insurance Company?*
    Yes, the Hospital would expect to receive the amount covering the usual charge for the care given by the Hospital Staff.

11. *What services are included under Hospital ward care?*
    X-rays, laboratory examinations, professional services, operations when necessary, and all routine nursing care.

12. *Is it possible for Guild members to have Private Room service if admitted to the Hospital?*
    If a member upon admission to the Hospital desires private room service, he will be allowed a credit of $4 a day. With this deduction, the charge for private room service, operation, laboratory work, professional fee, etc., will be computed as for non-members.

13. *Can Guild members have their choice of doctors on the Hospital Staff?*
    In so far as it is practicable, it will be the aim of the Hospital to comply with the wishes of patients in their choice of doctors.

14. *If a Guild member is admitted to the Hospital, is there any limit to the length of time which he can continue to receive Hospital ward service without additional cost to him?*
    There will be no additional charge during the term of membership if the illness is of long duration.

15. *Who shall decide where a member shall be treated?*
    The doctors of the Hospital Staff reserve the privilege of deciding whether an illness is to be treated at home, in the office, or by admission to the Hospital.

16. *Is it possible for one individual to take out memberships for other individuals or families?*
    Yes, any person may subscribe for as many memberships as he desires. An individual or family may subscribe for another family, or an employer may, if he wishes, take out memberships for each of his employees.

The dues of the members of the Guild will be paid to the hospital; and the physicians will serve for fixed salaries to be paid by the hospital. The service gives rise to important questions in medical ethics, such as the standing of the members of the staff as "contract" doctors, and legal points connected with the practice of medicine by a corporation. The members of the Committee on Public Relations of the Medical Society of the State of New York to whom the entire service of the Guild was referred for investigation and observation, have taken a broad view of the situation, and will withhold judgment for the present (See page 36).

The Guild pamphlet closes with the following note of information:

"The Bassett Hospital Guild is offered to the community as something of an experiment. The success of the plan depends largely upon the number of its subscribers, and upon a spirit of cooperation between the Guild members and the members of the hospital staff. It is hoped that a sufficient number of members can be enrolled within the next six weeks to make it possible to put the plan in operation on January 1, 1931. If, after a trial for one year, the Guild is satisfactory, both from the point of view of the hospital and of the members of the Guild, it is the intention of the hospital to make it a permanent organization."

COMMITTEE ON PERIODIC HEALTH EXAMINATIONS

The special Committee on Periodic Health Examinations met at the Academy of Medicine in New York City, on December 20th, for the purpose of considering the program for work during the coming year. The following were present:

Dr. C. Ward Crampton, Chairman
Dr. W. Warren Britt
Dr. Walter A. Calihan
Dr. Nellis B. Foster
Dr. Walter D. Ludlum
Dr. Marion Craig Potter
Dr. Guy H. Turrell.

The following members of the Executive Committee of the Council were also present:

Dr. William H. Ross
Dr. John A. Card
Dr. James N. Vander Veer
Dr. W. Ross Thomson.
Dr. Thomas P. Farmer.

The Chairman reported that the banquet meeting of the Periodic Health Committee held in Rochester June 4, 1930, after the close of the Annual meeting, had been attended by Mrs. R. R. Vail, Executive of the State Parent-Teachers Association, and Miss Harriet Mayer, of the

New York State General Federation of Women's Clubs (see this Journal, June 15, page 737), and that these two organizations had passed resolutions favoring periodic health examinations.

The resolution of the Parent-Teachers Association on October 9th, was as follows:

"Whereas, The Summer Round-up has demonstrated the advantages of the physical examinations of the pre-school child and

"Whereas, The physical examination of an adult is of equal importance,

"Therefore be it Resolved, That every District of the New York State Congress of Parents and Teachers shall, through its Health Chairman, provide its members with accurate and up-to-date information as to the value of an annual health examination, and encourage its members to have such examination"

The resolution passed by the Federation of Women's Clubs in November, was as follows:—

"Whereas, examinations for the discovery of defects in 'Well Baby Clinics,' 'Summer Round-ups' of pre-school children and children in the public schools have demonstrated this practice to be effective for the health of the child and one bearing directly upon its future welfare and

"Whereas, in our program for the prevention of disease and the prolongation of life, a check-up for adults is of corresponding importance; therefore

"The Division of Health of New York State Federation of Women's Clubs recommends that each club seek to promulgate the education among its members of the value of a health examination by a competent physician and record the number examined; and The Division of Health urges that the Federation in convention assembled endorse this recommendation."

The Committee intends to submit to the Journal, for publication, material calculated to be of aid to the physicians who may be called upon to give health examinations to members of these organizations.

After so doing, they will feel at liberty to advise these organizations that the physicians have been informed and are ready.

The Committee, through its Chairman, has asked the publication Committee to print this information in the Journal and to invite suggestion and comment thereon from members of the Society.

The chairman described a "Health Exhibit" conducted in the Women's Building at the Rochester Exhibition during the first week of September, 1930. The exhibition is a non-profit organization promoted by the leading citizens of the community for the benefit of Western New York. It is comparable in many features to the State Fair at Syracuse. It has been held annually the week of Labor Day for the past twenty years. This year, there was a reported attendance of nearly two hundred thousand. The Women's Building was built for civic and educational enterprises and the display of exhibits. It is the only building exempt from payment for space.

The Health Exhibit was sponsored by the Health Committee of the Federation of Women's Clubs, and was visited by more than 18,000 persons. A large number of organizations contributed to the exhibit including the Committee on Periodic Health Examinations, the Tuberculosis and Health Association of Rochester, Monroe County, and the Rochester Gas and Electric Corporation.

Moving pictures were shown continuously and a great amount of health literature was distributed.

The Exhibit aroused a widespread interest in health matters, and especially in personal health, of which the periodic health examination is the concrete expression.

C. WARD CRAMPTON, *Chairman.*

NEW YORK STATE HEALTH COMMISSION

This Journal of May 15, 1930, carried an account of the appointment of the New York State Health Commission of fourteen members by Governor Franklin D. Roosevelt, for the purpose of:

"1. The consideration of public health activities of State and local authorities, and their relation to one another.

"2. Recent progress in public health in other states and abroad.

"3. To submit any conclusions and recommendations which it may deem wise relating to either the legislative or administrative aspects of public health."

Dr. Livingston Farrand, President of Cornell University, was made Chairman of the Commission. Dr. Farrand is a doctor of medicine who has the point of view of the practising physicians, and has had a wide experience in public health administration.

The Secretary of the Commission is Dr. Thomas Parran, Jr., Commissioner of Health of New York State.

The Commission assigned each of its members to the chairmanship of a sub-committee on a particular subject; and each chairman was authorized to appoint associate members. The subcommittees chosen were as follows:

Cancer: Chairman, Dr. George W Cottis, Jamestown surgeon.

Associates: Dr. R. V. Brokaw, American Society for

the Control of Cancer, 25 West 43rd Street, New York City.

Dr. James Ewing, Cornell Laboratory, 477 First Avenue, New York City.

Dr. Burton T. Simpson (Secretary), Director, New York State Institute for the Study of Malignant Disease, 115 High Street, Buffalo, N. Y.

Dr. Francis Carter Wood, 1145 Amsterdam Avenue, New York City.

Dr. Howard Taylor, 20 West 53rd Street, New York City.

Laboratories: Chairman, Dr. Simon Flexner, Rockefeller Institute for Medical Research, New York City.

Associates: Dr. Stanhope Bayne-Jones, 62 Dartmouth Street, Rochester, N. Y.

Dr. Thomas Ordway, Dean Albany Medical College, Albany, N. Y.

Dr. William H. Park, N. Y. C. Bureau of Laboratories, Foot of East 16th Street, New York City.

Colonel F. F. Russell, Rockefeller Foundation, 61 Broadway, New York City.

Dr. A. B. Wadsworth, (Secretary), Director, Division of Laboratories, Albany, N. Y.

Local Health Service: Chairman, Dr. Thomas J. Parran, Jr., New York State Commissioner of Health, Albany, N. Y.

Associates: Mr. W. P. Capes, Executive Secretary, Conference of Mayors, City Hall, Albany, N. Y.

Dr. W. P. Draper, Asst. Surgeon General, U. S. Public Health Service, Washington, D. C.

Dr. John A. Ferrell, Rockefeller Foundation, 61 Broadway, New York City.

Dr. Allen W. Freeman, Johns Hopkins School of Hygiene and Public Health, 615 North Wolfe Street, Baltimore, Md.

Medical Care: Chairman, Dr. W. H. Ross, Brentwood, President of the Medical Society of the State of New York.

Associates: Dr. A. T. Davis, County Health Commissioner, Suffolk County, Riverhead, N. Y.

Dr. Joseph S. Lawrence, Executive Officer, State Medical Society, 100 State Street, Albany, N. Y.

Dr. W. S. Rankin, The Duke Endowment, Power Building, Charlotte, N. C.

Mr. Barry C. Smith, The Commonwealth Fund, Fuller Building, 57th Street and Madison Avenue, New York City.

Dr. Nathan B. Van Etten, 300 East Tremont Avenue, New York City.

Mental Hygiene: Chairman, Mr. Homer Folks, Secretary, State Charities Aid Association, New York City.

Associates: Dr. John E. Burke, School Medical Director, 1308 State Street, Schenectady, N. Y.

Dr. Eric Kent Clarke, Assistant Professor of Medicine, School of Medicine and Dentistry, University of Rochester, Rochester, N. Y.

Dr. Elizabeth M. Gardiner, Director, Division of Maternity, Infancy and Child Hygiene, State Department of Health, Albany, N. Y.

Dr. Richard H. Hutchings, Superintendent Utica State Hospital, Utica, N. Y.

Mr. Charles H. Johnson, Director, State Department of Social Welfare, Albany, N. Y.

Dr. Harry L. Levin, Clinical Director, Buffalo State Hospital, Buffalo, N. Y.

Dr. Cayce Morrison, Assistant Commissioner for Elementary Education, State Department of Education, Albany, N. Y.

Dr. Frederick W. Parsons, Commissioner State Department of Mental Hygiene, Albany, N. Y.

Dr. George S. Stevenson, Field Work Consultant, National Committee for Mental Hygiene, 370 Seventh Avenue, New York City.

Mr. Arthur Towns, Secretary, Onondaga Health Association, 327 Montgomery Street, Syracuse, N. Y.

Dr. Theron J. Vosburgh, Gracelands Hospital, Westchester County, Valhalla, N. Y.

Orthopedics: Chairman, Mr. Henry Morgenthau, New York City.

Associates: Mr. Frederick Brown, 565 Fifth Avenue, New York City.

Miss Sarah Schuyler Butler, 9 East 41st Street, New York City.

Dr. Walter S. Craig, Director of Division of Orthopedics, State Department of Health, Albany, N. Y.

Miss H. Ida Curry, State Charities Aid Association, 105 East 22nd Street, New York City.

Mr. Charles Johnson, Department of Social Welfare, Albany, N. Y.

Mrs. Sarah Kirkendall, 119 Albany Street, Ithaca, N. Y.

Mr. Raymond Knoeple, 5 Beekman Street, New York City.

Dr. Louis Wilson (Secretary), State Department of Education, Albany, N. Y.

Miss Lillian D. Wald, 265 Henry Street, New York City.

Public Health Law: Chairman, Dr. Matthias Nicoll, Jr., White Plains, Commissioner of Health Westchester County, and lately Commissioner of Health of New York State.

Associate: Dr. Edward H. Marsh, State Department of Health, Albany, N. Y.

Public Health Education: Chairman, Mrs. Henry Goodard Leach.

Associates: Mr. Bertrand Brown, Milbank Memorial Fund, 49 Wall Street, New York City.

Mr. Edward F. Brown, Director, Diphtheria Prevention Commission, New York City Department of Health, 505 Pearl Street, New York City.

Public Health Nursing: Chairman, Miss Katherine Tucker, Director National Organization for Public Health Nursing, New York City.

Associates: Miss Mary Thornton Davis, Director, Public Health Nursing Association, Inc., 130 Spring Street, Rochester, N. Y.

Miss Elizabeth Fox, Superintendent New Haven Visiting Nurse Association, New Haven, Conn.

Miss Amelia Grant, Director, Bureau of Nursing, Department of Health, 505 Pearl Street, New York City.

Miss Mathilde S. Kuhlman (Secretary) Director, Division of Public Health Nursing, State Department of Health, Albany, N. Y.

Sanitation: Chairman, Dr. Matthias Nicoll, Jr., White Plains, Commissioner of Health Westchester County, and lately Commissioner of Health of New York State.

Associates: Mr. George W. Fuller, c/o Fuller and McClintock, 170 Broadway, New York City.

Mr. Charles A. Holmquist (Secretary), Director, Division of Sanitation, State Department of Health, Albany, N. Y.

Professor Henry N. Ogden, Cornell University, Ithaca, N. Y.

Child Health: Chairman, Dr. Livingston Farrand, President Cornell University, Ithaca, N. Y.

Associate: Dr. Elizabeth M. Gardiner, Director, Division of Maternity, Infancy and Child Hygiene, State Department of Health, Albany, N. Y.

Social Hygiene: Chairman, Dr. Edward L. Keyes, President American Social Hygiene Association, New York City.

Associates: Dr. Walter Brunet, New York Tuberculosis and Health Association, 244 Madison Avenue, New York City.

Dr. Albert Pfeiffer (Secretary), Director, Division of Social Hygiene, State Department of Health, Albany, N. Y.

Dr. William F. Snow, Director, American Social Hygiene, Association, 370 Seventh Avenue, New York City

Tuberculosis: Chairman, Mr. John A. Kingsbury, Milbank Memorial Fund, New York City.

Associates: Dr. Reginald M. Atwater, County Health Commissioner, 302 Laurens Street, Olean, N. Y.

Mr. Baily B. Burritt, General Director Association for

Improving the Condition of the Poor, 105 East 22nd Street, New York City.

Miss Alta E. Dines, Director of Nursing Service, Bureau of Educational Nursing, Association for Improving the Condition of the Poor, 105 East 22nd Street, New York City.

Dr. Albert H. Garvin, Director, Buffalo Tuberculosis and Health Association, 370 Seventh Avenue, New York City.

Dr. Henry E. Kleinschmidt, Medical Secretary, National Tuberculosis Association, 365 Military Road, Buffalo, N. Y.

Mr. George J. Nelbach, State Charities Aid Association, 105 East 22nd Street, New York City.

Dr. Robert E. Plunkett, (Secretary), Director, Division of Tuberculosis, State Department of Health, Albany, N. Y.

Dr. Frederick Rand Rogers, Director, Bureau of Welfare, Physical Education and Health Teaching, State Department of Education, Albany, N. Y.

Mr. Fred M. Stein, New York City Tuberculosis Association, 244 Madison Avenue, New York City.

Dr. Nathan B. Van Etten, 300 East Tremont Avenue, Bronx, New York City.

Dr. E. R. Baldwin, Trudeau Foundation, Saranac Lake, N. Y.

Dr. Lawrason Brown, Trudeau Sanatorium, Saranac Lake, N. Y.

Dr. E. P. Kolb, Suffolk County Sanatorium, Holtsville, N. Y.

Dr. George C. Ruhland, Department of Health, Syracuse, N. Y.

Miss Grace L. Anderson, East Harlem Nursing & Health Service, 354 East 116th Street, New York City.

Mr. Harry L. Hopkins, Director, New York Tuberculosis and Health Association, 244 Madison Avenue, New York City.

Mr. Edward Hochhauser, Committee for the Care of the Jewish Tuberculous, 67 West 47th Street, New York City.

Public Health Personnel: Chairman, Dr. Linsly Williams Director New York Academy of Medicine.

Associates: Dr. Livingston Farrand, Office of the President, Cornell University, Ithaca, N. Y.

Dr. Thomas Parran, Jr., Commissioner of Health, Albany, N. Y.

Dr. Matthias Nicoll, Health Commissioner, 158 Martine Avenue, White Plains, N. Y.

Hon. Homer Folks, State Charities Aid Association, 105 East 22nd Street, New York City.

Mr. John A. Kingsbury, Milbank Memorial Fund, 49 Wall Street, New York City.

Surgeon General Hugh S. Cumming, U. S. Public Health Service, Washington, D. C.

Dr. Haven Emerson, 630 West 168th Street, New York City.

Dr. Allen W. Freeman, Johns Hopkins University, Baltimore, Md.

Dr. Edward S. Godfrey, State Health Department, Albany, N. Y.

The Commission and its sub-committees are composed of ninety-two members, representing nearly every phase of civic medicine and public health, and their opinions will carry the weight which belongs to experts in their several lines.

JEFFERSON COUNTY

The December meeting of the Jefferson County Medical Society was held on December 11th, at the Black River Valley Club. Dinner was served at 6:30, and the meeting was called to order at 7:45, President Walsh presiding.

A report from the Public Relations Committee was made by Chairman Olin. About twenty-five meetings have been addressed around the County in the interest of the County Health Unit. He read a letter from Dr Ross, President of the State Society, emphasizing the point that, in Suffolk County, the county health administration has, in these two years of operation, had no interference from the State Department. It pursues its own policies and has all freedom in the choice of a health officer. All that Albany seems to want is the assurance that local work is progressing satisfactorily. Two letters from Dr. Parran, Commissioner, bore out the same statements relative to non-interference from the State Department.

The proposition is now ready for presentation to the Board of Supervisors. After considerable thought, and some difficulties, the committee was now of the opinion that the best way to do this would be for the communication to be put in writing and read to the Board by the Secretary of the Medical Society, the health officers from the rural sections being especially urged to be present. Advice was asked, but no other suggestions were offered.

A report of the Legislative Committee was made by Dr. Calkins. Due to lack of time, the Committee had not been able to act on the proposed agreement with Compensation Carriers, as authorized at the last meeting. The proposed agreement was read, and minor points, possibly objectionable, were pointed out. After discussion, Dr. Calkins moved that the agreement be accepted without reservation, and the cause of our delayed action explained; seconded by Dr. Gardner, and carried.

A motion was then made that the President appoint a committee of three to draw up a fee-schedule, as required by the above agreement. Seconded and carried. Dr. Gardner requested that the Secretary obtain a copy of the fee-schedule of one of the counties in the Metropolitan area.

Dr. Walter Atkinson moved that the Secretary be authorized to send flowers to Dr. Hawkins, Mrs. Hawkins having just passed away, also that a committee be appointed to draw up resolutions. Seconded and carried.

Dr. Metzger then gave his address, as retiring President. He dealt with the "demerits" of the County Health Unit plan. He thought the health authorities of a village would know more about the village health problems than a county health officer; that politics might play an undesirable part in the appointment of the county board and the health officer; and that there might

be undue interference in policies and program from outside sources. He quoted freely from an address given by Dr. Morris, Secretary of the Cattaraugus County Society. It was not so much an attack on the county unit idea as it was a friendly effort to point out minor defects.

Five members were scheduled to speak on "Observations at the Last Meeting of the American College of Surgeons."

Dr. Walter Atkinson asked to be excused because so few are interested in eye work.

Dr. Cooper spoke interestingly of a new theory about forcing fluids. In some diseases, e.g., toxemia of pregnancy, it is possibly better to limit them.

Dr. Thornhill sounded a warning about "Thymophysin," the new drug advertised as a "reliable and safe means of accelerating delivery," with opinions from Philadelphia and the A. M. A. He spoke of various forms of local anesthesia coming into favor, of the talking pictures exhibited, and lastly of the willingness of prominent surgeons to confess inability to make a diagnosis, provided the case had been carefully studied.

There were forty members present, and two guests.

Adjournment at 10 P. M.

W. S. ATKINSON, *Secretary.*

TIOGA COUNTY

A general hospital for Tioga County was dedicated on the afternoon of Tuesday, November 25, with elaborate ceremonies. The hospital was built at a cost of over $200,000, raised by subscriptions, and is therefore not under the control of the governmental officials of the county, as are the hospitals of the counties of Lewis and Wyoming; and it is the center for the entire medical profession of Tioga County represented by the County Medical Society.

The hospital will be more than a place where sick persons are treated; it will be an educational center, at which scientific standards of diagnosis and treatment will be maintained. While it will be open to all physicians in the county, yet they have voluntarily adopted high standards of practice and will maintain them by monthly staff conferences. The importance of the hospital as a center of graduate education is indicated by the fact that the list of speakers included a group of officers of the Medical Society of the State of New York—Dr. W. H. Ross, President, Dr. J. A. Card, Speaker of the House of Delegates, Dr. J. E. Sadlier, Chairman of the Committee on Public Relations, and Dr. J. S. Lawrence, Executive Officer.

The hospital has a capacity of sixty patients and was half filled on the day it was opened.

The Waverly Sun of November 27, 1930, devoted over a page to a description of the hospital and the ceremonies of dedication.

ORANGE COUNTY

The annual meeting of the Medical Society of the County of Orange was held at Mitchell Inn, Middletown, on Tuesday, December 9, 1930, at 6 P. M.

A turkey supper was served to 67 members, this number being the largest at a Society meeting for many years. President S. L. Truex presided at the supper and at the close opened the meeting for nomination and election of officers which resulted as follows:

President.....Earl C. Waterbury, Newburgh
Vice-President.....S. W. Mills, Middletown
Secretary-Treasurer..H. J. Shelley, Middletown
Censors:—M. A. Stevens, H. F. Pohlmon, E. G. Cuddeback, W. H. Snyder.

Delegates to State Society for 1931-1932:—J. B. Hulett; alternate, J. D. Mors.

Delegate, First District Branch:—S. L. Truex; alternate, G. Otto Pope.

The subject of the Relation of Industrial Insurance carriers to the medical profession was presented by Dr. Edgar A. Vander Veer, member of the Committee on Economics, who outlined the principles formulated at a conference of representatives of the County Medical Societies of Greater New York, and the Insurance Carriers which was described in the Journal of November 15, 1930, page 1480. This subject was referred to a special committee to report at a special meeting of the Society on January 12, 1930.

The subject of County Pre-school Clinics was presented through a letter from Dr. Thomas Parran, Jr., State Commissioner of Health. Dr. J. S. Lawrence, executive officer of the State Society, explained the point of view of the State Society. The subject was referred to a special committee to report on January twelfth.

Following a reading of a letter from Dr. Robert Corder complaining of fines imposed for failing to pay the annual registration fee, the following resolution was offered and carried, viz:—

"That the annual registration of doctors be removed and that the Secretary send a copy of

this resolution to the President of the State Medical Society and to the State Department of Education."

The Treasurer's report showed 107 paid-up members.

Dr. John Howell, Chairman of the 125th Anniversary Committee, reported progress and fixed a tentative date in July, 1931, for the celebration.

The Society went on record against fishing, bathing or boating in municipal water supplies of the county.

BRONX COUNTY

A regular meeting of the Bronx County Medical Society, held at Concourse Plaza, on November 19, 1930, was called to order at 9 P.M., with the President, Dr. Gettinger, in the chair.

The following candidates were elected to membership: Drs. Isadore Aronowitz, Thomas I. Brennan, Milton J. H. Grand, Julius Katz, Pincus Marlowe and Joseph W. Wilner.

Dr. Magid submitted the report of the Committee on Medical Economics with special reference to the compensation agreement between the county societies and the insurance carriers. The President stated that, while it is not a perfect plan, thanks are due to the various committees, including the State Committee on Medical Economics, of which Dr. Chandler is chairman, for having brought about this agreement The agreement was further discussed by the members and Dr. Rosenthal, chairman of the Committee on Economics of the Medical Society of the County of New York. Following the discussion, it was moved and carried that the compensation agreement be accepted by the Bronx County Medical Society.

Dr. Bick presented a tentative Report of the Social Committee. A Beefsteak Dinner with a novel entertainment will be held at Ebling's Casino on Wednesday evening, January 28, 1931, only physicians to be admitted. Any profit from this affair is to be credited to the relief fund.

Dr. L. A. Friedman submitted the report of a joint meeting of the committees on Health Examination, and Public Health and Medical Education. The committees recommended that the Bronx County Medical Society go on record as favoring the compulsory immunization against diphtheria before a child is admitted to school.

The Scientific Program then proceeded as follows:

Papers:

1. Modern Cancer Research, Francis Carter Wood
2. Radiotherapy in Cancer, Maurice Lenz
3. Modern Cancer Surgery, George Henry Semken.

I. J. LANDSMAN, *Secretary.*

DELAWARE COUNTY SURVEY

Dr. John E. Safford, of Stamford, Chairman of the Public Health Committee of the Delaware County Medical Society, wrote to Dr Sadlier, on November 27:

"We had no Committee on Public Relations up to two weeks ago, when one was created and Dr. Gordon Maurer of Margaretville was made its Chairman.

"The new Public Relations Committee will make a more complete survey and, no doubt, will cooperate with your State Committee heartily.

"We have been handicapped in our Public Health work by not having a county nurse. In the absence of a nurse, the Secretary of the County Antituberculosis and Public Health, the Home Bureau, the State Department District Nurse, and local lay committees have assisted.

"Since 1924 we have administered toxin antitoxin to 4073 children, 699 of whom were under five years of age; and 1,971 children of pre-school age have been examined, mostly by our own physicians. Our relations with these county lay organizations have always been cordial, and we have led the procession."

THE DAILY PRESS

LESSONS IN RELAXING

The Daily Press Department of this Journal for December 15, 1930, page 1497, contained a description of a course in relaxation in Barnard College, New York City. Numerous comments on the course show that it is to be taken seriously. Tension, both nervous and muscular, is the serious threat to health to children as well as adults, and physicians will welcome a method for overcoming it. An editorial in the New York *Times* of December 11 suggests the following plan which works well in a kindergarten class:

"Barnard College, with its new courses in resting, is but following in the footsteps of a kindergarten in Seattle, Wash. There Miss Winifred Chamberlain has been teaching children the art of relaxation, just as they are taught writing or baseball or dancing.

"Realizing that the average child leads an 'overstimulated life,' she began using the ten-minute rest periods to teach the youngsters how to relax. Mothers provided each child with a clean but rather Spartan resting mat, made of several thicknesses of newspaper covered with wrapping paper. When not in use these are folded so that the clean side never touches the floor.

"The children were shown how to lie down on their mats in a posture found by experiment to induce the greatest relaxation, so that "the child is lying face downward with head turned to left side, the right leg out straight and the left leg slightly bent, throwing most of the weight on the right side." With a little instruction, all took to it like ducks to water.

"Seattle mothers must be grateful to have their youngsters taught how to rest, and in a way which makes it seem a pleasant game. One can easily imagine a precocious and high-strung Junior being invited to perform for visitors by going into his rest instead of speaking a piece; or, better yet, being assigned as "home-work" two hours on the resting mat.

"In the kindergarten the best relaxer was recognized by having his picture displayed in a poster frame labeled "John is showing us the best way to rest." Here at last is a chance for the dullards to come out ahead of the bright youngsters."

CHEESE NAMES

How many kinds of cheese can you name? You would start off with American, Roquefort, Camembert, and Edam, and would probably stop at Limberger. But Beverly Smith, writing in the "Lantern" column of the New York *Herald Tribune* of December 11, says:

"Glancing over the literature of cheeses I find a tentative list of almost 500, ranging from Abertam, a hard rennet cheese made in the mountains of Bohemia, to Zips, a variety of the Brinsen or Brinza which is cunningly concocted of sheep's milk in the Hungarian Carpathians.

"To mention a few at random, there is the Brug-Panir of Armenia, the Bra of the Italian Piedmont, the "Brickbat" of Wiltshire, the Broccio of Corsica, the Caerphilly of Wales, the Chaschol de Chaschosis of Switzerland, the Chhana of Asia, the Damen of Vienna, the Dotter of Nuremberg, the Dunlop of Scotland, the Elbing of West Prussia, the Eriwani of the Caucasus, the Ftinoporino of Macedonia, the Geheimrath of Holland, the Gisley of Denmark, the Goya of the Argentine (Firpo?), the Ilha of Portugal, the Jack of Monterey County, California; the Josephine of Silesia, the Kajmak of Turkey, the Karut of Afghanistan, the Lapland cheese made of reindeer milk and the Neapolitan cheese made of buffalo milk.

"Most of these cheeses, even with the help of our finest bacteriologists and cheesemakers, could not be reproduced in America. The water used, the climate, the provender fed to the cattle—these delicate factors make a good cheese as hard to imitate as Pilsener beer. Even the great chemists of Germany, as you know, have at last abandoned the attempt to produce real Pilsener anywhere except in the little Bohemian town of Pilzen.

"America is beginning, however, to produce rare cheeses of her own. The great army of Americans who travel abroad every summer have learned something of what good cheese can be. They are demanding Camembert and Gorgonzola and Port de Salut at the delicatessen stores."

GIANTS

The frequent references to a race of giants in the older books of the Bible, as Genesis 6:4, have often been taken as scientific truths which have been confirmed by reports of actual skeletons of persons of unusual stature. The New York *Herald Tribune* of December 15 discusses the myths of giants, and compares their persistence and perennial births with those regarding children nurtured by wolves and wheat grown from kernels found in the mummies of the Pharaohs. The editorial says:

"A casual and incomplete census of outbreaks of these three myths of giants, wolf-boys and ancient seeds in the last few years indicates what doctors would call an incidence of about once every six weeks. The curious thing is that any one of these three stories might be true A race of gland-diseased human beings most of whom were giants is not unthinkable. There is no definite evidence that a lost baby might not grow up among animals. No seed ever has been known to live, it is true, as long as thirty centuries, or even as long as two, but no one can call the feat impossible. The only thing against the three stories is that they always turn out false. The giants, for example, probably are ordinary men and women whose bones have been laid out carelessly and measured a foot or two too long. In life there is a long overlap between the human leg bones and the spine, a result of the normal tilt of the bones of the pelvis. Unless an excavator is a skilled anatomist, he usually forgets this when measuring the length of a skeleton, thus magnifying his measurement by a foot or so and imagining a giant is what is merely a wrongly tilted pelvis and insufficiently overlapped legs."

A NON-POISONOUS DENATURANT FOR ALCOHOL

The newspapers have been carrying protests against the use of the poisonous wood alcohol as a denaturant for ethyl alcohol used in manufacturing, on the ground that it gives no manifest sign of its presence when the alcohol is used as a drink. The New York *Herald Tribune*, as well as other newspapers, of December 11, announce the discovery of a safe denaturant after three years of research and experimentation The new substance is described as follows:

The substitute for wood alcohol will be alcotate, a chemical element derived from the production of gasoline through the cracking process The element is supposed to be contained only in petroleum found in California. Industrial alcohol will be treated with 1 per cent alcotate and 1 per cent aldehol, also a petroleum product.

"This rids us of the need of using wood alcohol," said Dr. Doran. "It will not kill or blind and it is more effective for its purpose than wood alcohol. It is a big improvement all around. Alcohol denatured by this process is proof against removal by the most drastic bootleg manipulations. It is harmless if accidentally or purposely taken in quantities to be found in industrial alcohol. It will ruin the taste of beverages prepared from denatured alcohol, however."

RYE BREAD

It is a trait of human beings, both young and old, to acquire a wish to do things forbidden. The New York *Herald Tribune* of December 10 has the following editorial discussion on the compulsory use of rye bread in Germany:

"If we know human nature the Germans are about to acquire a dislike for the strong-tasting, sour rye bread which has been, along with beer, their national pride. For Germany has a surplus of rye and a deficit of wheat, and one of Chancellor Bruening's new economy measures is to forbid the restaurants to sell white bread. Now before the war many a German grew to manhood without even tasting white wheat bread; and when he did taste it, it seemed to him as insipid as water.

"Our ancestors who migrated from England to America may never have tasted white bread; white bread was the exception, something of a luxury, in the England of their day. It was not until the middle of the eighteenth century that wheat became the major constituent of British bread. North France clung longer still to rye; for some curious reason southern Europe never adopted rye at all.

"Russia, of course, still lives on bread which is not only brown but black—a heavy, musty-smelling concoction positively repellent to most Western palates. But taste, in bread as in other matters, is a growth of custom. The Russian peasant does not feel oppressed by being forced to eat black rye bread; he would object more if compelled to subsist on fluffy, crusty, white French rolls. Most of us are arrant reactionaries in matters of food. We like that to which we are accustomed; we fear the strange. Nothing less than a prohibition will force us into new habits."

OUR NEIGHBORS

ANNUAL MEETING IN MICHIGAN

The minutes of the Annual Meeting of the Michigan State Medical Society, held in Benton Harbor, September 15 to 17, 1930, fill pages 821 to 872 of the November issue of the Journal of the Michigan State Medical Society. The report of the Council lists the following activities of the Society:

"1. Publication of the Journal.
"2. Medical Legal Defense.
"3. Joint Committee on Public Health Education.
"4. Post-Graduate Courses in Ann Arbor and Detroit in conjunction with the Post-Graduate Department of the University.
"5. Post-Graduate District Conferences.
"6. Legislative Conferences.
"7. County Society Activities.
"8. Entertainment of Officers and House of Delegates of American Medical Association.
"9. Joint Activity with Standing Committees.
"10. Individual Investigations.

"Our Society has conducted several worthwhile surveys and studies. Notable were those on Tuberculosis, Free Service Hospitals, Need of Additional Accommodations in State Institutions, etc. Valuable contributions have thus been made."

Concerning legislation, the President reported:

"There seems to be among our membership two opinions. The one favoring a passive or non-active attitude and passing the responsibility for maintaining the high standards of practice squarely over the legislature. Aside from the State Department of Health the medical profession has had no assistance in its fight from local boards of health or public officials, and I believe that since the benefits fall upon the public rather than upon us, the job is not entirely ours. Personally I am quite disgusted with the actions of legislators and perhaps if we left them severely alone for a term or two, allowing them to enact all the cult legislation they desired, I am quite convinced that it would react to a public demand for repeal with great benefit to scientific medicine, and a material surcease in our legislative efforts in the future.

"On the other hand there is a group who favor an active legislative campaign—offensive as well as defensive. Among this group are the members of the Wayne County Medical Society Legislative Committee, and the State Legislative Committee. It appears that these two groups differ somewhat as to the method of procedure and the objects in view. Both are meritorious and both will bring results. From my knowledge of them it seems they could work together to mutual advantage."

The following resolution was adopted:

"Whereas, the *Michigan State Medical Journal* in the August, 1930, issue contains the following paragraphs, describing the methods used by the Berrien County Medical Society.

"There are no municipal clinics. Indigent cases come under the care of welfare workers and the public health nurses. Where medical attention is necessary, the patient is allowed to choose his own physicians and the bill for medical services is certified by the social workers and paid by the municipal governments. A reasonable fee is allowed, and there is very little criticism on the part of the public or the medical profession.

"Therefore, be it resolved that we, the House of Delegates, compliment the Berrien County Medical Society as using the best practical methods consistent with all the ethics and traditions of our profession and,

"Further, be it resolved that the various county societies follow their splendid example and apply such methods throughout the State as far as possible during the coming year."

A diagnostic clinic for the Upper Peninsula was discussed:

"Most of you are familiar, I believe, with the donations of Mr. Couzens during the last several years in the interests of child welfare.

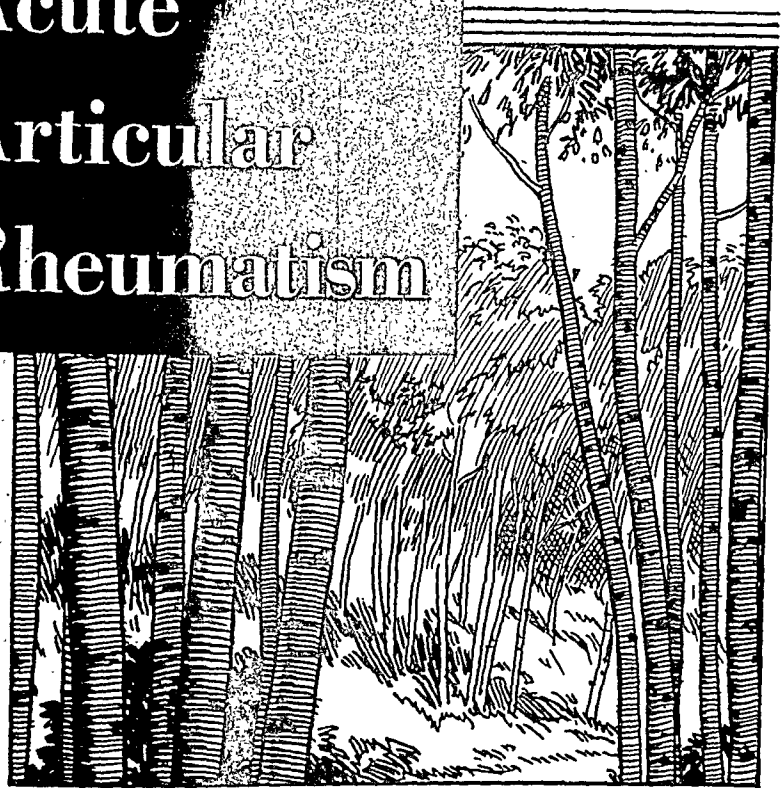
"A little over a year ago he made a much larger contribution in the sum of $10,000,000 which is to be expended at the rate of $700,000 a year in the interests of the welfare of the children of Michigan and of the country generally.

"Some months ago, after a survey of the State, it was determined by the Michigan Children's Fund—which is the official name of the organization—to put a clinic, with nurses and doctors and everything necessary to take care of a very considerable group of children, into the Northern Peninsula.

"After studying the situation for some time it was decided that the University and the State Society enter into a contract with the Couzens' Fund with a view to establishing a medical center in northern Michigan. That was the suggestion that was decided upon. A clinic building would be erected for purposes of diagnosis and for treatment, and the work would progress under the auspices and control of the Department of Post-Graduate Education of the University of Michigan and the Michigan State Medical Society. At regular intervals during the year clinicians

(*Continued on page* 48—*adv. xii*)

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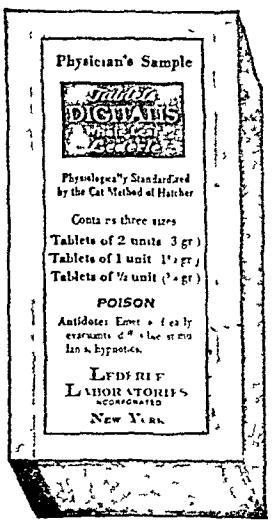
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(*Continued from page* 46)

and teachers would be sent there and diagnosis would be made; demonstrations would be made upon the clinical material afforded. In that way they would establish, really, an extension of the University and of the State Medical Society.

"We know that very often, no matter how laudable the purpose of these large foundations may have been, yet with large sums of money at their disposal as public servants the personnel have gone about to do a certain duty, and in their zeal they have often overrun what we regard as the proprieties of medical practice. We have every assurance that that will not be done in this instance because the professional activities are entirely under the control of the department which I represent in the University, and under the control of the committees among the profession locals, and, of course, the profession in the State."

Dr. Bruce reported: "I met with the Society in groups at the Soo. Every member of that district was there except one. At Marquette we had an attendance of about 50 or 60. Each of the other meetings was attended by proportionate numbers. There was universal accord on this matter. They all appointed committees to work with the Fund in the prosecution of this work."

COUNCILOR DISTRICT MEETINGS IN NEW JERSEY AND PENNSYLVANIA

The December number of the Journal of the Medical Society of New Jersey contains a stenographic report of the Conference of Secretaries and Reporters of the County Societies of New Jersey, held on November 5, 1930, in Trenton. One subject discussed was a proposal to hold Councillor District meetings. New Jersey has five councillor districts which are analogous to the Eight District Branches of the Medical Society of the State of New York; but unlike those of New York, the New Jersey districts do not hold annual meetings, although the Fifth, consisting of the southernmost counties, has held meetings in 1929 and 1930.

The arguments for Councillor District meetings were presented by Dr. Walter F. Donaldson, Secretary of the Medical Society of the State of Pennsylvania, which is divided into eleven Councillor Districts, each of which holds an annual meeting. Dr. Donaldson described one function in which the councillors are members of the Board of Trustees of the State Society, as they practically were in New York before a separate Board of Trustees was organized in July, 1926. Dr. Donaldson said:

"In Pennsylvania, the members of our Board of Trustees are also Councillors. You, of course, have a Board of Trustees in your State Medical Society and I do not need to tell you how great

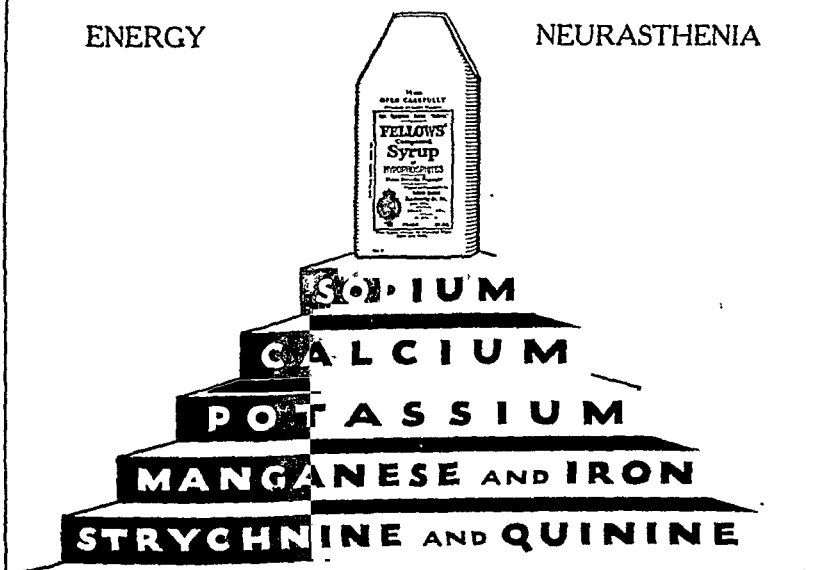
(*Continued on page* 50—*adv. xiv*)

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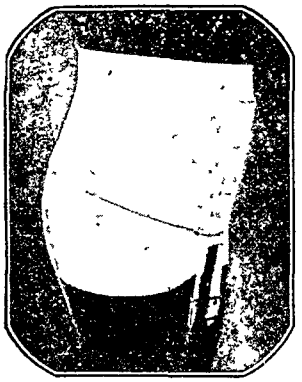
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(*Continued from page* 48—*xii*)

are their responsibilities. In Pennsylvania, our Trustees conduct all of the interim activities of the State Society,—I mean in the period between annual sessions of the House of Delegates. Therefore, the members of the Board of Trustees are familiar with the activities of all standing or permanent committees of our State society; with the conduct and publication of our monthly journal; and with the financial problems of the society, because all of the finances are handled by the Board of Trustees, even those originally created by the House of Delegates. Our Board of Trustees meets regularly three times a year, and at the call of the Chairman when necessary. At these meetings all standing committees, which later on report to the House of Delegates, are expected to make reports of progress, or if they desire suggestions or advice, to come before the Board of Trustees. The reason I mention this fact is that the members of our Board of Trustees are also Councillors, and through this familiarity with conduct of the business of the State Society each one of these trustees, as a councillor for a district, is kept familiar with what is going on in the State Society between annual meetings. And since his duties as a councillor require that he must conduct at least one meeting annually in his district, he will take to that group of component societies the very latest developments in relation to problems that are before the Board of Trustees."

Dr. Donaldson also described a system of District Censors, as follows:

"Among the officers of our State Society are not only the Board of Trustees who are also Councillors, but we have District Censors. A district censor is a member of a component county medical society who has been recommended, or nominated, to the House of Delegates at the annual meeting of the society by a component society; and, of course, he has always been elected by the House of Delegates. Among our State Society officers are sixty-two district censors. Their duties are not heavy, but are largely of a judicial character. Members who have been disciplined by component county societies and who wish to carry their case further, must do so through the district censor of the county society. He in turn will call a meeting of the district censors of other county societies in his councillor district."

Dr. Donaldson then discussed the program of an ideal district meeting as follows:

"We always open with a report from each district censor, limiting that report to about sixty seconds. In that time, he reports the number of members, the number that have died since the last meeting, number of scientific meetings held, and the interest or lack of interest that has been shown.

(*Continued on page* 52—*xvi*)

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(*Continued from page 50—adv. xiv*)

"The second subject of an ideal district meeting is a paper on the history of some county society which becomes the property of the councillor in charge of the district, who in turn sends it to our archives of the State Society; and in that way we are slowly accumulating material for what we trust will be a worthwhile history of the Medical Society of the State of Pennsylvania."

The third feature of the ideal program is an address by the President of the State Society, and lastly a scientific session. Dr. Donaldson concluded as follows:

"The State Society contributes in no way to financing the social features of such a meeting. We expect every man to pay for his own dinner, and as the dinner is usually at a hotel or country club, there is no additional expense for a place of meeting; so there is not much expense to consider.

"As for attendance, I haven't time to analyze that, but I will say that the attendance is never disappointing. At the Valley Forge meeting there were one hundred and twenty-six in attendance. That many men gathered together makes a very inspiring group. At the district meeting held in Pittsburgh recently, there were one hundred and seventy-six at the afternoon meeting and two hundred and twenty at the night meeting. Of course, you might expect a much larger attendance than that from a councillor district that has one society as large as the Allegheny Medical Society, but an audience of one hundred seventy-six to two hundred and twenty is well worth talking to."

The meeting adopted a lengthy resolution in favor of establishing district meetings, and then followed a long discussion as to the details of starting the meetings,—whether they should be controlled by the county societies, or by the district councillors, or by the State Society. It was finally decided to leave the organization of the meetings to the councillors and the county secretaries and reporters.

WOMAN'S AUXILIARY OF MICHIGAN

The annual meeting of the Woman's Auxiliary of Michigan was held on September 16, 1930, in connection with the annual meeting of the State Medical Society. The activities of the Auxiliary were set forth by Mrs. Mundt, of Illinois, a Director of the National organization, as follows:

"Mrs. Mundt suggested that we enlighten our-

(*Continued on page 54—adv. xviii*)

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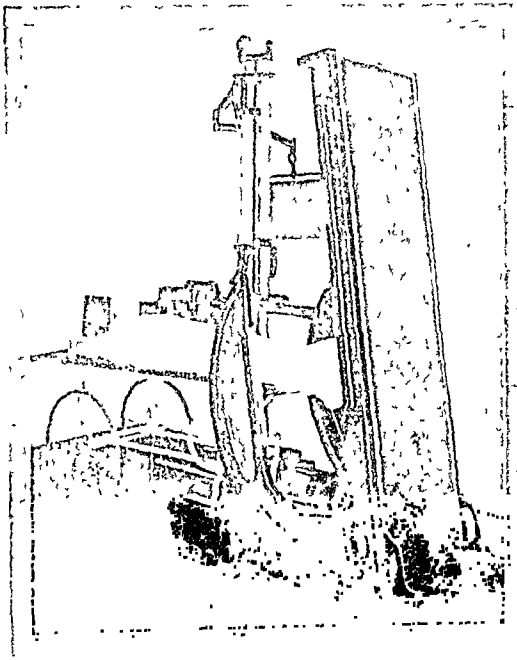
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"As a general practice in which it has been used, it has been revolutionary in the excellent quality of pictures, unusual adaptability to any position or angle, and in the feature of electrical safety. It is especially satisfactory in fluoroscopy above or under the table, or for the unlimited positions at any conceivable angle or across table. The apparatus is easily and readily changed to meet the desired setting, even by a very small technician as I happen to have.

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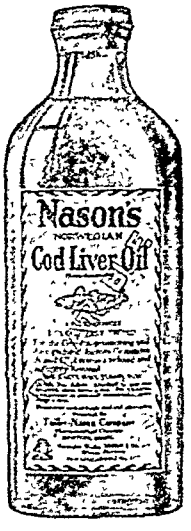
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(*Continued from page 52—adv. xvi*)

selves as to bills coming up in the legislature, see that our members are given strategic positions in clubs where bills are discussed so that both sides of the question are presented; our auxiliaries should have occasional meetings with the medical societies; keep our eyes open to see to what organizations we are contributing, and in clubs know for whom we are voting, and whether they are friendly to the medical profession. She suggested that we let our friends know that the American Medical Association broadcasts health talks, and do what we can to suppress quack health programs; suggest to club women that they use the package libraries from the health departments; place Hygeia instead of Physical Culture in offices, also that we should read the Medical Journal ourselves; be sure to enlighten ourselves regarding State medicine; read and know what medical science has done in stamping out disease. 'We can do much toward spreading information to the benefit of medical legislation. Let us join hands in helping our own profession.'"

The President of the Auxiliary reported that it had 648 members, which she contrasted with the membership of Pennsylvania, 1,894; Texas, 1,173; and Minnesota, 774. The National organization has 10,220 members in 37 organized states.

THE ENGLISH HEALTH INSURANCE LAW

Dr. Henry O. Reik, Editor of the *Journal of the Medical Society of New Jersey,* gave an address before the New Jersey Conference of County Secretaries and Reporters on November 5, 1929, as recorded in the December issue of the *Journal.* Dr. Reik referred to the articles in the NEW YORK STATE JOURNAL OF MEDICINE for July 15, August 1 and 15, and September 1, describing the proposals for a general medical service proposed by the British Medical Association, and then said:

"I would like to add, regarding the Health Insurance Law in Great Britain, that I happened to be in England when that was instituted, and learned afterward that physicians were not so bitterly opposed to that law as we were led by published reports to believe. I have been surprised to read from time to time in some of our medical journals that 'the profession has been ruined by that law.' I am told by English practitioners that the bill has not been such a horrible affair. It was fought by the profession for a time, but if it were put to a vote of the British Medical Association today whether they would hold to the law or go back to the old conditions, they would vote to hold to the present law. But

(*Continued on page 55—adv. xix*)

(*Continued from page 54—adv. xviii*)

they do want something better than they have, and they have at last done what I think would have been the best thing to have done in the beginning, and what I think will be the best thing for us to do to-day in advance of any State Medicine Act being passed for us. The British Medical Association has proposed that the Government shall extend the national health insurance law, which at the present time only covers 15,000,000 members of the population, to the entire population of the country, and in such form that it may embrace anything that may be necessary in preventive as well as curative medicine There is a widespread misunderstanding in this country that the British law took away from the individual the right to choose his doctor. It did not Under the present law the individual can choose his own physician. The physician is not, on the other hand, compelled to accept the patient. If he does not want to attend an individual or his family, he can decline and the panel board makes some other arrangement. It is working smoothly. The doctors are now getting payment in many cases where they previously got nothing for their work. There is some abuse of the law, of course. It works very much like our Workmen's Compensation Act. I suppose each of us could find something to criticize about that law in New Jersey, but on the whole the medical profession is certainly better off than it was prior to the passage of that law, when physicians had to do much work for which they received no pay."

GROUP LIABILITY INSURANCE IN FLORIDA

The November number of the Journal of the Florida Medical Association, Inc., contains the following circular letter:

"At the last meeting of the Florida Medical Association, the present Executive Committee was authorized by the House of Delegates to arrange with some insurance company for a group malpractice insurance policy which would be available for any member of the F. M. A. who might desire it, provided such insurance could be obtained for our members at premium rates less than those charged for individual or small group policies.

"Your Executive Committee has made a careful study of malpractice insurance as it is now carried by the various members of our Association. Also many conferences have been held with representatives of several responsible insurance companies.

"An arrangement has finally been made with the United States Fidelity and Guaranty Company, of Baltimore, for a group policy which will

(*Continued on page 56—adv. xx*)

Here is a Calcium—

immediately assimilable, administered orally—and that actually tastes like Chocolate Peppermint

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TRADE MARK REGISTERED
COLLOIDAL

Not an ordinary calcium with a would-be chocolate disguise, but a sound and ethical preparation utilizing a vehicle of novel form to combine calcium and other physiologic salts with lecithin in a colloidal base. Extensive clinical experience backed by laboratory tests shows that Olajen is a serviceable agent in conditions of calcium deficiency.

When the normal calcium is low,

When the patient is undernourished,

When bodily resistance must be raised,

When bronchial affections "hang on" and sap vitality—prescribe Olajen. One teaspoonful to be eaten after meals and at bedtime.

Clinical results will demonstrate to you, often more rapidly than expected, that there is a definite therapeutic reason for offering Olajen in its colloidal chocolate vehicle.



Olajen contains per 8 oz.:

Calcium lactate	12 gr.
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Sodium phosphate	12 gr.
Potassium bi-tartrate	12 gr.
Lecithin	4½ gr.

in a colloidal, nutritive base.

Olajen, Inc.
451 West 30th Street
New York City

(*Continued from page 55—adv. xix*)

comply with the requirements of the House of Delegates.

"Any member of the Florida Medical Association will be eligible to become a member of this group. In every form of policy there will be a saving in premium rates. This saving will be less for those men who have formerly been insured in small county groups. For those who have been carrying individual policies, it will naturally be greater, amounting in some forms of policies to over 40 per cent.

"This service will be available October 14th, next. Individual policies must be taken out through local representatives of the United States Fidelity and Guaranty Company in your county. Further information may be obtained from the secretary of your county society."

POST-GRADUATE EDUCATION IN MAINE

A plan for Graduate Education in Maine is set forth in the following statement in the *New England Journal of Medicine* for October 30:

"The Board of Directors and the Medical Staff of the Central Maine General Hospital under the auspices of the Harvard Medical School Courses for Graduates are developing a new plan of post-graduate medical education for districts removed from the larger medical centers. Previously, it has been possible for physicians to obtain graduate instruction only in Graduate schools associated with the larger Universities. Such instruction is specialized, expensive, and means that the physicians must be absent from their own hospital centers for a considerable period of time. At best, such graduate instruction is available only to a limited number of practicing physicians.

"The new plan adopted at the Central Maine General Hospital in Lewiston has as its chief aim the education of the staff members and physicians associated with the hospital. It hopes to accomplish this by conducting teaching clinics at the hospital under the auspices of the Harvard Medical School Courses for Graduates. The Board of Trustees has voted $1,000 to put this project into operation during the current year and has approved the following plan:

"1. That ten post-graduate clinics be held at the Central Maine General Hospital either monthly or bi-monthly as may be recommended by the graduate teaching service. A plan to place these clinics under the

(*Continued on page 57—adv. xxi*)

JUST A COUGH ...AT FIRST

... then bronchitis, then pneumonia. Stop the cough and the consequences will need little attention.

Sealing up germ-laden mucus with opiates by making the membranes insensitive to the irritation, is merely storing up trouble.

Guiatonic contains no opiates. Its creosote and guaiacol loosens the cough by liquefying the mucus and making its expulsion easy.

The hypophosphites of iron, quinine, strychnine, manganese, calcium and potassium help to build strength to withstand the onslaught of disease.

WILLIAM R. WARNER & CO., Inc.
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TRY Guiatonic for the cough. Use it to *prevent* the cough and its consequences. You will like the result.

GUIATONIC
THE RECONSTRUCTIVE TONIC

SEND FOR A TRIAL SUPPLY

Please mention the JOURNAL when writing to advertisers

(*Continued from page 56—adv. xx*)

auspices of the Graduate Courses of the Harvard Medical School is approved

"2. That Dr. Soma Weiss, Assistant Professor of Medicine at the Harvard Medical School, head this service and recommend the associates.

"3. Objects:

"A. To elevate the standards of medical practice in the community and to keep these abreast with those of the larger medical centers.

"B. To provide adequate consulting services to patients, equal to those of large medical centers, which can otherwise be obtained only at a great cost and effort.

"C. To create a Medical Center about the Central Maine General Hospital for the neighboring districts."

SOCIALISTIC MEDICINE IN TENNESSEE

An editorial in the November Journal of the Tennessee State Medical Association discusses the socialistic tendencies in medicine, as follows

"It is most unfortunate that doctors' fees are always thrown into the jumble of costs of being sick Doctors may be blamed or credited for whatever effect their charges and collections have on the situation and no more. Most all the speakers and writers of recent months make no attempt to clarify these points in the minds of the readers. The lay reader is left with the unfortunate impression that all of the services cost too much and the doctor alone is to blame. This is not only unfortunate—it is unfair both to the doctors and the public. It may lead to rash action which would not only bring regrets but would be difficult to correct.

"The attitude of some leaders in business is so inconsistent as to be striking. They seem to favor the principles of socialism as applied to affairs other than their own business. This bit of inconsistency is the biggest danger that lies out in front of us.

"Every one recognizes the importance of the relationship between health and good food, good homes, good clothing, good blankets, decent hours of work and recreation; yet the very men who see advantages in medical socialism would be most violently opposed to these other necessities being supplied by socialistic methods."

(*Continued on page 58—adv. xxii*)

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Because Atophan relieves pain, reduces congestion and fever, eliminates uric acid and inhibits its formation—these are the best reasons for its use in rheumatoid conditions, neuritis, neuralgia, myalgia, gout.

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Many drugs are capable of lowering blood pressure but few of *maintaining* reduced pressure sufficiently long to benefit the patient. Experiments prove that lowering of tension produced by the drugs classified as vasodilators is only a matter of minutes or hours.*

But blood pressure can be lowered, and kept down safely and surely, by administering a synergistic combination of approved vasodilators (sodium nitrite, potassium nitrate and nitroglycerin) in combination with Cratægus Oxyacantha—Pulvoids Natrico. Although incapable of lowering blood pressure alone, Cratægus Oxyacantha has the unique property of aiding in maintaining the lower level brought about by other means.

Try Pulvoids Natrico for yourself and check its results against the cold figures on the sphygmomanometer. Prove to your own satisfaction that the reduction of blood pressure they effect is not a matter of *minutes* or *hours* but of *days*.

*Effect of amyl nitrite lasts 7 minutes; nitroglycerin 30 minutes; sodium nitrite 2 hours; erythrol tetranitrate 4 hours; mannitol hexanitrate 5 hours.

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I enclose $5.00, for which send me 1000 Pulvoids Natrico, postpaid. Send me free copy of "High Blood Pressure, Its Diagnostic Importance, Its Efficient Treatment."
I dispense and want your free catalogue.

Name .....

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City..... State.....

(*Continued from page 57—adv. xxi*)

The article closes with the following paragraph, which is printed in italics in the Journal:

"We will repeat again, business leaders may force socialism into medicine. If it does, medicine in turn will socialize the balance. This one type of human service will not be rendered under a socialistic scheme of operations and others remain unsocialized."

COUNTY HEALTH DEPARTMENTS IN IOWA

A leading article in the November number of the Journal of the Iowa State Medical Society describes the new law regarding county health departments, and says:

"The Forty-third General Assembly of Iowa gave us a law granting permission, or making it a legal possibility for any county board of supervisors to appropriate funds for a county health unit.

"In the political organization of our State government the township or municipality constituted the unit for all things governmental.

"It was found in 1925, that the county had no legal right to appropriate funds for county-wide health work, since such function was delegated wholly to townships and municipalities. Prior to 1925 there had been two county health units organized in Iowa but both were discontinued on account of this legal opinion.

"The Iowa county unit health law delegates to the county board of supervisors the legal right or privilege, 'by their own resolution, or by mutual agreement with any local board or boards of health of their county' to adopt the county health unit plan..

" 'When the county health unit plan is adopted a county board of health shall be appointed by the county board of supervisors to guide and direct all public health activities within the county.'

"The county board of health shall consist of not more than eleven members, three of whom shall be members of the county medical society. The others may include representatives of local boards of health or representatives from boards of education or any other organization interested in public health activities.

" 'All financial expenditures shall be approved by the board of supervisors. The county board of health shall serve as such without pay.'

"The State Commissioner of Health is charged with the two following duties:

"1. To assist in the investigation of all public health activities carried on in the county and, advise the county board of health and the county

(*Continued on page 60—adv. xxiv*)



Curiosity GAVE THE WORLD A NEW AND IMPORTANT MEDICINE ... PHYSIOLOGICAL STANDARDIZATION MADE THIS MEDICINE UNIFORMLY POTENT ... ...

OLD MOTHER HUTTON, the Shropshire herb-woman, guarded her secret jealously Had not her herb tea relieved an Oxford dean of his dropsy, when all other remedies had failed? To satisfy his curiosity, Dr William Withering sought out the old woman, nearly 150 years ago At first she stubbornly refused to talk to him. But finally one argument prevailed. There was the clink of golden sovereigns in Mother Hutton's palm, and the cherished recipe was his!

Withering saw that the crudely written scrawl called for twelve common herbs and plants. After long and patient trial he found eleven of them medicinally worthless. But in the twelfth, the purple foxglove, he found a new and powerful drug, now more commonly known as digitalis.

Physicians welcomed Withering's contribution to medicine, but they soon found that the use of digitalis was attended by a serious difficulty. Extracts made from the drug were by no means uniform in potency. Some were too weak, others were much too strong for safety.

For over a century, physicians and pharmacists grappled with the problem of making uniform extracts of digitalis. Then, in 1898, exactly 113 years after Withering's discovery, the Parke-Davis medical research laboratories announced the first *standardized* tincture of digitalis.

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Parke, Davis & Company is justly proud of the part it has played in introducing, developing and extensively applying the principles of chemical and physiological standardization. No product leaves our laboratories until there have been applied to it all the tests that scientific investigation has found necessary to determine its purity and potency as a medicinal agent.

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Made in colors which have been scientifically worked out so as not to show through thin silk hose.

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BROOKLYN SPRINGFIELD DETROIT

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(*Continued from page 58—adv. xxii*)

board of supervisors regarding the coordination and correlation of same.

"2. The State Department must adopt rules of procedure for the organization of the county board of health and also specify its duties.

"The functions of a county health unit may be enumerated as follows:

"1. Administration, including:
- "a. Stenographic service.
- "b. Recording of births, deaths and communicable diseases.
- "c. General education, including addresses, newspaper articles, conferences, posters, correspondence, exhibits, etc.

"2. Investigation of communicable diseases.

"3. Quarantine and isolation of communicable diseases.

"4. Venereal disease control.

"5. Stimulating immunization campaigns.

"6. Public health laboratory.

"7. Public health and school nursing.

"8. Sanitation: General, milk, and other foods."

THE WHITE HOUSE CHILD CONFERENCE

The December issue of *Colorado Medicine* contains the following excellent editorial on the White House Conference on Child Welfare:

"The main recommendations of the White House conference are very largely colored by the report of Section III of the conference. This section, on Education and Training, furnished an extremely well organized and constructive program. We would that as much might be said of all the sections. The section on medical service was handicapped by the fact that the related committees had not finished their task, and even after the conference had been called from all parts of the country were compelled to meet in camera, closing their doors on the first morning of the conference to the assembled delegates. In the section on public health, committees had indeed reached a program, but it contained so much well accepted material, as that milk is a valuable food and should be used more freely, that its more important suggestions are in danger of being overlooked.

"Among these latter we note emphasis upon the value of the county health unit and the demand for increased appropriations for public health services from federal, state, local and private funds.

"An excellent suggestion, coming from this section, is the recommendation to County and State medical societies to appoint advisory committees

(*Continued on page 61—adv. xxv*)

(*Continued from page 60—adv. xxiv*)

who shall confer with official health organizations.

"A lively dispute which has been spoken of as 'unfortunate' developed in the sub-committee to study reorganization of federal health services. The sub-committee had recommended that the maternity and infancy work of the Children's Bureau of the Department of Labor be transferred to the Public Health Service Miss Abbott, who was a member of the sub-committee, wrote a dissenting minority report which was omitted from the official volume of preliminary committee reports.

"The delegates who attended the first meeting of the conference in this particular sub-section were quite obviously and militantly on Miss Abbott's side. The chairman made every effort first to prevent the delegates from speaking to the subject at all, and then to block any effective expression of their views. But the weight of the very much consolidated women's organizations and the social workers from all over the country finally prevailed, and the disputed recommendation has been referred to a continuation committee for unanimous agreement.

"The dispute may be a most fortunate incident if it should draw the attention of the medical profession to the existence of organizations that have definite interest in child welfare and in its political organization

"It is quite probable that the proposal of the majority of the sub-committee was sound. What was evident was that the distinguished medical men on the committee were quite unaware that their suggestions were of interest to several million women, to many organized social workers, and even to organized labor. Their attempt to muzzle the representatives of these interests showed even more clearly how far they are from political common sense. A protest which might have been temporary and futile is now in danger of becoming an emotionally debated issue in every corner of America.

"There is a moral in this dispute that is applicable elsewhere. The problems of medicine are becoming and must increasingly become matters of public interest. Unless we have not only a rational programme for meeting medical social needs, but have also persuaded the public of the advantages of our programme, we may expect to find our influence in future legislation of astonishingly small account."

THERAPEUTIC ALMANAC



JANUARY FEBRUARY

Months of winter-coughs and colds—infectious and febrile diseases. Acidosis predisposes to them—aggravates them. The right alkaline combination has a threefold function: to act as antacid, to liquefy the mucus; to produce diuresis, to reduce the fever.

Rx ALKA-ZANE

A teaspoonful in a glass of water, taken after effervescence has subsided, as often as the patient desires a cooling drink.

Note—Alka-Zane combines the carbonates, phosphates and citrates of sodium, potassium, calcium and magnesium. No sulphates, tartrates or lactates; no sodium chloride.

ALKA-ZANE *for Acidosis*

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COLLECTION AGENCIES IN WISCONSIN

The *Wisconsin Medical Journal* for December has the following editorial comment on collection agencies:

"More and more complaints are coming to the desk of the secretary of the methods and service of collection agencies.

"A recent case involved a justice court suit brought by a collection agency upon a fifty-dollar physician's account. The agency entrusted the matter to a clerk, who was not a lawyer, whereas the defendant was represented by an attorney. The services had been rendered more than two years before the suit, but nevertheless the attorneys for the defendant set up a counterclaim for $200, the limit of the justice's jurisdiction, for alleged malpractice.

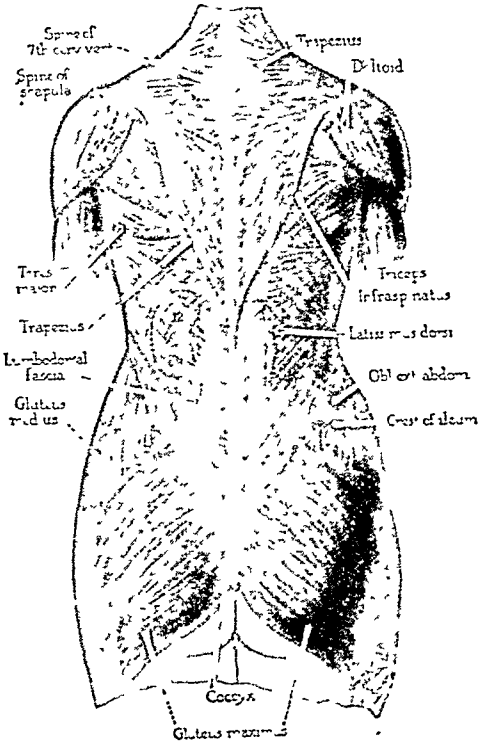
"The physician knew that the counterclaim for malpractice, asserted for the first time after the suit, was unfounded, but knew also the loss of time and unpleasantness attached to defending such a claim, and instructed the collection agency to defend with the statute of limitations. But the clerk did not know how to do this, with the result that the patient's uncontradicted testimony was taken of the malpractice, and judgment of $150 and costs was about to be entered against the physician.

"Just in time, the physician became aware that something was wrong, and consulted his State Medical Society, who immediately placed the matter in the hands of a competent attorney. This attorney secured delay, straightened out the procedural mix-up, and got the counterclaim dismissed and judgment entered for the physician for fifty dollars and costs.

"It is just as logical for the sick to go to laymen for medical relief as it is to place legal matters in the hands of a lay collection agency.

"So great need does there appear to be for some reliable agency in the collection field, that will have an understanding of physicians' accounts and competently handle them, that the entire matter is being investigated to ascertain if a practical solution can be worked out."

ANATOMICAL STUDIES



SUPERFICIAL MUSCLES OF THE BACK IN THE FEMALE

for the Practitioner

Sets of Anatomical Studies furnished to physicians upon request.

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Physiological Supports Scientifically Designed

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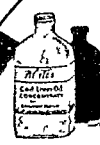
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These candy-like wafers are good—and, an unusual advantage in Cod Liver Oil preparations—there is absolutely no oily taste reminiscence. Once the patient has swallowed them they can be really forgotten. (For very small patients, give them crushed in milk or orange juice.)

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IMPORTANT to your patients, too, these days: Price is right—compares readily with high test oil. $1.00 for 100 wafers, ten days adult supply on the average.



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Samples, of course, if you wish

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WOMAN'S AUXILIARY IN MINNESOTA

The December issue of *Minnesota Medicine* has the following editorial on the Woman's Auxiliary.

"The Woman's Auxiliary of the Minnesota State Medical Association was one of the first auxiliaries to be founded. The question of the advisability of starting an auxiliary in Minnesota was fully discussed previous to its organization and the step was taken with the approval of the State Medical Association.

"While the members of an auxiliary have few common interests compared to those of a medical society, an active auxiliary can undertake certain well worth-while activities.

"Perhaps one of the most important functions of a medical auxiliary is the entertainment of visiting women at the time of medical conventions. This applies, of course, to the units in the larger cities, and the entertainment of the visiting women at the recent International Assembly in Minneapolis is a case in point.

"Fully as important a function is the opportunity an auxiliary has for disseminating facts about medicine through its contact with various women's organizations. We are inclined to shut our eyes to the importance of using every channel possible to counteract the vigorous and often malicious propaganda being foisted upon the public by anti-vivisectionists, anti-vaccinationists and similarly minded individuals. The false reasoning and illogical conclusions reached by certain well-meaning, but perhaps often fanatical individuals is certainly in opposition to sane medical progress and detrimental to the public welfare. Continuous, not spasmodic effort to inform the public through every possible agency must be made to counteract the various anti's who seem to be tireless in their energy.

"Legislative activities are mentioned as one of the functions of an auxiliary. Lobbying is out of the sphere of women, but members of an auxiliary can be informed as to choice of legislators and can disseminate such information.

"We approve the aims of the Women's Auxiliary of the State Medical Association which are enumerated in this issue of the *Journal*, and we offer our assistance in every way possible.

The most unpleasant manifestations of malaise have been frequently allayed by drinking

Poland Water

Physicians have commented favorably on its bland diuretic properties for over 60 years.

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PUBLIC HEALTH WORK IN OHIO

The December number of the *Ohio Medical Journal* has the following editorial description of local health departments in Ohio:

"At the annual conference of Ohio health commissioners with the State Department of Health, held in Columbus the third week in November, questions and problems relative to public health work in Ohio were discussed and the official health work being carried on in the state appraised.

"Ohio ranks high among the various states in its organized, official public health activities.

"Eighty-six of the 88 counties of the state have full or part-time public health services.

"Forty-four counties have full-time services. Seventeen cities have full-time services, combined with county service, and 18 cities have full-time services, exclusive of county service.

"All of the 86 county or joint county-city health commissioners of Ohio are physicians.

"However, of the 75 cities of the state having health services independent of county services, 21 employ health commissioners who are not physicians.

"It must be admitted that some good public health work may be carried on in some cities by commissioners who are not physicians and who have little or no knowledge of the medical sciences. On the other hand public health work in other cities has been decidedly inefficient, due, no doubt, to the fact that the director of the service is lacking not only in executive ability but also in knowledge of the fundamental sciences which play a principal role in curative and preventive medicine."

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PUBLISHED BY THE MEDICAL SOCIETY OF THE STATE OF NEW YORK

Vol 31, No 2 | New York, N Y | January 15, 1931

DERMATOLOGY IN RELATION TO METABOLIC DISTURBANCES*

By WALTER JAMES HIGHMAN, M D, NEW YORK

TWO groups of manifestations occur in any diseased organ,—manifestations peculiar to that organ, and manifestations in that organ reflecting a general disturbance Thus the skin is affected with local diseases and with diseases representing participation in a general process It is not always possible to refer an eruption to its proper class on inspection Frequently enough, even after painstaking study, it cannot be done

Dermatology, until a comparatively short time ago, seemed to be peculiarly dissociated from internal medicine The precise ties between the disturbed skin and disturbed body it envelopes were vague Today they are not yet definitely known, but an insight into the relationship has been gained If the curve of dermatological growth were traced it would be found at a dead level until its rise in the era of Willan in England, then a drop until Hebra and his school in Vienna brought it to the level which is the jumping off place for every enterprise in modern cutaneous medicine Isolated names in English, French and German speaking lands caused small elevations in the line between these two masters Willan's genius was mainly biological, Hebra's mainly that of a classifier Willan was an internist, Hebra an externist, in his leanings The value of Willan's efforts was lost partly because of his untimely death, partly because the methods and knowledge of an internist were necessarily restricted over a century ago The clinical genius of England was reflected in Willan

Hebra was an acute observer, a stupendous reader and an original thinker He achieved for dermatology what Darwin did for biology He collected, studied, arranged and classified dermatoses But he lacked Darwin's philosophic talent for crystallizing out great principles His was a card index mind Using arsenic, as he did in treating lichen ruber, he even failed to see the significance of his own gleanings Nevertheless, his was a signal contribution to dermatologic progress for he supplied the alphabet of the specialty His classification today stands unchallenged, and if he lacked subtlety, he at least had force No one is a dermatologist who does not start out with a complete understanding of Hebra His language is the Esperanto of the specialty The problems of dermatology are those of understanding, explaining and rearranging the conditions he isolated and named, according to the enlightenment of modern methods of medical investigation

If Hebra's work resulted in an absurd vocabulary, it is absurd only in the sense that his nomenclature may become obsolete or inaccurate as progress makes it so Inherently, in relation to his era it was serious and important Few men have had their names identified as Hebra's is, with an epochal moment, the plotting of the point of departure at which the future path of a science or art is indicated and indicated clearly Hebra's immediate successors began the journey, notably Kaposi Hebra's school is the dermatologist's alma mater To belittle Hebra would be like belittling Euclid because an Einstein has been born, or Hippocrates because there has been a Claude Bernard, or Plato because a Spinoza came later Hebra could not be a dermatologist, as we today can be, in terms of parasitology, histology serology, immunology, biochemistry and endocrinology, because some of these fields were then scarcely opened and others not yet discovered If dermatology fifty years ago was scarcely more than an objective branch of medicine, a series of labels for skin pictures, general medicine was little better Up to then, medicine too was merely an art, the successful application of which depended simply on combining a patient's story with observation of physical signs gathered by the examiner's eye ear and fingers The nearest approach to laboratory study of a disease was urinalysis In dermatology only the eye and fingers were required

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are still ignorant of those that cause the exanthemata. Such a fact does not negate the infectious hypothesis nearly so much as that there is no valid evidence of transmission from person to person. Indeed, there is more logic just for this reason in favoring the metabolic theory. The effect of arsenic alone supports it, although this metal might equally function as a parasiticide were the disease due to a general infection. On the other hand, none of the huge amount of investigation purporting to prove its metabolic origin, notably in the domain of nitrogen chemistry is convincing. In spite of Schamberg's painstaking studies, neither his findings nor therapy based thereon are conclusive. What is instructive in our research on psoriasis is that neither the doctrine of its internal or external origin has been overthrown nor maintained by work designed to sustain or tear down either point of view. The mere fact that in a large minority of psoriatics evidence exists of disturbed nitrogen metabolism does not signify that such a disturbance either explains or is related to the disease. Indeed, no therapeutic policy founded on any such assumption, whether as to drug administration, diet or other regimen, affects the disease without proper local treatment. Moreover, local treatment alone is often efficacious. What the meaning is of the frequent success of autoblood injections in this disease is still a mystery. Nevertheless, the impression is justified that psoriasis is a metabolic disease, if only because of its not infrequent relation to arthropathy. Our failure to prove the fact may be lack of adequate methods of investigation which the future may amend.

Much of what has been said about psoriasis applies to eczema. The origin of eczema, if external, may be infectious or due to chemical or physical agents; and if internal, to infection or metabolic causes. In point of fact all these views are correct. The essential lesion of eczema is the vesicle. The lesion which is a response to most agents is the erythema. Next comes the wheal; and third, the vesicle. Each one of these lesions indicates a single process, but the number of excitants of each process is huge. Therefore a great many different substances and conditions may provoke eczema. Some eczematics get the eruption from only one cause, others from several. It is a dermatologic commonplace today that eczema and dermatitis venenata are identical. The history of how this view became now almost universally adopted would serve as a special thesis, but the fact must be taken for granted. It will be sufficiently substantiated by Norman Walker's case of primrose dermatitis outlining an experience no dermatologist today has lacked. A lady with chronic eczema recurring for years under given conditions of life in her home, was found to get the eruption whenever she came near primroses, for which she had a great fondness. When this fact was determined, and the primroses were eliminated from her surroundings, she was cured. This is the foundation of our present understanding of eczema, substituting other precipitants for primroses in the story.

In the past eczema was recognized as similar to or identical with dermatitis, dermatitis being defined as a form of the syndrome in which the cause was known, eczema as one in which it was unknown. About seventeen years ago, I first maintained their identity in this country, and ten years later adduced convincing proof of the fact, at about the same time that Bloch, now of Basel, published more and better conceived studies proving the point. For the moment let us regard eczema in the old light, as dermatitis of unknown origin, and test the validity of the concept "unknown." Unknown etiology assumes the character of widening hypotheses with the growth of medical knowledge. Thus at first eczema was considered gouty, later parasitic, then metabolic, nervous, anaphylactic in origin. It was variously associated with distinctive periods in human life, childhood, adolescence, the climacteric, senility. It was terrifically overnamed. The most fantastic theories, dietetic, medicinal, local and the like were applied to its treatment. In recent years Schamberg attempted to prove its relationship to excessive blood uric acid; MacGlasson to too much blood sugar.

Whatever else is true of eczema, this fact stands out, that there are people who readily get the disease. This was noted fifty years ago by Besnier, who called such individuals eczematics, and who stated in the vivid manner of the French: "There is no eczema, there are only eczematics." What this means is that if the eczematic be not exposed to something that provokes the eruption he is free of it. Of course, the same is true of any disease, but it requires intelligence to isolate a principle, and as soon as a principle is accepted as a law it seems trite. Of fifty people exposed to rhus or bichloride or some other substance, only relatively few will respond as eczematics. These few might not respond to primrose or soap, as still another group might. In short, eczematics are peculiarly susceptible to certain things. Call this idiosyncrasy, allergy, hypersusceptibility, atopy or by any other term. The point is that the eczematic is responsively prepared to react to certain agents in a consecutive way.

Such responsiveness may be congenital or acquired, may be due to sensitization or not, may, in the last analysis, represent a skin locally responsive, or responsive because of some internal disturbance. If the last be so, and this is still subject to demonstration, then metabolic or internal infectious agents must be considered as

possible actors in the drama. It is true that eczema may disappear when diabetes is controlled; or upon removing a kidney infected with the colon bacillus after it had been reduced to a shell by a huge antler calculus, as in a case of my own. Needless to say, if the eczematic in some way stops being one he will no longer react to precipitants; allergens as they are now called. Thus, biologically, eczema may be considered a cutaneous response in a prepared individual to exciting causes. It is an exudative inflammation, acute or chronic, according to the consistency with which exposure to excitants is maintained, or the consistency with which the peculiarities conditioning predisposition persist.

In diabetes the curve of the latter is easy to trace. But in more instances, eczema has been ascribed to disturbed nitrogen than to disturbed fat metabolism, and to my mind on the flimsiest of grounds, namely, blood chemical studies; especially to hyperuricacidemia. This state in a case of eczema does not indicate inevitable cause and effect or even relationship. It is not present in more than forty-five chronic cases out of a hundred. Nor does a scheme of life based on the relief of such a disturbance relieve, to say nothing of cure, eczema. If, during, a hospital stay such a patient loses his eruption, it is more likely because he is away from the environment including the precipitant. A twenty-eight-year-old patient of mine who has had chronic, recurring, extensive eczema for fifteen years lost her eruption within a week after an appendectomy. Clearly a case of metabolic eczema! A relapse took place in her home a few days after she left the hospital. It was found to be due to soaps and household cleansing powders.

In fact, eczema must be studied by skin tests, the patch tests of Bloch and his school. Suspected agents are applied to the skin in several ways. The responsible ones provoke a local patch of eczema either at the site chosen for the test, or at a site previously affected. More and more chronic cases, with or without laboratory evidence of metabolic disturbances fall in this group. Thus the study of the disease today resolves itself into one of isolating precipitants. For future study, as methods are improved, is reserved that of predisposition, which is, of course, metabolic in meaning, whether the disturbance be congenital or acquired. For the moment eczema must be regarded as allergic in nature, but not in name, for allergy and all kindred states express the ancient knowledge that one man's meat is another's poison. We know now that eczema can often be explained by exposing an eczematic experimentally to suspected agents, thus giving him eczema. It is a simple concept and requires none of the miasma of pseudoscientific verbiage to adorn or befog it.

More precise evidence of the nature of the foregoing is found in eczema due to pathogenic fungi. The details are intricate, and to elaborate them would prolong this paper without adding to its substance. Suffice it to say that this type, still so widely ascribed to gout, uric acid and such other fantasies, actually reflects certain recognized laws of infection and immunity, and strikingly parallels the chemical types save that the source of the poisons is the fungi. This fact put the coup de grace on eczema due to dyshidrosis, and has limited, if not overthrown, belief that pompholyx or sweat gland eczema is in any way different from other eczema.

If prurigo, pemphigus, dermatitis herpetiformis were as common as psoriasis and eczema, undoubtedly they could be as intensively studied, and the principles already elaborated, and the knowledge acquired, would be similar in significance to what obtains, imperfect as it still is, in the two conditions in question. It remains to show that metabolic disturbances are not the key to psoriasis and are the key to eczema, without, in the latter, losing sight of their contributory meaning. But this is stating the obvious. No disease develops except on suitable soil, and suitable soil must reflect pathological conditions, these in turn reflecting metabolic alterations, however subtle with reference to our present methods of attack. This must apply equally to so superficial an infection as impetigo, as to so profound a process as pemphigus.

A moment's recapitulation! There are skin diseases definitely related to internal disturbances, metabolic disturbances if this be the preferred term. There is a larger group not demonstrably so related but in which the strong presumption of such a relationship exists. There is a still larger group in which the explanation of the eruption is simpler and referable mainly to outside factors, which, however, could not operate without that modicum of general derangement inherent in the concept of susceptibility. The second and third groups overlap. It is the duty of the expert, basing his clinical conceptions of dermatoses on the classification of Hebra and his followers, to be able to appraise them in terms of modern medicine, to know which are essentially to be regarded from the internist's standpoint, and which are not. My own reiterated conviction is that a dermatologist is an internist who knows skin diseases. I should prefer substituting the term cutaneous medicine for dermatology. It follows, however, that I am not taking sides as between dermatological externists and internists. There should be no such division. A good dermatologist belongs to both factions and should not be partisan. I contend, however, that in order to be able to approach a dermatosis as an internist it is necessary first to know when it is not of purely external origin.

Let me illustrate. An aged, retired physician

had a generalized itching eruption called eczema by a syndicate of his colleagues. One group advised him to cut proteids out of his dietary because eczema was due to nitrogenous foods; the other group emphasized carbohydrates correspondingly, for parallel reasons. The old gentleman was accommodating and tried to obey both groups at the same time. When he consulted me he had edema of the legs, anemia and other signs of inanition. His skin disease was scabies. The human problem was to nurse him back to health. The moral is virtually what this paper is dedicated to, namely, that internism in dermatology must be founded on clinical dermatology, and its application must be based on something more substantial than superficial.

It would be quite as bad to treat prurigo for scabies. The moral would be that the externist should be rather less of an externist than internist when occasion warrants. In short, a dermatologist must know the significance and bearing, as well as its limitations in practice, of general medicine in relation to skin diseases. No qualified internist can be at a loss to understand and apply every element of modern medical knowledge to his problem. A dermatologist must be all of this with a special knowledge of skin syndromes thereunto added. Thus in considering the relation of metabolic disturbances to skin diseases, the significance and limitations of the ideas involved are admitted, and no dermatologist who is not primarily a physician is worthy of the name. Conversely, may it be urged in closing, that no internist who essays the field of dermatology without being able to distinguish between scabies and eczema is justified in his temerity.

REMARKS ON THE SO-CALLED JAMAICA GINGER PARALYSIS: REPORT OF A CASE

By GEORGE WILSON, M.D., PHILADELPHIA, PA.

CONSIDERABLE interest has been aroused, especially by the comments in the daily press, about a peculiar form of paralysis occurring in certain southern states and presumably due to the drinking of Jamaica ginger. The first reports on this condition seemed rather alarming and the diagnosis was obscure. It appears worth while briefly to cite a case which I have had the privilege of seeing in consultation with Dr. John B. Deaver and through whose courtesy I am making this report.

CASE REPORT: A white, married male, age 45, was admitted to the Lankenau Hospital, Philadelphia on March 18, 1930, having come to Philadelphia from a part of Tennessee where the so-called "ginger" paralysis was prevalent. So far as his present condition is concerned the past medical history is negative with the exception of a record indicating the use of "corn liquor" for years,—it has been his habit to take from 4 to 8 ounces of this liquid daily.

On February 1, 1930, he developed a severe upper respiratory infection and in a few days, apparently because of laryngitis, he lost his voice. On February 18, not having recovered from his cold, he took four ounces of Jamaica ginger and repeated the dose the following day. The infection gradually subsided and the man felt in good condition until March first when he noticed that the left foot below the ankle was numb. Two days later a similar condition appeared in the right foot. Both of his feet and [illegible] and in five days he had no movement left in the toes or ankles. The condition in the lower extremities remained stationary for the next twelve days.

On March nineteenth he first noticed numbness in his hands and difficulty in separating the fingers. The numbness bothered him because he could not button and unbutton his clothes and he had difficulty in handling eating utensils. For one day at the onset of the trouble he had difficulty in passing the urine. He gave no history of difficulty in vision or hearing, he had no girdle sensation and lethargy was not a part of the symptom complex.

EXAMINATION: The pupils were slightly unequal, the right being smaller, but both reacted well to light and accommodation. The cranial nerves were normal. The biceps, triceps and patellar reflexes were present and top normal, whereas the achilles were lost. Plantar stimulation produced no response whatsoever and the abdominal reflexes were present but depressed. The finger to nose test on the whole was well performed although he occasionally missed the mark on the left side. As far as the motor functions were concerned an absolute paralysis existed in all movements of the ankles and toes although the power at the knees and hips was excellent. In the upper extremities there was slight weakness in separating the fingers but the grip was good in both hands and movements [illegible] rist were free and easy. The man had

no spontaneous pain in the extremities and squeezthe feet, calves and hands produced no discomfort. Sensation was carefully tested and the only disturbance found was for vibration which was lost below the knees. Pain, touch, heat, cold and position were normal. In the upper extremities sensation was normal save for a slight disturbance of position sense in the left hand. He appreciated objects with the hands correctly but had difficulty buttoning and unbuttoning his clothes. The spine showed no evidence of disease. The feet were bathed in perspiration and the man complained mildly of a feeling of heat in the affected parts. Mentally, the man was alert, intelligent and co-operative.

LABORATORY EXAMINATIONS: The urine, blood count, blood chemistry, blood Wassermann and the spinal fluid were essentially normal. Cultures made from the nose and throat showed gram positive diplococci. Rontgenograms of the sinuses and teeth were negative.

CLINICAL COURSE: The man was under observation for nine days and improved. The paresthesias and weakness were disappearing from the hands and the feet had begun to regain power when he returned to Tennessee

DISCUSSION

The condition in this patient was evidently multiple neuritis occurring in a man long accustomed to the use of alcohol who developed a severe respiratory infection and then took eight ounces of Jamaica ginger in twenty-four hours. As not infrequently happens in a person accustomed to alcohol, an infection or an added toxemia is frequently enough of an insult to the peripheral nerves to cause signs of irritation or of paralysis in them. The delay in the appearance of the symptoms after the infection and after the use of the Jamaica ginger in this case is not unusual in certain cases of multiple neuritis; for example, after diphtheria the symptoms of peripheral nerve involvement frequently do not come on for four to eight weeks after the throat has become normal. The condition herewith reported reminds one considerably of certain cases of post-diphtheric multiple neuritis in which in addition to the paralysis there is a loss of so-called deep sensation with preservation of pain, heat, cold and touch. I reported instances of such involvement in diphtheria.[1]

The role of the Jamaica ginger in producing the paralysis in the case under discussion was probably contributory; the peripheral nerves had been well prepared by the prolonged, though moderate use of alcohol, were further insulted by an infection and the ginger preparation completed the job.

As far as the differential diagnosis in this case is concerned it appears to be a clear cut case of multiple neuritis, the only other possibility being an atypical form of poliomyelitis. This latter diagnosis, however, is untenable.

Several reports exist in the literature of blindness following the use of Jamaica ginger. Woods[2] reported six cases some of whom showed in addition symptoms suggestive of multiple neuritis although the neurological reports were rather meager.

Jamaica ginger has long been used in dry areas for its intoxicating effects and it is frequently used by chronic drinkers to taper off from a prolonged debauch. It is interesting in this connection to quote an article from the Baltimore *Sun*, November 16, 1898.—"There were two deaths in Oxford last week caused by drinking Jamaica ginger, used as a substitute for whiskey in dry places. The first to die was one, Terry, a peripatetic individual, who spent most of his time in Oxford. It is said he has a wife and children, but their residence is unknown. John Cousins, a permanent resident of Oxford, was the other victim of this pernicious habit.

Thomson[3] reported a similar case to those of Woods but a year previously. DeSchweinitz in discussing Thomson's paper remarked it was the first case of toxic amblyopia following the use of Jamaica ginger of which he had knowledge. He also said that he had been informed that people in the northern part of Pennsylvania who could not obtain whiskey were in the habit of indulging excessively in the use of Jamaica ginger.

It is likely that the toxic effect of Jamaica ginger is due in a large measure to the methyl alcohol which it contains. Methyl alcohol acts as a direct poison to the optic nerves and also to the peripheral nervous system.

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N. Y. State J. M.
January 15, 1931

POST-OPERATIVE CARE OF ABDOMINAL CASES

THE Buffalo Surgical Society met on February 18, 1930, and held a round table discussion on the topic "Post-Operative Care of Abdominal Cases." Twelve concise papers were presented by Fellows who were known to have original ideas on the several topics—Emesis, Pain, Thirst, Flatus, Fear, Constipation, Embolus, Ileus, Peritonitis, Hemorrhage, Secondary Infections, and The Stethoscope in Post-Operative Care.

These papers are printed in the order in which they were delivered.—*The Editors.*

POST-OPERATIVE EMESIS

By J. C. BRADY, M.D., BUFFALO, N. Y.

I. Incidence

Of all the post-operative complications the most frequent and most constant is vomiting. Comparatively few cases, no matter what the operative procedure or anesthetic employed, recover without a period of nausea or vomiting. The causes in order of importance are briefly five:

1. Anesthetic.
2. Anesthetist.
3. Local irritation and length of operation.
4. Patient's general condition.
5. Tendency of certain individuals toward vomiting.

1. Of the anesthetics, ether is notorious, gas oxygen with ether next in order, gas oxygen with morphine and scopolamin following, and ethylene, local and spinal bringing up the rear.

Just a word about spinal anesthesia. From a list of about 750 cases done at the Sister's Hospital these deductions can be made—i.e., that the period when the anesthetic is taking hold there is a sensation of nausea with an occasional slight emesis of bile, this same phenomena being apt to occur a second time when the patient is being shifted from the table to the cart or bed. Following this, vomiting occurs in possibly less than 10% of cases.

2. The selection of a good anesthetist is half the battle. I am convinced that they frequently save the day for us and assure a quiet, orderly convalescence when otherwise we might encounter a very stormy recovery sometimes ending disastrously.

3. Local irritation and length of operation, operations on the upper respiratory tract and undue, rough handling of tissues, pulling on omentum and prolonging the operation over two hours are factors to be eliminated in so far as possible.

4. Debilitated and cardiacs, cardiorenals, etc., are very prone to emesis.

5. Children and neurotics will sometimes vomit for days [illegible]

II. Treatment

Falls under two headings—Prophylactic and Treatment proper.

Under prophylactic treatment:

1. The wise choice of anesthetic and anesthetist

2. The debilitated and cardiacs, etc., should be put in the best possible condition. If there is any question a transfusion is probably the best procedure.

3. In operations on the upper respiratory tract we should use sharp dissection with gentle handling.

4. In neurotic individuals we should see to it that the surroundings are as nearly ideal as possible; that they be kept quiet; and that they have tactful nursing; plenty of sedatives, etc.

Treatment proper:

A little nausea and occasional vomiting in the first twelve hours are of little moment.

In operations on the upper respiratory tract—plenty of ice to cut down the mucous, astringent sprays with or without a local anesthetic are of value.

Avoidance of too much fluid by mount will often prevent troublesome vomiting but small amounts are rarely contraindicated.

Vomiting that persists after twelve hours, or severe or pernicious vomiting requires early and more or less strenuous efforts. Every surgeon has his pet bag of tricks and the advised procedures are legion. For the sake of brevity I am eliminating complicated cases as, diabetics, high obstruction, acute dilatation of the stomach, paralytic ileus, etc.

The most efficacious procedure, out-ranking all others in the armamentarium, is aspiration of the stomach with or without lavage. Personally I favor the simple aspiration without lavage. This to be repeated as often as indicated. In conjunction with this, sedatives, small amounts of fluid by mouth, hypodermoclysis, proctoclysis, and when protracted or alarming, hypertonic saline with glucose intravenously by the slow gravity method.

Other adjuncts of questional value are small amounts of soda in water as a natural lavage.

[illegible]cked ice, gastric sedative powder,

cerium oxalate, bismuth, magnesium, a few drops of chloroform in water, anesthesin, etc., ad infinitum.

For about five years I have been using the duodenal tube, practising aspiration with a bulb syringe, and allowing more liberal amounts of fluid by mouth. The tube is left in attached to the cheek or over the ear and then to a bottle or allowed to hang over a basin beside the bed. This, of course, is backed up by the usual adjuncts of proctoclysis and intravenous saline and glucose if necessary. The procedure is simple and eliminates frequent distressing passing of the stomach tube. It is not uncomfortable and can be retained for days and the intake and loss of fluids readily estimated. I have used it several times on children between the ages of 4 and 5 years and, save for the necessity of splinting the arms for the first few hours to prevent them from dislodging the tube, have found that they readily become accustomed to it.

POST-OPERATIVE PAIN

By J. Y. COHEN, M.D., BUFFALO, N. Y.

Memory for pain is, fortunately, short. In preventing post-operative pain the procedure should be started pre-operatively. One of the things to be done is to give the so-called clinic hypo. It brings quietness of mind and makes the pre-operative state a vague blur instead of a hideous nightmare. In the operating room the operative procedure is very important. Gentleness in handling, lack of mauling, tends to make much less post-operative pain. Also proper suturing is important. Following the operation the proper placing of dressings, especially if the case is a drainage case, makes the patient more comfortable afterward. If, instead of the present wide adhesive strapping which is generally put on much too tightly so that the least distension causes considerable pressure, we went back to the old style many-tailed binders with pins, the patient would be much more comfortable as these could be easily adjusted.

Patient should not be rushed down to his room. He should be placed in bed gently. Position in bed is very important. Patient should be placed so that there is least tension on sutures. Other important points are giving of fluids; quietness; absence of relatives.

On relief from pain Bartlett of Mayo's says "patients should be given morphine." This should be continued for the first 24 to 48 hours when pain is definitely from operation and should be given in doses of at least 1/4 grain and repeated frequently enough to keep the patient perfectly comfortable unless contraindicated or the respirations go below 12. After 48 hours the pain should be controlled by things like luminal. In regard to stimulants they should be given gently. Painful spots following the giving the hypos may result.

Fluids: most men are using the drip method instead of the continuous drip which may become painful. Sometimes 100 to 200 cc. should be given and repeated at frequent intervals.

Difficulty in urination is the cause of much pain. Catheterizing of patient should be done not more than every 12 to 18 hours. After 24 to 48 hours the pain that develops is usually something separate from operation. Surgeon should examine bandage, drains, etc. If, 48 or more hours post-operative, there develops pain which is situated at some distant site it is indicative of something of more severe nature and the cause of this pain should be carefully investigated.

These are the most common causes of post-operative pain: Hemorrhage or infection in the wound; distension of bladder; poor application of dressing; neuritis and backache, postural or toxic; phlebitis and pulmonary embolus.

POST-OPERATIVE THIRST

By ALFRED H. NOEHREN, M.D., BUFFALO, N. Y.

Emphasize four principles:

1. It is much easier to give fluids before operation than after. We should see that patient has a glass of water every hour before operation until two hours before operation, unless it is a stomach case, so that the patient goes into operation with plenty of fluid. Stomach or dehydrated case should be given hypodermoclysis.

2. After operation: start fluids at once. Do not wait. Give water by mouth when patient becomes conscious. Even if he vomits it is usually all right, for it washes out his stomach. If the vomiting persists, or if the case is dehydrated, it should be given by rectum, by Murphy drip or continuously by a tube, or hypodermoclysis: In severe cases hypodermoclysis can be continuous, given slowly. Another method is to give it intravenously. Personally, I am afraid of intravenous medication. Blood transfusion: difficult technique, difficulty in getting donor, matching bloods; sometimes doing patient more harm than good.

Usually use other methods. In case of hemorrhage the surgeon must use transfusion of course. Fluids dilute the toxins, stimulate the excretory organs.

3. Keep the tongue moist; the tongue is the best indication of patient's need for fluids.

4. Best treatment of thirst is prevention. Fluid before, fluid after operation, skillful anesthesia, careful asepsis to prevent infection, and gentle handling of tissues.

POST-OPERATIVE TYMPANITES

By A. W. HEINGERER, M.D., BUFFALO, N. Y.

Tympanites or flatulence takes second place to no other condition following an abdominal operation in disturbing and annoying the patient and taxing the ingenuity of the surgeon.

The condition is referred to with but little attention in our textbooks, as, for example:

Moynihan: "Abdominal Operation"—"If flatus cannot pass easily, 1 tablespoon of turpentine is added to the enema," etc.

Johnson: "Operative Therapeusis"—"Post-operative distention of the intestines is a frequent complication, and is very annoying to most patients. Repeated enemata, occasionally with oxgall and peppermint, relieve this condition as a rule. On the third day the patient receives a cathartic, and thereafter there should be no disturbances on the part of the intestinal tract."

When a patient becomes distended, following an abdominal operation, and complains of varying amount of pain, we are dealing with a condition which may be simple or extremely serious. We are confronted with the necessity of deciding whether the tympanites is caused by

Actual Obstruction:

1. Mechanical adhesions, impaction, etc.
2. Adynamic—paralysis of bowels.

Retention of gas:

3. Mesenteric thrombosis.
4. Peritonitis.

Causes:

Poor preparation of patient prior to operation.

Fecal impaction.

Adynamic Ileus—lazy bowel or actually paralized.

Obstruction.

Neglect, or inability of the patient to empty the bowel of feces or gas.

The symptoms of tympanites and flatulence are distention of the abdomen, rumbling (Borborygmus of the bowel), so-called gas pains, and a desire of the patient to relieve himself either of gas or feces. Percussion yields a resonant sound not changed by change in position of the patient.

1. If the patient's condition permits the best treatment is knee-chest position. This will often permit of the expulsion of gas.

2. Use of the rectal tube.

3. Injection of a large amount of milk of asafetida or asafetida by mouth.

4. Hypodermics of eserine salicylate. This is one of the best drugs for tympanites and should be given in large doses 1/50 gr. (normal gr. 1/100). Atrophine sulphate 1/75 to 1/15 may be given when eserine or physostigmine is not obtainable. If the case is one of adynamic ileus large doses of morphine act well and it is surprising how useful morphine is in these cases. The escape of gas is facilitated by the relief of pain and relaxation of anal sphincter.

Feeding of post-operative patient should not be begun until intestines are free from gas.

POST-OPERATIVE FEAR

By JULIUS RICHTER, M.D., BUFFALO, N. Y.

Of all the emotions fear is by far the most prevalent. It is questionable whether it is not intermixed in varying degrees with every other emotion. It might well be, for it is nature's prime requisite for self-preservation. Were there no fear, the instinct of self-preservation would be almost useless and humanity would have long since perished off the earth. Fear, moreover, is the driving force of life for without it, there would be quiescense and no bodily reactions. Man was born into fear in that he was born into a world where most of the energies were set against him. Everyone

of people with whom you come in contact during an hour and I wager that all have fears of one kind or another. The father fears for his son's future, the clerk for his job, the employer for his investments, the girl for her lover's devotion; all have fears and probably rightly so, for as individuals we need difficulties to overcome and fear is a stimulus to that end.

Fear is not only a widespread but a decidedly contagious emotion. In wild life within the herd or pack, the transmission of fear is unusually rapid. Hunters say that it is easier to approach

It is nature's guard

for the many that the most sensitive single animal starts a stampede. Observe the many instances in history of fear starting with a small nucleus of people, eventually encompassing an entire nation, and ending in wholesale bloodshed; of panic stricken crowds trampling each other to death in their headlong effort at escape; and lastly, in a small way, but nevertheless interesting to us the effect upon patients of foolish pessimistic gossip.

Of the various fears the profoundest and most instinctive is the fear of death. It exists irrespective of intelligence or reason. No one is free from it. A man may shake with fear yet stand his ground because he fears to be called a coward Philosophers and poets are ofttimes psychologists by intuition. Thus to quote Rousseau, "He who pretends to face death without fear is a liar." Lord Byron divines the instinctive quality of fear of death in these lines from "Cain:"

"I live. But live to die, and living see nothing to make Death hateful—save an innate clinging—a loathsome and yet invincible instinct of life, which I abhor; as I despise myself, yet cannot overcome, and so I live—"

If, therefore, the fear of death is instinctive, it follows that you cannot argue or reason a person out of it. You can modify, divert, suppress or submerge such an emotion; but it continues to exist as a psychic entity. It is highly probable that the contemplation of an operation—accompanied as it is by the glamour of the hospital, the glittering instruments of pain, the mysterious sleep of anesthesia, invites fear of death much stronger than we as surgeons are willing to believe. It is feasible, also, that directly after an operation an anxiety complex remains which together with a weakened physical condition is equal to the first, for anxiety and worry are chronic fear.

No one who has kept pace with experimental physiology can doubt the delaterious effects of strong emotion—especially fear. In fact it may be safely said that five-sixths of all human ailments, barring infections and accidents, are due to worry and anxiety. Physical effects of strong fear are known to every layman: palor, cold perspiration, rapid cardiac action, nausea, relaxation of the sphincters, trembling, dilatation of the pupils, etc.,—all of which to a physician describe a picture much like surgical shock. It is a moot question whether sudden strong fear or terror of itself can produce death, but there can be no argument as to this possible end where a concomittant marked debility, such as cardiac disease or the unexplained and little understood status lymphaticus, exists. In the lower animals the effect of fear or anger is to so stimulate or inhibit certain organs as best to prepare the animal for flight or combat. This is brought about by what Williams and Hoag in their book, "Our Fear Complexes," term "the glands of fear and anger" —namely, the thyroid and adrenals It would be futile to go into the details here for the literature is rich in original work along this line. One can see from all these views that however well nature may have seen to the mechanism of self-preservation of the animal or primitive man, it leaves quite another picture when this action takes place in a person of modern social environment. The mechanism is the same but the outlet different. Dr. Crile, in his book, "The Origin and Nature of the Emotions," has graphically presented this phase of the subject:

"We fear not in our hearts alone, nor in our brains alone, nor in our viscera alone—fear influences every organ and tissue. Each organ or tissue is stimulated or inhibited according to its use or hindrance in the physical struggle for existence. By this concentrating of all or most of the nerve-muscular mechanism for defense, a greater physical power is developed. Hence it is that under the stimulus of fear animals are able to perform preternatural feats of strength. For the same reason, the exhaustion following fear will be increased as the powerful stimulus of fear drains the cup of nervous energy more completely visible action may result.

"Perhaps the most striking man and animal lies in the gr man has gained over his prim actions. As compared with th organic evolution, man came t real abode and assumed his s nination over the physical wo ago. And now, though sixth s mand of the complicated m when he fears a business m manifest in the terms of th battle in the struggle for ex fear intellectually, he exp he fears with all his org are stimulated or inhibi a battle of credit or pr physical battle with t but one response to the phenomena are physical."

I am ready to [illegible] persons so const[illegible] leaves an indelibl[illegible] lasts throughout [illegible] believe that m[illegible] irritability, sle[illegible] turbances, con[illegible] etc., attributed [illegible] in reality left [illegible] operation. If [illegible] by some spec[illegible] pain and mor[illegible] proach it [illegible]

could be filled with enough opiate, the proper modus would be established. Such a stuporous nonchalance would be the ideal way to spend the whole period from the night before until forty-eight hours after the operation or at least until one could wake to be oneself with no fearful memories of torture. To effect this sort of "Twilight sleep" in a practical way is not so difficult. Enough morphine or pantopon given hypodermatically to keep the patient in a doze with respirations around twelve beginning the night before operation and continued thereafter for forty-eight hours, or longer if desirable, will produce the result. The advantages are:

1. Fear is eliminated.
2. Pain is eliminated.
3. Spread of infection already there or unwarily introduced is prevented.
4. A circulatory stimulant is provided.
5. It produces a grateful patient with no hangover of fear.
6. The burdens of the attendants are lightened.
7. The procedure is not dangerous.

POST-OPERATIVE CONSTIPATION

By D. C. McKENNEY, M.D., BUFFALO, N. Y.

When patient is ill a long time he is often constipated and takes cathartics. As he is usually thoroughly cleaned out before operation and has eaten little or nothing there need be no hurry about moving his bowels following operation. Pain anywhere tends to cause constipation through spasm. In these cases morphine works better than cathartics. Usually there is an insufficient intake of water and often loss by vomiting, so that there is not much moisture in the intestinal tract unless supplied as Dr. Noehren has indicated.

Due to lack of exercise, feces may collect in the lower bowel and cause an impaction. Practically all the difficulty is in the lower part of the colon.

Another cause is that the patient has some painful rectal condition, hemorrhoids, fissure, ulcer, etc. In these cases an application of adrenalin and cocain flakes may be used locally to relieve the patient's pain so that he can defecate. Mineral oil helps also. Milk of magnesia with the oil is also useful to correct the rectal trouble.

Where there is rectal impaction inject every hour, four times, for retention a small amount of warm water and follow an hour later with a large enema of plain water through a male catheter.

In obstruction cases a thing they are now doing is to supply sodium chloride. After relieving the obstruction inject a solution of sodium chloride into the gut, and give it also by mouth. 75 cc. of 15 per cent sodium chloride solution may also be injected intravenously and this will cause a clean-out in about half an hour.

POST-OPERATIVE EMBOLISM

By EARL P. LOTHROP, M.D., BUFFALO, N. Y.

The question of embolism is closely bound up with that of thrombosis and constitutes, as Forgue says, one of the black spots in abdominal surgery. From the recent literature it is obvious that there is a marked increase in the frequency of both thrombosis and embolism. The age incidents vary from 19 upward with the majority of the cases over 40. The site of operation is apparently unimportant and the primary cause of embolism is still as obscure as ever. Deterring reports that since 1923 the number of these cases has tripled. Although the number of primary or really medical emboli has increased, this increase is not in proportion to the number of traumatic or surgical emboli. In the Burger Hospital, thrombosis increased from 2 to 4 per 1,000 in 1919, to 16 per 1,000 in 1927. Parallel with that the number of cases of fatal embolism increased from 1 to 4 per 1,000. Henderson reporting on 63,000 operative cases from the Mayo Clinic states that "8 to 10 per cent of post-operative deaths are due to embolism the incidence being 0.34." Kuhn of the Pathologic Institute of Freiburg, reports that, between the years of 1924 and 1927, fatal embolism increased from 1.3 per cent up to 4 and then 9 per cent, while thrombosis in 1927 was found in every 4th body. This report, of course, included cases of medical thrombosis and embolus, but emphasizes the fact that there had been a large increase. It has been thought that the increased number of primary emboli was due to the better care cardiac cases are now receiving. With modern methods of intravenous medication the life of the cardiac is prolonged beyond the point where they formerly died from decompensation. They are now dying from embolism.

As stated before the real cause of formation of thrombosis and embolism has not been deter-

mined and those factors which have been regarded as active in the past are now looked upon as predisposing causes, such as:

1. Slowing of the blood stream.
2. Injury to the endothelium.
3. Changes in blood.
4. Decreased metabolic activity.
5. Lowered blood pressure.
6. Sepsis.

There is no agreement among investigators as to the relative importance of these factors although in certain clinics one is stressed more than another. The majority agree that slowing of the blood stream is not sufficient but that injury to the endothelium is necessary. Injury to the endothelium is brought about by trauma such as occurs in fracture of the limbs, severe blows upon the abdomen, extension of infection from neighboring wounds or certain types of bacteria in the blood. There seems to be no evidence to prove that intravenous medication has played any part in the production of thrombi and the number of emboli which have occurred following injection of varicose veins is exceedingly small. Changes in the white cells, platelets, blood calcium, fibrinogen, and prothrombin have always been recognized but, like the report of Mark Twain's death or the weather, their importance has either been exaggerated or ignored. However, two bright spots stand out in the literature indicating two definite attempts to solve this problem, one from the chemical, the other from the metabolic standpoint.

Bancroft and his associates report an interesting experiment which is being conducted at the Fifth Avenue Hospital from the standpoint of blood chemistry. Recognizing that there are certain elements in the blood which favor clotting and others which antagonize it, they are attempting to determine in advance whether the patient's antithrombin or prothrombin hold the balance of power and, by a second analysis three or four days later, to record the changes in their relative strength. They have observed in those individuals who live on a high protein diet, a greater tendency to thrombosis and embolism than in those who subsist on a fruit and vegetable diet. They have found that the ordinary method of estimating clotting time is of little value and recommend that the clotting index of the blood be determined according to the following formula: the percentage of prothrombin plus the percentage of fibrinogen is divided by the percentage of antithrombin, this formula giving what is known as the normal clotting index which is 0.5. They are searching for a simple test of one factor in the blood which can be universally used and will give a relatively accurate idea of the clotting index. So far they have been unsuccessful but the whole work is a step in advance and the article referred to is worthy of careful reading.

The other bright spot is at the Mayo Clinic. Walters reports in January 30th issue of "Surg. Gyn. Obs.," the use of thyroid extract post-operative from the third to the tenth day to increase general metabolism. His argument is based on the fact that a post-operative patient doesn't breathe deeply, abdominal muscular action is inhibited and residence in bed leads to inactivity of the muscles of the trunk and limbs. This, he believes, is the most important factor in the formation of thrombi and thyroid is recommended because it increases metabolism. In proof of his claims he reports 4,500 cases so treated with embolus death-rate of 0.09. The part which sepsis plays in thrombosis and embolism is still an open question. Undoubtedly it is a factor and is present in large percentage of cases but it is also true that a goodly number of cases occur in which sepsis cannot be proved so it must be left as a predisposing factor.

When I stated that the etiology of thrombosis had not been determined I overlooked the opinion of a bright young man who recently solved the problem and stated his theory in the following words: "Boshamer is of the opinion that thromboses, post-operative and essential, are the result of a lability of the vasomotor and the autonomic nervous systems, i.e., a parasympathicotonic hypertonia, developing as the result of a sympathetic irritation (surgical injury, cell degeneration) superimposed on an enfeebled circulation with imbalance of the splanchnoperipheral circulation, contraction of veins in the liver, disturbance in the metabolism of proteins in the liver, blood changes, and injury of the intima."

POST-OPERATIVE ILEUS

By JOSEPH BRENNAN, M.D., BUFFALO, N. Y.

ILEUS is a symptom complex of pain, tympanites, vomiting and obstipation. There are two main types seen post-operative: mechanical and paralytic. The mechanical type is ordinarily due to adhesions, bands, etc., but may occasionally be due to tumors, volvulus, intussusception. The paralytic type may be very insidious in onset, and may be easily overlooked in its early stages. It is a fact that when a patient has been operated surgeons are often slow in recognizing ileus.

Both types of ileus show after developing much the same clinical course. The usual case has all four of the symptoms mentioned. If

these are not relieved by enema, stomach washings, duodenal tube and sodium chloride, one should be prepared for further surgery.

Obstruction high up in intestines is rapidly fatal. If not soon relieved by operation the patient rapidly goes into the terminal stage, with rapid pulse, cold clammy perspiration, fecal vomiting, drooling, and dies. Conservative measures should not be persisted in up to the onset of fecal vomiting. Fecal vomiting is not so much a symptom of intestinal obstruction as it is a sign of approaching death. It is then too late for surgery.

There is a similarity of symptoms in patients in terminal stages of ileus and those dying in shock or gas gangrene. The intestines are blocked off, tremendously ballooned, and are just a pool of toxic material. This toxic material has been injected into guinea pigs and dogs by many different workers using much the same technique, but there is a wide diversity of opinion as to the cause of death. It has been claimed that death is due to starvation, dehydration, loss of chlorides, high nitrogen urea in the blood. According to Hayden and Orr, death is due to deficiency of chlorides. Williams gives serum on the theory that the underlying cause is the gas bacillus of Welch. It has also been claimed that the cause is lack of bile going through the intestines, and human bile enemas have been given with some success in this connection. I cannot, then, give the exact cause of death in ileus. It is probably due to absorption of nucleoproteins from the degenerated intestinal lining, in combination with other factors, dehydration, loss of chlorides and alkalosis.

The treatment should be largely one of prevention. Thorough knowledge of the patient beforehand, study of blood chemistry, not too early catharsis, replacement of fluid, return to the normal water balance in the body would do much in the way of prevention. In this connection too, in certain selected cases, it is well to perform an ileostomy as part of the original surgical work.

Gentle handling of tissues is important in preventing pain and also in preventing ileus. Rough handling of tissues is secondary in importance only to peritonitis in the formation of multiple fine adhesions. These fine adhesions can easily cause ileus of mechanical type, in fact they do cause 75% in the opinion of one observer.

The treatment of ileus will vary somewhat with the type, whether mechanical or paralytic. In the mechanical, removal of bands, adhesions, etc., is often sufficient, if done early. If late, the cause must be removed and case treated as paralytic ileus. Enterostomy is done, and because of greater toxicity of the contents of the jejunum, jejunostomy serves best to relieve the toxicity and depression. Intestinal contents are replaced with sodium chloride solution, with 5% sodium chloride in the veins, and 3% in large quantities under the skin.

Some surgeons have advocated stripping the entire small intestinal tract over a glass tube to thoroughly empty it. This seems a radical procedure, and must be determined by the condition of the patient.

The use of spinal anæsthesia in paralytic ileus has been shown to be of value both in differential diagnosis and treatment.

POST-OPERATIVE PERITONITIS

By MARSHALL CLINTON, M.D., BUFFALO, N. Y.

The commonest cause of death after an abdominal operation is peritonitis. To properly understand what the abdominal structures do in peritonitis when they follow the protective impulses, it is necessary to have a proper understanding of the philosophy of the treatment of this complication.

The physiology of the peritoneal cavity is such that when there is insult by injury from a foreign body or bacteria, the reaction is distension. This distension is comparable to the loss of function following injury to muscular tissue.

Peritonitis spreads by a mechanical extension due to peristaltic waves, by direct extension and through the lymphatic system. In the treatment of peritonitis, we cannot control direct extension nor can we control extension through the lymphatic vessels, but we can modify the spread of a peritonitis by controlling peristalsis. The mortality rate of an early spreading peritonitis has been reduced at least sixty per cent by following out the general treatment outlined by Dr. Ochsner of Chicago. He showed how a spreading peritonitis generally could be controlled by giving the patient large doses of tincture of opium per rectum, by keeping the stomach completely empty, by using the stethoscope on the abdomen to determine if any peristalsis is occurring, and by keeping the patient's respiration down to at least ten to twelve per minute. I think we sometimes forget that anything in the stomach will start a peristaltic wave that spreads throughout the entire intestinal tract and as this is one of the most harmful things that can happen to a patient with a spreading peritonitis, the stomach should be kept completely empty and fluids supplied per rectum and subcutaneously.

In our own experience we have seen this change in treatment of a peritonitis over a period of thirty years at which time the greater majority of patients died of this complaint. Today, we find that our mortality rate in cases of spreading peritonitis is less than six per cent.

POST-OPERATIVE HEMORRHAGE

By WALTER L. MACHEMER, M.D., BUFFALO, N. Y.

When hemorrhage does exist, there can be only one treatment—that being to stop the bleeding. This, as you know, may be accomplished by several different methods. Little need be said of the signs and symptoms of hemorrhage, also the treatment of the effects of hemorrhage shall receive only a passing comment.

Transfusion, which very often is put off until too late, should be used early. Instillation of fluids, such as glucose and saline solutions can be used intravenously and subcutaneously, orally and rectally. In the use of glucose subcutaneously, a five per cent solution can be used and is a method commonly used at the Children's Hospital, and also normal saline solution intraperitoneally, but in cases of intra-abdominal hemorrhage, the last method would be contra-indicated.

We shall deal with the prevention of hemorrhage rather than with the treatment. I would make the following suggestions: that any vessel which has a name should receive the respect of the surgeon; and when such vessels are encountered they should be tied as vessels rather than part of a piece of tissue. In other words, vessels, such as the renal, splenic, cystic, etc, should be identified as such before ligated. All important ligatures should be anchored.

Promiscuous tearing of adhesions may sometimes result in a continuous large hemorrhage.

In dealing with cases of increased abdominal tension, the sudden release of such pressure may permit a fatal hemorrhage within the abdomen. The manhandling of an inoperative lesion, such as carcinoma, may produce an uncontrollable ooze which may be equivalent to a real hemorrhage.

In making an anastomosis, the use of clamps may sometimes produce hemostasis only during the operation and if the same are released, a hemorrhage may occur. The mucous membranes are very vascular, and for that reason, it has been our practice to suture the same with a locked stitch or stitch tie suture. In a gastroenterostomy, we have not used clamps for many years and find that they are quite unnecessary in controlling the escape of gastrointestinal contents and we feel that our hemostasis is much more perfect, especially using the stitch tie suture under these circumstances. As this method of anastomosis is so complete, it has not been necessary to use any drainage.

POST-OPERATIVE SECONDARY INFECTIONS

By ALFRED H. CLARK, M.D., BUFFALO, N. Y.

Secondary infections which complicate or prevent recovery from abdominal operations may be 1. Those caused by organisms already at site of operation found at or just before time of operation, as in

A. General or Localized Peritonitis.
B. Multiple Abscesses from Infected Emboli in Lungs, Liver, Spleen, Kidneys, etc.
C. Pylephlebitis.
D. Single Abscess of the Liver.
E. Subdiaphragmatic Abscess.
F. Phlebitis.
G. Abscess of Lung.
H. Empyema.
I. Pneumonia.
J. Endocarditis.
K. Arthritis.
L. Pyelitis.
M. Perinephritic Abscess.
N. Parotitis.

The above named infective complications may come from:

Appendicitis; Ruptured Viscus; Cholecystitis; Diverticulitis; Pancreatitis; Perinephritic Abscess; Salpingitis; Parametritis; Metritis; Endometritis; Oophoritis.

2. Those arising from infections elsewhere in the body, as in the Teeth; Tonsils; Sinuses; Chronic Gall-bladder; Bacilluria from infections anywhere along the urinary tract, or from the upper air passages.

These include:

A. Pneumonia.
B. Endocarditis.
C. Arthritis.
D. Parotitis.
E. Epididymitis.

Parotitis can be metastatic in origin or from organisms ascending through the duct from the mouth. It is said to occur more frequently in pelvic operations than those in the general abdomen. More than half of the reported cases go on to suppuration. Judging from the few that I have seen this would seem to be an exaggeration —probably due to the fact that the suppurative ones are more dramatic and are more apt to be reported.

3. The third group of infective conditions are

those which are introduced from without at the time of operation, for example: Wound infection; infected suture material; spray from the operator's mouth; dust; sweat; careless sterilization; or colon bacillus infections in operations upon the bowl or in accidental injury to the bowel.

Urethritis, cystitis; pyelitis may be due to infection during catheterization.

"Health News" of February 17, 1930, quotes from "Municipal Sanitation" (January, 1930), on the danger of having the water intake of sterilizers below the water level in the sterilizer. They reported a case in which the pressure in the water system in the building was reduced enough so that water contaminated by soiled instruments in the sterilizer was sucked into the general water system thus completely contaminating it. They reported, also, a case where the still for distilled water was connected directly with the sewage and in which the operator forgot to close the tap after blowing the steam out of the still. Then when the still cooled, sewage was sucked directly in and mixed with the sterile water so when they thought they were using distilled water they were using about one part of distilled water to twenty of sewage.

POST-OPERATIVE ABDOMINAL AUSCULTATION

By JAMES E. KING, M.D., BUFFALO, N. Y.

A large number of abdominal operations are associated with some postoperative disturbance of intestinal peristalsis, either as a result of perverted nerve impulses or as a direct effect of a complication. To him who becomes familiar with the postoperative behavior of the intestines as revealed by auscultation, the stethoscope will contribute much to a better understanding of these clinical conditions, and it will sometimes render valuable aid in the early diagnosis of certain postoperative complications.

The postoperative disturbed nerve impulses may be regarded as producing in the intestinal tract three results: inhibition, overstimulation, and reverse peristalsis. The question as to whether these states are produced reflexly, as a result of the abdominal incision or whether they follow manipulation of the intestines and originate in the sympathetic system will not be discussed.

The course of events in the majority of laparotomies is as follows: For a variable period auscultation shows a much diminished peristalsis. Peristalsis increases during the next twenty-four to forty-eight hours, and the pain associated with it bears a relation to the severity of the contractions. The first stage may be regarded as the stage of inhibition, the second as one of spastic contraction. The spastic stage following the stage of inhibition produces the pain we designate as "gas pains." The term is appealing, although not entirely accurate, as frequently severe pain of this stage is not associated with distension. The stethoscope during this stage shows marked peristalsis of the sudden forceful type.

Perhaps the most typical illustration of the use of the stethoscope in peritonitis is found in the ruptured appendiceal abscess. Almost directly there is a marked decrease in intestinal movements. By the time the patient is seen by the surgeon, peristalsis has ceased. Our house surgeons like to characterize this as the "graveyard belly," a term which unfortunately may have a double significance. This state of affairs persists for three days, four days, or perhaps a week, and then one day a gentle sound is heard and after an interval another, which relieves uncertainty. The stethoscope under these circumstances is a great comfort, and makes it possible to take a firm stand on diagnosis and treatment, and helps in determining the prognosis.

Postoperative obstruction of the bowel is dreaded by every surgeon. Its early recognition is essential for successful treatment. The diagnostic criteria furnished by the average textbook are often those of an advanced stage. Vomiting and cramp-like pain are the two clinical indications of the greatest importance. Postoperative vomiting that persists after twenty-four hours, or vomiting that begins two or three days after operation, calls for careful analysis in its relation to the general clinical picture, together with the evidence obtained by abdominal auscultation. The stethoscope demonstrates active peristalsis, and one is justified in expecting, if the case is not one of obstruction, that an enema will bring gas. If repeated effort in this direction fails and if at the same time there is increasingly violent peristalsis, a diagnosis of obstruction is justified.

Perhaps one of the greatest values of the stethoscope is in the early differentiation between obstruction and peritonitis. I have never known it to lead one astray if the evidence obtained by auscultation has been carefully considered in connection with the clinical evidence.

PRESENT-DAY METHOD FOR TESTING THE HEARING AMONG SCHOOL CHILDREN*

By EMILY A. PRATT, M.D., ALBANY, N.Y.

From the Medical Inspection Bureau, State Department of Education, Albany, New York.

THE early literature gives nothing on tests of hearing.

It was not until 1821 that we note actual mention of a device for testing hearing. This is by the great otologist, Itard of France.

The transmission of sounds through the cranial bones in diagnosis of aural diseases was first studied by Johann C. A. Lucae, (1870). Rothenburg, in 1896, introduced new tests for audition in deafmutism and in unilateral deafness in 1897.

Various methods of testing hearing were discussed by T. M. Clarke, M. B.[1] For example, he says, "The human voice has long been used for such tests, and inasmuch as the ability to hear and understand speech is the criterion par excellence of hearing ability, it is unfortunate that its disadvantages outweigh its advantages."

The voice cannot be standardized.

The tuning fork is a dependable tool so far as *constancy* of *pitch* is concerned. This is for the aurist only and not the school authorities.

The ability to hear a watch, so-called watch tick test, is convenient. The results are on the rational hearing distance basis. This method has been the most satisfactory one we have had for testing groups of school children.

A considerable drawback to spoken or whispered speech is found in the fact that it is impossible to employ a uniformly strong voice on different days. Fatigue plays an important part. Even if we succeed by continued practice in training our voice and speech apparatus to a uniformly strong pronunciation the clearness of our voice will on many days be temporarily altered by trifling changes in the larynx and the ligaments of the glottis. In loud speech the volume of the sound of the vowels and of the consonants makes its use unsuitable.

"Politzer[2] hoped for the production of an instrument which would give a standard intensity of sound. The difficulties of production have apparently been too great, for acoumeters are encountered which vary widely in loudness."

"The audiometer does away with the uncertain loudness of the sound used in quantitative estimation of the acuity of hearing and gives us the ability to plot an audiogram that will mean as much to some one else as it does to the man who made it. *Perhaps* it will enable us to discern evidences of beginning deafness, whereas, when deafness is established, it is all *too often hopeless.*"[3]

So we come to the year 1925 and note an article by Dana Drury, M. D., of Boston which occurs in a number of the *Laryngoscope*. The title is "The Tests of 500 Average Ears."

These tests were made with the phono-audiometer, developed by the Western Electric Company under the direction of their physicist, Harvey Fletcher, Ph. D., together with the cooperation of physicians such as Dr. Fowler, Dr. Hays, Dr. Newhart and others and stimulated and cooperated by the American League for the Hard of Hearing.

We now have a device that detects incipient disease among school children by means of measuring the hearing in units of hearing loss. When the loss of hearing is found by the school health service, parents are notified that they may procure medical advice.

This device detects from five to ten percent, whereas by the obsolete methods, the voice and even the watch tick test, only one percent was found.

We therefore have an aid to diagnosis, to research and in determining the fitness of an applicant for the type of work for which he is making application; and to education. It estimates the degree of hearing of school children that "special" education may be provided for those who need it. (This special education is in the form of speech or lip reading.)

The phono-audiometer, as the name implies, is a device for measuring the degree of hearing loss in vibration units by means of an electromagnetic phonograph that revolves a special record. A voice repeats four columns of numbers for each ear, the numbers becoming fainter as the end of the column approaches. The machine is calibrated on exact mathematical and electrical measurement so that there is no difficulty about unification of a standard.

It produces speech electrically. It has been calibrated after innumerable tests to take care of the average outside noises and to be adapted for use in the average schoolroom.

It is economical of time and money. The device has 40 earphones which are attached to the phonograph, thereby making it possible to test an entire class at a time. All grades from the third up can be tested by this method. With time and patience the second grade can often be tested. Each child is provided with a prepared sheet of paper, on which he records the columns of figures he hear. If he hears only the figures at the top of the col-

*Read at the meeting of New York State Women's Medical Society, at Utica, N. Y., June, 1929.

umn his hearing loss is greater than when he is able to hear and record the entire column. All papers are corrected by means of selecting the better column for each ear and comparing it with a master sheet. All children found defective on the first test are given a second test to eliminate the element of fear, failure to cooperate, slowness of comprehension and so on, in order that the children who really do not hear may be noted.

The units of hearing loss are noted in columns on the record sheet. These units commence at 30 and decrease to 0 and —3. The numbers spoken decrease in regular steps, 3 *SU from a point louder than one with normal hearing* could hear easily, to a point at which only one with the best of hearing could interpret the numbers. Zero indicates normal hearing as noted by no loss of vibration units. Minus three indicates acute hearing.

The record of this test is in units of hearing loss. Everything under 6 may be considered normal. A loss of 6 units should be considered as questionable. A loss of 9 SU or more means defective hearing. The greater the loss the more serious is the defect. *All children found defective should be referred for otological examination.*

The New York State Medical Inspection Law (Laws of 1913, Chapter 627) provides that medical inspectors or principals and teachers in charge of public schools shall make eye and ear tests of the pupils in such schools, at least once in each school year. This is true of other states. We now have a means of more adequately carrying out the law. Many school boards throughout the United States use this phono-audiometer. The American Federation of Leagues for the Hard of Hearing have honored all cities which use this device and their local city clinics, and who provide Speech Reading for those who are deafened, designating them as "Three Point" cities. Rochester of New York State is one so listed.

Exclusive of Rochester, Buffalo and New York City the following statistics have been gathered in New York State during the school year 1928-1929 in an effort to establish the universal use of the phono-audiometer throughout the state as well as determining the incidence of hearing loss among school children.

The first survey was made in Poughkeepsie in 1926 with the result that 9½% out of 600 children were found defective.

Four hundred and thirty tests were next made in Schenectady with 5% found defective.

Later in Nyack 892 grade children were tested with 9.6% defective, 80% of whom had otological defect, consisting of adenoids and tonsils; impacted cerumen; otitis media, chronic and acute; chronic catarrh and nasal obstruction. Nine percent, or all but a very few of those found defective were recommended for lip reading instruction. Corrections were made on only 46%, or less than one half of the 80% of otological defects found.

In Hudson a larger group of children was tested and all defective given an otological examination. This same group was tested the following year and given a third test and a second otological examination.

The following points were noted:

1. Number of children tested.
2. Number found defective on first test.
3. Retest of above.
4. Number found defective on retest.
5. Number of above with otological defect.
6. Number of above retarded one or more school terms.
7. Number recommended for lip reading.
8. Number recommended for a deaf school.

The survey started with 1097 tests which included all grades and the high school.

The high school pupils pass out of the school system before much can be done in the way of follow-up work and special education. (It often takes from five to ten years to bring about some new phase of health work owing to many factors. One is that physicians doing part time school health inspections are too busy with their general practice to familiarize themselves with modern health measures and so fail to present the need for these newer methods to their Boards of Education.)

Four hundred and eighty-two *grade school children* were selected for the final study.

Out of this number, 398 or 82% had normal hearing.

68 or 14 plus percent had defective hearing (a hearing loss of 9 or more units.)

16 or 3 plus percent *were borderline* (6 *hearing loss units.*)

Of the 68 or 14%, 56 or 82 plus percent had an otological defect.

Of the 16 or 3 plus percent, 11 or 5 plus percent had an otological defect.

There were 67 children out of 482 with an otological defect.

There were 56 children with definite hearing loss.

The fact which I wish to bring out is that 14% of those tested had a definite hearing loss. They were handicapped by poor hearing.

82% of the 14% had an otological defect and in addition 3% of the borderline cases making a total of 84 with otological defect. If the otological defect could be corrected, there would be a chance for improved hearing in the 82% and normal hearing in the 3%. For example, 18% had impacted cerumen. If this were removed, hearing might be normal in this group which is only a fraction of the

number found to have a hearing loss The same would be true, to a certain extent, of diseased tonsils and adenoid tissue, acute otitis media and chronic catarrh to say nothing of the sinus infections A certain proportion of this 14% will remain deafened They require special education in *Speech Reading* The remainder need *prevention* Dr Franklin Bock, of Rochester proves this point each school year See also author's "Report on Preventive Work Being Done in One of the Schools for the Deaf" which appeared in the September number of the *American Annals of the Deaf*, 1928

The number of children with pedagogical retardation and defective hearing estimated after the third test was 59% That is to say that of those found with defective hearing, 59% had been kept back one or more grades (*There were 29 children who were repeaters* out of the 49 with defective hearing)

This seems like a large number The statement has been made that 3% of those children who are retarded pedigogically are so retarded because of defective hearing

The above statistics should of course be accompanied by a report of intelligence quotients It points out, however, the importance of detecting defective hearing among school children that a child with normal intelligence shall not be listed as mentally deficient or be considered a repeater and so an added expense to the School System

A recent report from one of the larger cities substantiates the Hudson findings of 59% of the children with defective hearing being pedagogically retarded

It is my belief that the percentage of those children pedagogically retarded who are found to have a hearing defect is greater than 3%, thus emphasizing the importance of early testing In this way the children will not lose valuable time and be classified as "stupid"

The phono audiometer has been used in 15 school systems in New York State during this school year (1928 1929) Some of these places were cities, some villages and some sections of rural districts

18,198 school children were tested Out of this number 1,169 were found defective This is 6 4% of the total tested

As previously mentioned only one per cent of all school children in New York State was found to have defective hearing as estimated by means of the now obsolete methods (Article by the author on 'Lip Reading—Its Need' presented before the American Federation of Leagues for the Hard of Hearing at their annual meeting 1927)

We can safely say that from five to ten per cent of school children have a definite hearing loss This is sufficient to recommend that the phono audiometer be used as an *accurate method* of estimating hearing loss

Children so handicapped should not pass into life 'through carelessness and inattention and from neglecting premonitory symptoms' as pointed out nearly one hundred years ago by John Harrison Curtis aurist to King William IV in 1831

In so many respects we have passed far beyond that period of civilization that we have *no right to persist in using obsolete* methods There are those who believe that legislation throughout the United States should be enacted that the phono audiometer shall be universally adopted Certainly scientific testing of school children should become universal Perhaps legislation will not be necessary

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LEUKOSARCOMA WITH MEDIASTINAL TUMOR

By BURTON L ZOHMAN, M D, BROOKLYN, N Y

From the Service of Dr Henry Joachim and Dr Joseph Rosenthal Department of Medicine United Israel Zion Hospital Brooklyn N Y

LUKEMIAS are occasionally observed which, both clinically and micro pathologically, show great similarity to the malignant neoplasms, especially to the sarcomas, by extensive and sometimes multiple growths Hematologically, cases of leukosarcoma are characterized by a predominance of large mononuclear, non-granular leucocytes which have a large, round or oval notched nucleus, which is hyperchromatic, possesses a thread network and several vacuolar structures within The protoplasm of these cells is scanty Anatomically, there is an atypical proliferation of the lymphatic apparatus closely resembling lymphosarcoma in *contradistinction to the actual hyperplasia* of the lymphatic organs as it occurs in lymphatic leukemia The tumors may be found in the prostate, breast, tissues of the orbit, the retroperitoneal space or in the mediastinum The primary site of our tumor was in the mediastinum

Case Report The patient, a white male, aged forty-eight years, was admitted to the United Israel-Zion Hospital on October' 2, 1928 He was apparently in good health until four weeks

before admission when he fainted while at work. About three weeks prior he began to cough slightly and would experience occasional sharp pains in the left lower chest. He remained at work until four days before admission when he had a sudden sharp attack of pain in the left chest with difficulty in breathing and a dry hacking cough. Since the onset of the patient's illness, there were marked night sweats, a poor appetite, weakness and a loss of ten pounds in weight.

On physical examination the patient was orthopnœic; the face and tongue were cyanosed. There were shotty glands in both the anterior and posterior triangles of the neck. The chest was of the emphysematous type with bulging of the left lower axilla. There was dullness with diminished tactile fremitus posteriorly beginning at the spine of the scapula down to the level of the angle on the left side, becoming flat at the extreme base. The entire left axilla was flat to percussion and the breath sounds were markedly diminished. Anteriorly, there was flatness on the same side beginning with the 3rd interspace downward and extending over to the mid sternum. The right border of the heart extended four and one-half centimeters from the midsternal line in the fourth space. There were a few enlarged inguinal glands and some prominence of the lower abdominal veins. Rectal examination was negative.

Following *x*-ray examination which disclosed a considerable left pleural effusion with the heart and mediastinal contents markedly displaced to the right, a thoracocentesis was done and 2,100 c.c. of bloody fluid were removed. Examination of fluid showed a predominance of lymphocytes, was negative on culture and for tubercle bacillus. Blood study on the following day revealed 4,700,000 red blood cells, 85% hemoglobin, 23,500 white blood cells with a differential count of 30% polys and 70% large mononuclears. At this time, a clinical diagnosis of leukosarcoma was made with the primary tumor invading the mediastinum. On the 5th of October, right and left axillary glands were felt. The trachea was considered fixed and the larynx was negative. *x*-ray showed a mediastinum which was tremendously widened, the external border of which presented a more or less scalloped appearance. The left chest showed evidence of being half filled with fluid which, when removed, was amber colored, negative on culture and for tubercle, and on section showed the same type of cell which was so characteristic in the blood. A biopsy of a cervical gland failed to reveal anything significant.

On the 8th, the submaxillary, supraclavicular and axillary glands were palpable, more marked on the left. A blood study showed 4,800,000 red cells, 85% hemoglobin, 220,000 platelets, 36,000 white cells with 16% polys and 69% large mononuclears, 3% atypical cells and 12% smudges. The oxidase reaction was negative. On the 10th, 1,500 c.c. of similar fluid were removed. On the 12th, the vessels over the anterior chest wall appeared prominent. The patient was given mediastinal irradiation. On the 15th, the erythrocytes numbered 5,500,000, the hemoglobin 80%, platelets 100,000, white blood cells 25,000 with 38% polys, 53% large mononuclears, 2% atypical cells and 7% unclassified. On the 18th, the liver was felt one and one-half fingers' breadth below the costal edge. On the 25th the red blood count was 5,000,000, hemoglobin 85%, platelets 90,000, white blood cells 23,600 with 40% polys, 55% large mononuclears and 1% unclassified. One per cent normoblasts were also present. On the 27th, *x*-ray irradiation was again given. On the 31st, the patient was very dyspnœic; the liver was felt 4 fingers' breadth below the free border, the spleen was not enlarged. The hands and face were cyanosed. The patient expired at 4 P.M. on the same day.

Repeated urine examinations were negative as well as Wassermann and sputum examination for tubercle.

Autopsy Findings (Dr. Max Goldzieher). The main tumor extends all over the anterior mediastinum. It is adherent anteriorly to the sternum and cannot be separated from the anterior surface of the right lung. It also encroaches upon the anterior surface of the pericardium. Posteriorly, it is in connection with several large lymph nodes which are fused together and surround the bifurcation of the trachea. The tumor tissue is white in color, mainly medullary and fairly soft in consistency, while other areas are more fibrous and firm. The lymph nodes which are partly fused with the main tumor, show anthracotic mottling.

Microscopically, the tumor in the anterior mediastinum consists of very cellular areas alternating with areas containing large foci of fibrous character. The cellular areas reveal a very fine reticular stroma in which the tumor cells are imbedded. These, although they are rather irregular, varying as to the size and shape of their nuclei, resemble lymphocytes. Their cytoplasm is scanty like that of a lymphocyte, however, the size of the nucleus exceeds that of a lymphocyte two or three times. Sections from the liver show extensive infiltration with tumor cells particularly in the periportal connective tissue. The hepatic sinuses also contain isolated cells of this type. The cells infiltrating the periportal connective tissue yield a negative oxydase reaction. The kidneys show the same type of infiltration. The spleen shows rather small follicles surrounded by hyperemic pulp. There are many of the large cells, comparable to those of the tumor, scattered all over the pulp and particularly

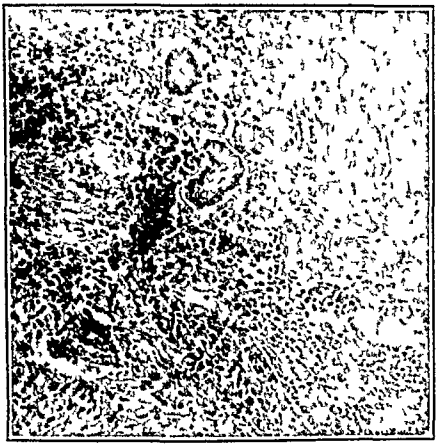


FIGURE 1

Section of kidney showing area infiltrated with large cells with intensely staining chromatin nuclei of type found in primary tumor mass
Zeiss—objective 8—Ocular 10



FIGURE 2

Section of liver showing interlobular space infiltrated with cells of same type as found in the original tumor mass
Zeiss—objective 8—Ocular 10

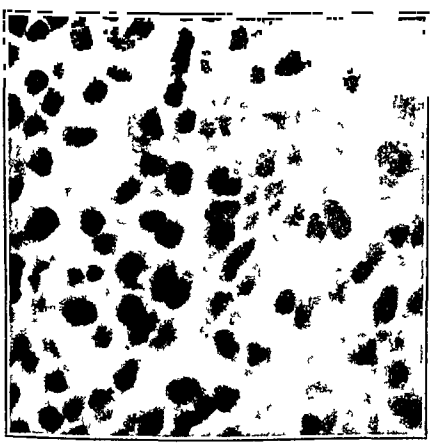


FIGURE 3

Section of tumor from mediastinum showing cells with very intensely staining nuclei of various shapes of similar type as found in blood
Zeiss—objective D—Ocular 10

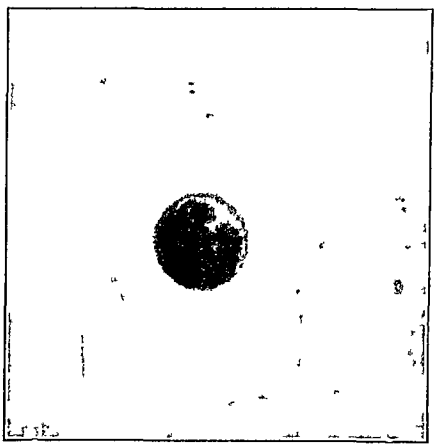


FIGURE 4

Blood smear showing typical white cell with intensely staining notched nucleus and small rim of cytoplasm
Leitz oil immersion—Ocular VI

in the hyperemic areas of the pulp Large quantities of eosinophilic leucocytes and myelocytes are also conspicuous A large number of oxydase positive cells are irregularly scattered over the pulp They surround the follicles in ring form There are practically no oxydase positive cells in the follicles

Comment A case of an irregular type of blood dyscrasia is presented It resembles closely the other types occasionally reported in the literature as leukosarcoma It is likewise characterized by a large tumor mass and a leukemic blood picture wherein the cells are similar to those in the tumor

THE CLINICAL SIGNIFICANCE OF ABDOMINAL PAIN IN CHILDREN*

By EDWARD J. WYNKOOP, M.D., SYRACUSE, N. Y.

THE advent of acute abdominal pain should always bring to the mind of the attending physician the question as to whether he is dealing with a medical or a surgical problem.

The occurrence of acute abdominal pain whether developing in the course of some acute illness or being the first sign of a surgical disturbance in the sick child, is a warning that should not go unheeded and should put us eternally on our guard.

Failure to properly interpret the symptoms may cause serious delay in arriving at a prompt diagnosis and postpone proper treatment.

Should the case prove to be medical in type, delay is not always so important but on the other hand, if the abdominal pain is a symptom of some surgical condition, delay may mean serious consequences, especially, in the young. The statement has been made "that it requires considerable judgment to give abdominal pain in the child its proper interpretation."

Whether the pain is superficial and muscular, or deep due to some infection of the visceral contents of the abdomen, should be determined accurately and with dispatch.

Pain of this type accompanies many conditions in childhood.

Intestinal Colic, Appendicitis, Pneumonia, Acute Peritonitis, Intussusception, Pyelitis, Strangular Hernia, Over-distended Bladder, Intestinal Parasites, Lead Colic, Rheumatic Fever, Movable Kidney, Acute Gastric Intestinal Indigestion, are some of the causes of abdominal pain.

The pain that is sometimes noted early in an attack of Catarrhal Jaundice should be mentioned. In the writer's experience, abdominal pain coming on in the course of what has seemed to be an ordinary Catarrhal Jaundice has proved in two instances to be the forerunner of those serious symptoms which turn out to be Icterus Gravis.

There probably is no disease that attacks the young which shows such a variety of symptoms, in its wanderings and vagaries, as the Pneumonias of Infancy and Childhood. Every hospital holds records of a good many cases sent in for surgical treatment with the diagnosis of an acute abdomen, only to find the pain is the result of disease in some other part of the body.

What physician has not been tried to the utmost in caring for a case that unquestionably showed atypical symptoms of respiratory infection and yet the abdominal pain has been so severe, the surgeon has been called in to help shoulder the responsibility. As one gets older in the field of medical practice, certain rules are many times formulated in one's mind and frequently symptoms are grouped together to prove the infallible rules of diagnosis. Then the unusual and unexpected happens, and we find while we may have been long in the fight against disease, there remains much to be learned for something new is forever showing up in the field of clinical medicine.

The suddenly stricken child, acutely sick with or without a chill, profoundly toxic, high fever, rapid respiration and pulse, severe abdominal pain, vomiting, expiratory grunt, with or without cough, the symptoms may point pretty definitely to respiratory infection but a search for any evidence of disease in the lungs, may for several days be futile.

Add to the picture severe abdominal distention; not only is the diagnosis rendered more difficult but the prognosis certainly is definitely worse. In the typical cases of Pneumonia with cough, fever, rapid respiration and pulse, abdominal pain may also be severe but early signs of disease in the lungs are easily recognized.

In these cases of unquestioned respiratory infection in which an accurate finding in the lungs is not at first possible, the careful analysis of the history together with a minute and thorough physical examination will reveal as a rule signs that point to the true cause of the disease.

Our hurry in skimming over a poor history added to insufficient time in a superficial examination, will many times cause us to overlook the warning signals.

The development of laboratory facilities, including blood count as well as *x*-ray examinations, make us lean altogether too much on these great aids in diagnosis.

We sometimes forget that clinical symptoms are just as valuable today as in the early centuries and our diagnostic ability ought to be sharpened rather than dulled by the progress made in medical science. Such, however, is not the case. We are inclined to let the *x*-ray picture point out some small area in the lung field that is causing all the trouble rather than to try and detect some minute change on auscultation, palpation or percussion that would prove our diagnosis.

Many a case of respiratory infection reaches the surgeon, occasionally, to be operated on, but many times sent back to the physician

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for further observation because the symptoms do not warrant surgical interference. The same might be said of some abdominal cases in which slight tenderness and rigidity did not wake us up till a blood count made us realize the early *clinical* symptoms were decidedly important.

Proper time taken by the examining physician in a complete examination of the chest and abdomen would usually in spite of dire difficulties make a diagnosis possible.

The high temperature that usually accompanies a Pneumonia, the mode of onset, expiratory grunt, dilating alæ nasi, disproportion between respiration and pulse, and the thorough searching of the respiratory track will usually show some area presenting abnormalities.

If the chest fails to reveal evidence of infection, the careful examination of the abdomen, taking plenty of time to guard against unnecessary roughness and hurry, will show the abdominal wall free from rigidity, deep palpation will be negative and rectal examination will fail to locate a tumor mass.

In every sick child there is always exhibited certain symptoms referable to the illness with which the child is suffering and it is up to the attending physician to properly interpret these clinical symptoms rather than to let the laboratory attempt to do it for him.

There is probably no disease which is so commonly associated with abdominal pain as appendicitis.

Whether in the breast fed baby or older child so-called Colic has led to many mistakes.

In almost every instance the physician is called by the mother with the idea that the abdominal pain, stomachache, cramp or colic is entirely a problem having something to do with the feeding but the thought should always be uppermost in the mind of the physician as to the possibility of appendicitis or some other serious abdominal condition being present.

Appendicitis is one of the most frequent causes of abdominal pain.

It might be better to rearrange this statement in the following manner; Abdominal pain is always an accompaniment of acute appendicitis.

The pain is usually first located in the Epigastrium being colicky in type and rather persistent in character.

The child does not seem to be free from discomfort though the pain may not be continually acute. The tendency is for it to finally locate in the lower abdomen in the vicinity of the right rectus.

The pain seems to continue with periods of partial relief but even as the more definite sign of localization appears, pain still continues general as well as local.

Accompanying the pain, vomiting, muscular rigidity, localized tenderness, fever, rapid pulse, constipation, follow as a rule in rapid succession. The localization of the infection usually follows promptly somewhere in the vicinity of the McBurney point but it may vary according to the locaton of the appendix, as often shown by vesical irritaton and flexion of the right thigh in the abdomen.

The pain that may accompany Pyelitis usually is referred to some part of the genito urinary tract and signs of peritoneal irritation are wanting. The pain that accompanies Intussusception severe and paroxysmal in character occurring with vomiting, shock, complete constipation and bloody stools and with the other symptoms that make up the picture, present in the early part of the attack a soft relaxed abdomen very different from that of an acute appendix.

Abdominal pain occurring in an acute gastro intestinal upset usually ceases as soon as the intestinal tract is relieved of the offending elements.

Pain in the vicinity of the duodenum which may precede an acute jaundice is accompanied with very little tendernes and general disturbance.

In any infant or child, pain in the vicinity of the Epigastrium continuing off and on but fairly persistent with slight fever, occasional vomiting and constipation, should always be a warning of a possible appendicitis. There is no type of case in which hurry and carelessness in making the physical examination should be relegated so thoroughly and promptly to the background as in the search for the acute abdomen.

The difficulty many times of obtaining an accurate history has to be combated by a physical examination in which every physical finding no matter how trival must be carefully noted.

In this short paper it is not intended to go into detail relative to the many causes of abdominal pain.

It would seem to be much more important to point out the seriousness of abdominal pain and to urge that its warnings be heeded.

In dealing with the young it is always most important to remember the difficulties in obtaining an accurate history.

The busy mother absorbed with her many duties does not notice the first signs of illness, or if noted, a realization as to their importance is not appreciated.

The sick child may have been distressed a much longer period than observed by the mother. Many times, too, when a realiza-

tion of the seriousness of the illness does occur, she may for fear of censure for neglecting the child make an inaccurate statement in regard to the length of time the child has been ill. This has occurred to the reader rather frequently especially in reference to cases of Intussusception and has caused most unfortunate results.

In supposedly early cases a good prognosis has been made when on operation the findings prove that the child has been sick a much longer time than the history would indicate. In some instances, too, the mother has made the statement afterward that the child had been sick a longer time than she had at first stated.

This paper is to plead not only for more care in obtaining a history but in the physical examination as well.

The careful inspection of the sick child—noting every detail, should be done in good light, with patient and physician in as comfortable a position as possible so as not to unnecessarily tire either. Much can be gained by inspection. The type of breathing whether thoracic or abdominal, the movements of the chest wall, facial expression, color of the skin, appearance of the abdomen whether flat or distended, signs of gastric or intestinal Peristalsis, the position of the patient in bed, are all important matters. The careful examination of the child's abdomen in many instances is extremely difficult.

The irritable, peevish child, one who is extremely nervous or suffering from pain, may require great care in handling.

With proper judgment the physician can usually secure the cooperation of the child so that palpation and percussion can be carried out firmly and quietly as to detect signs of tenderness, rigidity, formation or any condition that would denote some type of abnormality.

It is time to not only keep on training our powers of observation but to *educate* our touch and hearing so that we will know when we feel and hear conditions that are abnormal.

It should be possible if we are persistent and careful in an examination of the sick child to take sufficient time to interpret our findings to make a correct diagnosis from clinical symptoms in almost every case.

THE INFLUENCE OF NUTRITION UPON THE RESPIRATORY INFECTIONS OF INFANCY*

By S. W. CLAUSEN, M.D., ROCHESTER, N. Y.

Introduction

RESPIRATORY infections present one of the most serious problems in pediatrics at the present day. In spite of the enthusiasm following the discoveries of Pasteur, bacteriology has solved this problem only in part. This failure is due to a too narrow conception of infectious disease, a conception which overemphasizes the importance of the invading microorganism, and ignores the invaded macroorganism. In all studies of infection, we must give due consideration both to the virulence of the causative organism, and to the resistance, absolute or relative, of the human host.

In studying the effects of nutrition upon infection, we are obviously dealing with a set of factors which affects usually the *relative* resistance. *Absolute* resistance or susceptibility is dependant upon a set of factors other than diet: in particular, inherited predisposition or immunity; immunity acquired by the host after successful encounters with pathogenic microorganisms or their products; or specific sensitization to disease, acquired by what we may term an unsuccessful encounter with pathological microorganisms. These types of immunity and sensitization seem to characterize what are known as the acute specific contagions of childhood; especially the exanthems, whooping cough and diphtheria. The science of bacteriology has furnished more or less satisfactory measures for preventing this group of specific infections.

The great group of nonspecific respiratory infections, so fatal in early life, against which no absolute immunity may develop, are best prevented by isolation. The problem before us for consideration may, therefore, be stated as follows: *Taking due account of exposure to infection, can we assign to good diet and nutrition any important protective effect?* We shall attempt to answer this question by reviewing the existing literature dealing with animal experiments and by presenting an analytical study of the records of hospital patients.

The obvious advantages of animal experimentation are as follows: (1) Exposure to infection can be controlled; (2) single elements in the diet can be varied at will; (3) due account can be taken of the age of the animal and the physical factors (other than diet) in its environ-

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ment. The most serious general criticism of this method is that inherent in all animal experimentation: *Do the results apply to man?* We must assure ourselves that the deficiency in diet with its resulting nutritional effect are in fact counterparts of the corresponding cause and effect in man; that the infecting organism and the resulting infections process correspond to a similar pair of causal and resultant factors in man. It appears that up to the present time, few if any controlled experiments have been conducted with human beings. With man, so many uncontrollable factors are at work, which lead to infection or to its absence, that we are obliged to rely upon the statistical method. This can never furnish the convincing proof or disproof of the protective effect of good nutrition, which can be obtained by controlled experiment—but does furnish us with practical suggestions for treatment and with a program for further investigation.

In considering the very extensive literature dealing with the relationship of nutritional disturbances to infection in experimental animals, one is at once impressed with the great significance of vitamin deficiency. Among the vitamin deficiencies, that of vitamin A seems of great importance. In order to illustrate this fact, we will cite a recent experiment of Bradford and Boynton (unpublished experiments). Bradford (1928) had isolated from lesions in rats dying of vitamin A deficiency a bacillus of the Friedlander group, capable of killing rats when administered in standardized doses by the intraperitoneal route. Groups of rats placed on the vitamin A deficient diet plus cod liver oil, were infected by intraperitoneal injection of the minimal lethal dose of the culture of the Friedlander-like organism. The time of survival of these animals was noted. It was shown that, in the protected group survival was more likely to occur; that lowering of resistance could be demonstrated at the 4th week, and that at the 12th week both control and low A animals never survived; and that at this time, the period of survival in both groups was much reduced. In order to compare the effect in animals with rickets, the Steenbock diet No. 3134 was used: controls received 0.01 mg. of irradiated ergosterol daily. Although pronounced rickets developed in the rats not so protected, there was no difference in the controls and affected animals until the latter were nearly moribund. These experiments emphasize the great importance of cachexia from any cause in lowering resistance; demonstrate that rickets per se does not lower resistance to this infection in the rat; and that the lowering of resistance to infection in animals on diets low in vitamin A can be demonstrated at a period before stationary weight is attained, and therefore long before xerophthalmia occurs.

Clinical Observations

Statement of the Problem: Does dietary deficiency predispose children to infection? In order to answer this question, we must prove the following propositions: (1) Certain children have received deficient diets; the deficiencies need not be absolute; (2) Children who have received such diets are more liable to infection than are children who have received good diets; (3) Either the two groups of children are comparable in other particulars or any differences which exist are such as to favor proposition 2.

There obviously exist other factors than diet which affect resistance to infection. This is particularly true in case of such contagious diseases as diphtheria, measles, smallpox, etc., against which known specific prophylaxis exists. We are concerned in this study rather with types of infection for which specific immunity does not seem to develop, particularly the respiratory infections.

Description of Clinical Material: The material includes all of the children who first entered the Strong Memorial Hospital or Rochester Municipal Hospital before their third year. Of about 1,000 such children, the records of some 300 have been analyzed, with special reference to the family history, the feeding history including particularly breast feeding, formulas of whole milk, dried or condensed milk, fruit juices, cod liver oil, cereals and vegetables; the presence of rickets, scurvy, anemia and underweight; the presence of rhinopharyngitis, otitis, mastoiditis, laryngitis, bronchitis and pneumonia. Forms were filled in so that the age and seasonal incidence of all variable factors could be graphically recorded.

Although such a study suffers from the inaccuracy inherent in all hospital records, it is felt that the inaccuracy of the data would probably be not much greater than the inaccuracy of statistical analyses in general.

The feeding histories are probably fairly reliable, especially in case of children under the age of 18 months.

Attention was paid only to the infectious processes actually observed in the hospital. In children under 3 years of age the number of specific contagious diseases is small, whereas the number of acute respiratory infections is very large.

Infection surely existed in our group much more frequently than it did in children who did not enter the hospital. In this sense, the group is not a fair sample of the juvenile population of Rochester. The children who were well-nourished probably enjoyed better general hygiene than did those badly-nourished; this fact may have been responsible for the lesser frequency of infection observed in this group. Moreover, the better-nourished children, who probably came from happier economic surroundings, would not enter the hospital unless really

serious diseases compelled them to do so. Therefore, very many of the children in this group had severe respiratory infections, in spite of an excellent feeding-history and good general nutrition. This means that the beneficial effects of good nutrition may be quite nullified if the individual is exposed to a sufficiently virulent microorganism. Such an infection in a badly nourished individual may seem no worse than in one well nourished.

Dietary Deficiency in the Children Observed: Cases of outspoken deficiency include scurvy and rickets. If deficiency of vitamin A exists it must obviously be of the relative type, the existence of which can be neither proved nor disproved by our present methods. If analysis should reveal a correlation between low intake of vitamin A and prevalence of infection, one might be justly criticised for concluding that relative deficiency existed and at the same time predisposed to infection, because unappreciated dietary factors (or others) might be involved. It is sound logic only to state the relationship itself; final proof could then be furnished by showing that in a similar group or in the same children, infections could be prevented by increasing the

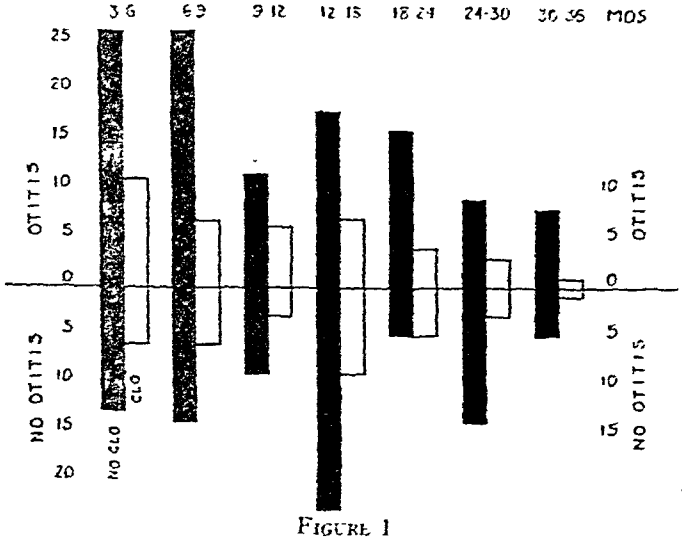


FIGURE 1

Effect of Cod Liver Oil in Preventing Otitis—The black rectangles represent the number of cases in various age-groups which did not receive cod liver oil before 2 months of age, or which received it in amounts less than half a dram per day. The white rectangles represent the cases which received cod liver oil before the age of 2 months, and in amounts more than a half dram per day. Doubtful cases are omitted. The portions of the rectangles above the horizontal line represent cases observed to have otitis media in the hospital; the portions below the line represent cases observed not to have otitis media. This chart fails to show that the administration of cod liver oil prevents otitis media.

intake of vitamin A. The sources of vitamin A in infant feeding are milk, green vegetables and cod liver oil. The latter, as usually purchased, is somewhat variable in vitamin A content, but it is believed to be a much more potent source of vitamin A than any other food used in our series.

We have, therefore, begun in the analysis of the data by tabulating infections in the groups which did and which did not receive cod liver oil. The results in case of otitis media are given in Figure 1. If one considered only the age-group 9-12 months, and only the cases having otitis, he might be led to conclude that cod liver oil prevents otitis. But by considering all children in the age-groups, it will seem that no really beneficial effect is to be expected from *cod liver oil alone in the prevention of otitis media.* If, however, our two groups are not strictly comparable in other particulars, this conclusion may not be valid; without further consideration, we would, of course, not be justified in dispensing with cod liver oil in infant feeding.

Consideration of the incidence of pneumonia shows what appears to be a somewhat more favorable effect from the use of cod liver oil (Figure 2).

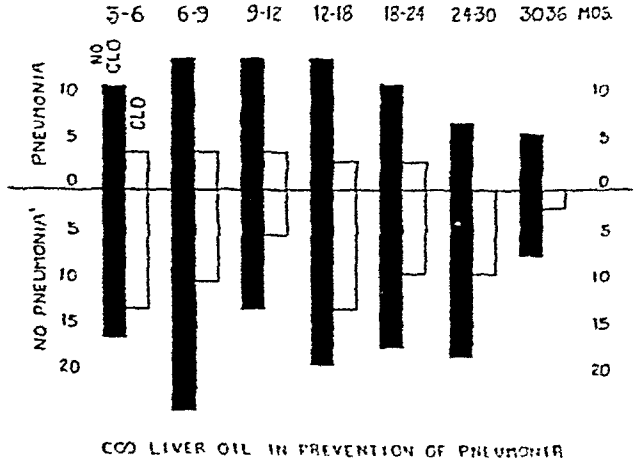


FIGURE 2

Cod Liver Oil in Prevention of Pneumonia—The method of representing cases which received cod liver oil and those which did not is the same as in Figure 1. The portions of the rectangles above the horizontal line represent cases observed to have pneumonia. The portions below the line represent cases observed not to have pneumonia. Doubtful cases are omitted. This chart fails to show that the administration of cod liver oil prevents pneumonia.

These two examples are given to illustrate what we believe to be a faulty method of analysis. For example, was the cod liver oil given in sufficient quantity, or are the records correct? If the infant developed rickets, one may assume for purposes of this analysis that an insufficient quantity of vitamin D has been absorbed; since vitamin A accompanied vitamin D, we will further assume—obviously as only an approximation to the truth—that the presence of rickets implies an insufficient intake of vitamin A.

In a purely arbitrary manner for the purpose of our study, we will assume that *bad nutrition* exists

(1) when cod liver oil was omitted after 6 weeks of age, or (2) when rickets developed, whatever the type of feeding, breast or bottle; (3) when the infant was premature or syphilitic or suffered from congenital heart disease. *Good nutrition* will be said to exist in all other cases. It will be seen that this comprehensive definition omits reference to weight, emphasizes the intake of vitamin A and provides for the inclusion under "bad nutrition" of those cases in which the vitamin A stores may have been low at birth (prematurity) or for some obscure reason may conceivably not have been well retained. The definition is doubtless too broad; but if with its aid we are still unable to observe a clear-cut effect on susceptibility to infection in "bad nutrition," the case for the influence of vitamin A will be seriously compromised.

The effect of good and bad nutrition upon the incidence of otitis media is shown in Figure 3

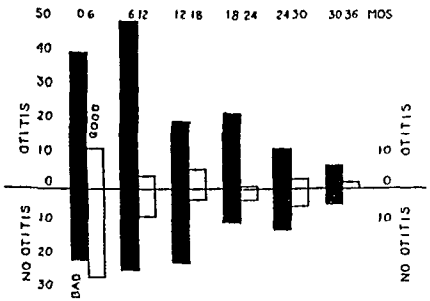


FIGURE 3

Bad Nutrition As a Cause of Otitis—The black rectangles represent the number of cases with bad nutrition as defined in the text (page 5 and 6). The white rectangles represent the number of cases with good nutrition. The portion of each rectangle above the horizontal line represents the number of cases observed to have otitis media; the portion below the line represents the number of cases observed not to have otitis media The chart shows that bad nutrition favors the development of otitis in the first six months of life, and perhaps in the first two years; but fails to show this effect in the third year. It is also obvious from the chart that other factors than nutrition are at work.

There is a fairly good correlation of bad nutrition with this infection in the first two years, and no correlation in the third year. This can be expected, because (1) we are able to get better dietary histories in the younger children and (2) older children are doubtless less dependent upon vitamin A, as is shown by the age-incidence of xerophthalmia with a maximum incidence at 6 months.

Nevertheless, the correlation is far from convincing. In Figure 4 is given the correlation between bad nutrition and "Severe infection." The latter is defined for our purposes as: (1) Mastoiditis, (2) pneumonia, (3) any infection (e.g., erysipelas) resulting in death. We exclude rhinopharyngitis, otitis, laryngitis and non-fatal bronchitis. We thus secure a much better correlation than before. In this, one would be inclined to see evidence for the thesis that relative deficiency of vitamin A is associated with severe infection. But in order that this conclusion should hold, it is necessary that the two groups—(bad nutrition, good nutrition)—either be comparable in other ways, or that any differences be such as to favor our thesis.

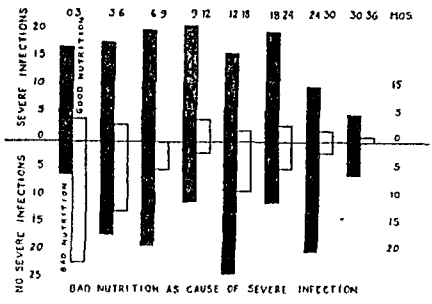


FIGURE 4

Bad Nutrition As a Cause of Severe Infection—The meanings of bad and good nutrition and of severe infection are those stated in the text. The method of representing the number of cases is that given in the note under Figure 3. This chart clearly shows that bad nutrition is a potent factor in the causation of severe infection in the first six months of life; and that good nutrition is a potent factor in the prevention of severe infections in the first six months of life. This effect is not clearly evident after the ninth month.

It can be shown that the two groups are not strictly comparable; e.g., Figure 5 shows the seasonal incidence of *all respiratory* infections in both groups. It will be noted that the badly nourished children develop many respiratory infections in winter; very few in summer; and a considerable number in September and October. The well-nourished children, on the other hand, develop most of their infections in the late spring months and very few in summer or in September and October. The infections in winter months are almost invariably severe. This is probably explained by the fact that this group of children are somewhat better cared for, and are not usually brought into the hospital for the milder infections. It is, therefore, a differently selected group from that with "bad nutrition." Can we show that a factor operates in the group with good nutrition which is likely to overcome the effect of the good nutrition in preventing in

fections; and that this factor operates to a lesser extent in the group with bad nutrition? If so, weight is added to the arguments already given to support the hypothesis.

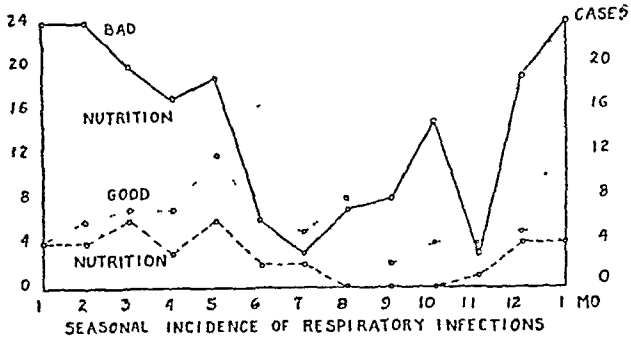


FIGURE 5

Seasonal Incidence of Respiratory Infections—Ordinates denote number of cases. Abcissas denote months numbered according to their order. Good and bad nutrition are defined in the text. Only cases with respiratory infections are shown:

o——o denotes cases of bad nutrition having any res. inf.
o. . . .o denotes cases of good nutrition having any res. inf.
o- - -o denotes cases of good nutrition having severe res. inf.

It is evident from this chart that the seasonal incidence of respiratory infections is strikingly different in the cases with good and those with bad nutrition.

The severe infections are usually acquired from other persons. If there are older children in the family, the chances of severe infection developing in the younger children are much increased; in the age-group in question the transmission of an infection from younger to older children is less likely to happen. Analysis was, therefore, made to correlate the presence or absence of "severe respiratory infection" (Mastoiditis or pneumonia) with the presence or absence of older children in the family. There is a very striking difference in the well-nourished and in the badly nourished group. Figure 6 at once suggests: (1) Many infections in both groups are closely associated with the presence of older children. (2) This factor is much more important in the well-nourished group. Unfortunately, the number of cases is too small to permit a more detailed analysis.

CONCLUSIONS

It may be concluded, therefore, that two factors are clearly at work in the production of severe respiratory infections in young children: (1) The presence of virulent organisms in the child's environment. This factor depends especially upon the presence of older children in the family. This factor is so powerful that it can overcome any beneficial influence of good nutrition. (2) Bad nutrition. Our results suggest that a number of dietary factors are involved, among them rather conspicuously vitamin A; but we would emphasize that the situation is more complicated than the presence or absence of vitamin A in the diet; and that at present we are justified only in considering "Bad Nutrition" as due not to one but to many factors.

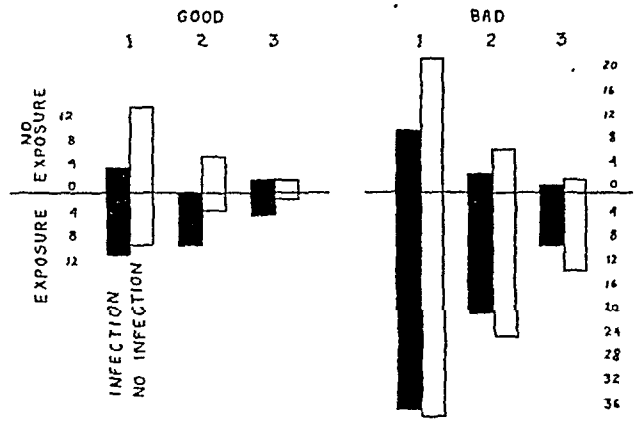


FIGURE 6

Severe Respiratory Infections in Groups of Children With Good and With Bad Nutrition As Associated With Exposure—The black rectangles denote the number of cases observed to have severe infection. The white rectangles denote the number of cases not observed to have severe infection. The portion of each rectangle above the horizontal line represents the number of cases not exposed to an older child in the family. The portion below the line represents the number of cases in which there was an older child in the family. Cases of good nutrition are represented by the three groups of rectangles on the left; cases of bad nutrition, on the right. The age groups: 0-1 year, 1-2 years. 2-3 years are separately represented.

It is apparent that no correlation exists in the badly nourished children between severe infection and exposure to an older child, whereas a striking correlation exists in the well-nourished children, and this correlation is apparent through the second year at least.

Finally, the results of animal experimentation and of clinical experience may not yet be convincing, but they do permit us more definitely to formulate a problem for further research. Under specified conditions of exposure to infection, can we, by proper administration of vitamin A lessen the liability to infection, or moderate its severity?

One important practical conclusion follows from this study. At the present time, when propagandists are urging the use of irradiation for the prevention of respiratory infections, and the substitution of visosterol for cod liver oil, we should demand adequate proof of their claims. We have good reason for advocating cod liver oil for every infant.

PHYSICAL THERAPY IN GENERAL PRACTICE*

By C. E. ANDERSON, M.D., ELMIRA, N. Y.

PHYSICAL THERAPY must be based upon a diagnosis that is founded on a careful physical examination and laboratory procedure. It must be based on a thorough knowledge of the physiology and pathology of the given morbid condition.

Its greatest use is as an adjunct to other well organized procedures used in medicine and surgery, and this combination has increased the efficiency of therapeutics as a whole most markedly.

It should never displace other proven methods that may be superior.

Physical therapy demands as much training as surgery or medicine. Yet, I am afraid, there is a tendency to entrust this type of therapy to an aide or nurse with no real supervision and oftentimes without sufficient thought and diagnostic procedure. This is the most glaring fault attending physiotherapy among a few of our practitioners and that invariably is the reason why some of our profession are disgusted with physiotherapeutic results.

The question of equipment: The remark of a personal friend still rings in my ears; who exclaimed, "I believe I can get more results with an excellent masseuse and a heat lamp than without a masseuse and all the equipment in the world."

I know the most necessary equipment of a department is, first, a masseuse. If she does not know electrotherapy, certainly you can teach her that yourself if you are conversant with your own equipment, and it will not take long before she can apply these modalities as well as you can. But all the beautifully trained so-called physiotherapy technicians in the world can not get maximum results with patients unless they know and practice real massage; of course, we take for granted that a masseuse knows anatomy.

These technicians must be efficient, pleasant, cheerful, and above all, encouraging. This may be a lot to ask of one person but if you have such a one, your physiotherapy results are bound to be commensurately satisfying.

Of course, the first piece of equipment is invariably a heat lamp, one with an interchangeable infra-red unit and incandescent bulb. Perhaps next an air-cooled mercury quartz ultraviolet lamp. In my observation and personal experience, a water-cooled lamp has not enough uses in general practice to justify its expense. I have nothing detrimental to say about the carbon arc, but in a busy practice, time is a factor which would make a choice in favor of the quartz light.

Added to this a high-frequency machine, preferably one that can be adjusted to the most delicate dosage yet if necessary strong enough to produce heavy coagulation. Diathermy is a most useful modality and may be employed in almost every condition where inflammation exists, barring first a tendency to hemorrhage and secondly, the presence of undrained pus. This second contra-indication is put aside if drainage is established.

The foregoing equipment provides an adequate start and if the practitioner appreciates the limitations of this minimum equipment, it will suffice for most of his applicable cases. However, if his interest increases and his type of practice warrants it, galvanism and sinusoidal current can be added, and then perhaps whirlpool baths for the arm and leg. Static electricity still has its voters.

A few years ago Dr. Granger allowed me to wander for a number of weeks about his clinic at the Boston City Hospital. While there, he stressed the point that convalescent patients need encouragement; that the slightest improvement be noted and the fact drawn to their attention; that an atmosphere of cheerfulness was very important. The psychic side of physiotherapy, as in every field of medical practice, should never be neglected.

The room, or rooms, used for this purpose should be efficiently lighted and ventilated, its decorations, curtains designed to give a restful cheerfulness. Privacy should not be overlooked.

Dr. Wm. McFee, of Boston, tells us in regard to treatment that "If we are students of our work, our experience and observations will tell us the technique we should follow, and this must depend upon the equipment available to our use and our knowledge of the quality and quantity of current which it can be made to produce so that in all treatment by diathermy the exercise of individual judgment is all important. We cannot depend entirely upon following a rule. This must be our procedure until such time as physicians are able to get and use equipment with a common standard of current quality, quantity, control, and measurements."

The above quotation not only applies to diathermy but to every piece of equipment used in physical therapy. Given for example a known pathological condition, the knowledge of the possibilities of your equipment will present themselves, if applicable.

In physiotherapy a single modality can be used

* Read at the Annual Meeting of the Medical Society of the State of New York, at Rochester, N. Y., June 4, 1930.

in but a very few indications. The right combination of mutually helpful and complementary measures is the key to successful treatment. This does not include the physical modalities alone but the proper combination of all methods of treatment applied to a given pathological condition.

I would not filch the prerogatives of later speakers by discussing at length the technique of physical therapeutic appliances, but I do not think it would be amiss to mention the use of ultra-violet in the asthenic patient.

Many patients come to my office in a year's time with a low resistance, no definite active objective symptoms, but tired, exhausted with the stress and worry of earning a living; certainly presenting the picture of dejection; in splendid shape to receive the first invading organism and provide soil for its rapid multiplication.

Physical and laboratory examinations do not reveal that these patients are hyperthyroids in type; not active pulmonary tubercular patients, nor are they diabetics; and we may also exclude the arterio-sclerotic myocardial nephritic types.

Often the only positive sign may be a low hemoglobin, but these cases have been a very active problem.

Ultra-violet combined with the indicated medical therapeutics have picked up these patients beautifully. Radiations are kept well below an erythema reaction given every second day. Their mental depression and physical exhaustion improve in a very rapid and satisfactory manner.

Our calcium deficiency cases also respond in the same gratifying way.

I believe that we do not spend enough time in producing adequate medical care in these very common non-spectacular border-line cases. Here physical therapy in its broader meaning finds a most efficient field. It provides us with a most helpful means of raising resistance in almost any of our prodromata as well as our convalescent cases.

The general tonic effects of ultra-violet are becoming very well recognized by the general public. This has been brought about at least in part by the various companies producing ultra-violet lamps for the home.

Some of the lamps contain little or no ultra-violet; others do produce an appreciable amount; how much we cannot determine for our erythema reaction after all is by no means an accurate scale of ultra-violet.

I know that these lamps in the majority of instances will have no medical supervision; also that a certain percentage of our doctors do not know or recognize the dangerous weapon ultra-violet may become in unfamiliar hands.

I have seen some early cases of pulmonary tuberculosis fulminate under the injudicious use of ultra-violet. A number of hyperthyroids have become markedly exaggerated. One diabetic has passed into the beyond, and a large number of our senile cases with arteriosclerosis. Myocardio nephritic symptoms have done far from well with its use.

So let there be some publicity to this effect that these cases upon which treatment is to be used by lamps sold at the door be first supervised by a physician familiar with ultra-violet and, second, that the actual amount of ultra-violet emitted be accurately stated. Or what is a thousandfold better, keep the sale of these lamps under the control of physicians' prescriptions. In our own rural districts they are being loaned about the community like a prescription for stomach powders.

In the field of orthopedics and industrial surgery, physiotherapy is an indispensable adjunct to bring about maximum functional restoration.

Seventy-five per cent of physical therapeutics in a general practice will find employment in the realm of minor bruises, contusions, hematoma, sprains, ligamentary and muscle strains, etc., with a minimum amount of time lost to industry.

In the after-care of fractures and treatment of non-union, physiotherapy has found a field that in itself alone would find ample justification for its existence. Arthritis and synovitis, periarticular adhesions and scars, atrophies, upper and lower neuron lesions find physiotherapy a marked help in restoration.

The field of industrial surgery could not have reached its present efficiency without these modalities.

In conclusion, let it be said that in physical therapy every case is a distinct problem. It will vary in its type of treatment with each subject. After all, it is not so much what we use as how we use it. It must be used after a careful physical and laboratory examination. A correct diagnosis must be made. And use it only in such cases as we may anticipate some benefit.

I can do no better than quote from Dr. C. P. Hutchins' paper to the effect that "It is of real value when used as an adjunct to medicine and surgery, but it is not a panacea; neither is it a dump. Physical measures are not specific. The instruments and methods we have been discussing are entitled to just recognition for faithful accomplishment. They will acquit themselves just so far and so truly as their application is conceived in rational therapy. They are as precise as the scalpel and castor oil when guided by the same knowledge. But no amount of engineering or manual skill can atone for immature or faulty judgment."

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CHARLES H GOODRICH, M D, *Chairman*, . . Brooklyn CHARLES GORDON HEYD, M D . . . . . New York
DANIEL S DOUGHERTY M D . New York

Editor in Chief—ORRIN SAGE WIGHTMAN, M D New York *Executive Editor*—FRANK OVERTON, M D Patchogue
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For list of officers of County Medical Societies, see December 15 issue, advertising page xxi

Next Annual Meeting, Hotel Syracuse, Syracuse, N Y, June 1, 2, 3, 1931

THE JOURNAL FOR 1931

A brief note of appreciation from an officer of the State Society states that the January 1st JOURNAL was the most interesting of all the numbers that have been issued The probable reason for that opinion is that the record of the activities of official medical societies was unusually large, filling nineteen pages—two of the editorial section, ten of the news department, and seven of the section called Our Neighbors

The editors are not responsible for the intrinsic interest of the records—that depends on the activities themselves But the fact is that the medical societies are doing things which are of vital interest to the physicians themselves and also to the public. The editors will have no difficulty in making the JOURNAL interesting and practical so long as the leaders of the medical societies continue to do things which are worthy of record

PRESIDENTIAL COMMENTS ON CURRENT EVENTS—NO. 14

On page thirty-seven of the January 1st issue of this Journal there is a report of a plan offered by the Bassett Hospital Guild for supplying medical service to practically every person in the small city of Cooperstown, Otsego County, N. Y., on essentially an insurance basis.

There are two general classes of insurance—commercial and social. The Bassett Hospital proposal is nearer commercial insurance than social insurance. It is based upon the same kind of principles that fire insurance is based upon and which nearly everyone uses for the purpose of distributing individual losses among a group. Everybody understands the value of commercial insurance.

Is this proposal only a plan to distribute the expense of sickness so that the burden may be borne by the well as by the sick, as the plan states? Is there any thought behind the plan to give to the person whose income is insufficient to provide for himself anything more than the barest necessities, some means of not leaving him totally unable to provide for the cost of sickness?

This proposal has no limitation of service, except obstetrics, chronic diseases, and roads difficult of access to the patient. There is no reference to the financial status of the individual. One well-to-do may become a member as well as one of limited financial resources. If the proposal were to be confined to the wage earner who has little or no surplus after providing the necessities of life and, therefore, could afford to pay little for sickness or not at all, it would be quite different from including the moderately well-to-do person who becomes a member of the Guild only because he finds it profitable to do so. There would then be different viewpoints of the plan which, as it stands now, includes everyone who can pay twenty-five dollars a year and without regard to his financial ability. This plan, of course, gives financial security in future sickness just as an insurance policy gives financial security from the danger of one's house burning down. It does not seem to consider, however, the results of inability to do profitable work and the poverty that comes because of inability to work because of sickness.

This proposal does not undertake to meet any underlying need of poverty from sickness or to meet any disturbed economic state that comes from insufficient wage income, unemployment, or other cause. The proposal is not, therefore, social insurance as the world understands social insurance. One, therefore, wonders just what the object is behind the proposal. Is it to give better health service than the individual would have if he had to pay for it by fees, since it does not seem to imply a charity service? It seems that it is meant to apply equally to those who have ability to pay their bills for sickness and who may find it financially better to adopt this form of commercial insurance, and to those who have limited financial resources.

I do not know that there is a basis of exact knowledge as to the cost of sickness. One wonders if twenty-five dollars a year will cover the cost of the health and sickness service that an individual should have, or that it will cover the cost of the service that an individual will believe necessary when he has paid in advance for the care of all the sickness for a year.

There is some public interest in sickness insurance. This field has not been well thought out in this country. Its weaknesses and limitations are not known in America. Its soundness or unsoundness will come out, perhaps, in the proposed experiment at the Bassett Hospital. The proposed plan will have some value in showing what the facts really are. If this experiment succeeds, it will diminish personal, financial insecurity. It does not seem as if it would do anything else. On the other hand, it may diminish personal watchfulness of health. It might diminish personal interest in preventing illness. It undoubtedly would encourage a patient to go more often to a doctor. This might be a benefit to the patient. One wonders if it would increase malingery.

The medical profession is not sympathetic toward any plan of insurance that would tend to diminish personal, professional responsibility. The merits and demerits of this Guild proposal should be observed and the profession should avoid the temptation to decide upon it now.

We have at the present time a Welfare Law that in time will properly grow into perfection of administration that will take adequate care of the indigent. This is supported by general taxation and the burden, therefore, is evenly distributed.

There are no legal objections to the proposal to give sickness service for a year at a definite price. It is legal to practice medicine by means of a guild. It does not come under the head of practice of medicine by a corporation. It is therefore, I am informed, within the law.

This matter was referred to the Public Relations Committee of the State Society. This Committee has discussed it exhaustively. It has reached the conclusion that the matter should have open minded observation; and it will report to the Society from time to time or whenever conclusions can be reached.

The objections are plain to the profession. It seems, however, that it would be better to avoid the temptation to draw conclusions from the proposal at this stage than to condemn the proposal without the equivalent of a hearing.

WILLIAM H. ROSS, M.D.

ANNIVERSARY OF FIRST MEDICAL PRACTICE ACT

April 4, 1931—less than three months ahead—will be the one hundred and twenty-fifth anniversary of the enactment of the first medical practice act in New York State. This law authorized the qualified physicians of each county to organize themselves into a county medical society for the purpose of examining and licensing candidates for the practice of medicine. Also the law provided that delegates from the county societies should meet and organize a state medical society, which they did on February 2, 1807. This state society had the same powers as its component county societies, and in addition could license candidates and also act as a board of appeal if a candidate were rejected by a County Society.

The editors of this Journal desire to collect and record the history of the founding of the county medical societies, for very little has been published on the subject. Diplomas and licenses issued by the county societies will be especially valuable and interesting. On page 107, there is reproduced such a license issued by the Delaware County Medical Society in 1813 to Dr. Luther Appley, whose descendants of the third and fourth generation are still practicing medicine.

This Journal of February 1st will contain a reproduction of a license issued by the Suffolk County Medical Society in 1807 to Dr. Nathaniel Miller

This Journal of November, 1924, page 958, printed a reproduction of the first page of the minute book of the Washington County Medical Society, recording its organization on July 1, 1806, with twenty-two members. This book is still used to record the minutes of the society.

The Medical Society of the County of New York contains a mass of unpublished material including a book in which are recorded the details of the examinations of individual candidates—the questions asked and the candidates' answers.

Several county societies are planning to celebrate the one hundred and twenty-fifth anniversaries of their founding, and the histories of these societies should be published in the Journal.

The editors will welcome any information regarding historical material, and will try to follow up suggestive leads and rumors.

LOOKING BACKWARD

This Journal Twenty-five Years Ago

A.M.A. Biographical Index: One of the great services rendered by the American Medical Association is the preparation and maintenance of a current biographical index of every physician in the United States. This is the "Book of Life" of the medical profession wherein is recorded every medical act a doctor has done, be it good or bad, or indifferent. It is from this book that the data are obtained for the exposure of quacks and illegal practitioners; but the virtues of good doctors are recorded with equal care and fullness. The installation of this index was described in a two-page article in this Journal of January, 1906, as follows:

"A biographical card index of the medical profession has been established, and it is hoped that very soon this index will contain a card for every physician in the United States. On the card will be recorded name, place and date of birth, preliminary education, medical college and year of graduation, state license and data, medical societies, college and life insurance positions, school of practice, and specialty, if any. In connection with this fundamental information, provisions are made for recording removals, positions held and other matters that may occur in the life of the individual that are of sufficient medical interest to note. Such information is pouring into the general offices of the Association from state and county societies, from licensing bodies, from newspaper clippings, the last alone averaging over one hundred and fifty a day. Through the cooperation of medical colleges and State boards, certified lists of graduates and licentiates, together with most of the personal information requested, have been obtained and are now being properly classified. There is now in possession of the Association a fairly complete list of graduates of American medical colleges from 1860 to 1901. This list has been supplemented and brought up to date through the coöperation of registrars and secretaries of medical colleges. Copies of the official records of more than three-fourths of the licensing bodies have been secured. The remaining records are now being copied and will soon be completed. Blanks for reports both of colleges and of licensing boards have been prepared.

"The second reason for desiring this information is for use in compiling a reliable and accurate directory. The directory, however, is only incidental to the other work. From the index will be drawn information, either personal or official, for compiling, revising and correcting the directory, for the one now in preparation, as well as for subsequent editions."

MEDICAL PROGRESS

Post-Operative Coronary Occlusion.—Osmer S. Randall and Thomas G. Orr, writing in the *Annals of Surgery*, December, 1930, xcii, 6. report two cases of coronary occlusion following operation. Both patients were males, aged 58 and 60 years, respectively, showing definite evidence of arteriosclerosis, but neither gave any history of angina pectoris. In one case examination revealed an irregular pulse with what were apparently extrasystoles and a pulse pressure of 160 systolic and 110 diastolic. The blood pressure in the older man was 95 systolic and 60 diastolic and the pulse was regular. In the younger man death occurred on the fourth post-operative day; in the old man symptoms of occlusion occurred on the eleventh post-operative day. Evans has pointed out that post-operative thrombosis in general manifests itself most frequently at an interval of some days after operation. He notes that blood platelets rise following operation, reaching a maximum in about ten days, and then decline to normal. After operation there is also a rise in blood-fibrinogen, apparent on the third day and lasting until the tenth day. The increase in these two important elements of clotting following operation explain why surgical patients may develop thrombosis or embolism about the tenth post-operative day. It might be possible in certain cases to avoid post-operative catastrophe by taking a careful cardiac history prior to operation to exclude angina pectoris as a predisposing cause of post-operative coronary occlusion. Every effort should be made to prevent shock by proper selection of anesthetic and operative technique. In order to combat the decrease of metabolism, the fall in blood pressure, and the slowing of the circulation 2-grain doses of desiccated thyroid may be given three times daily. In addition the diet should be carefully regulated since food intake bears an important relation to coagulability. Protein diet increases coagulability while carbohydrates and fats have the opposite effect.

The Anatomical Result of Peri-arterial Sympathectomy.—As the results have been notably varied in all the conditions in which peri-arterial sympathectomy has been tried, D. M. Blair, D. Duff, and J. A. Bingham undertook the present investigation in order to gain more precise knowledge of the origin, distribution, and function of the vasomotor nerves. They studied the condition of the nerves in the main arteries in a leg amputated five weeks after a peri-arterial injection of alcohol into the sheath of the femoral artery. All the nerves running with the artery at the seat of the previous operation appeared to have degenerated distally, but an abundant additional supply running to the vessels lower down from the ordinary nerves of the limb then showed up in marked contrast. This accessory nerve supply had arrived upon the vessels of the leg mainly in the popliteal space. The incidence of these accessory nerves was also checked by anatomical dissection in another limb. The findings in the dissected and "experimental" limbs corresponded fairly closely, and were in general agreement with the results obtained by Potts in dissections of nerves to the arteries of the leg. Neither the authors nor Potts observed any vascular twig coming from the obturator nerve in the thigh. It seems a pity if the only vascular nerve in the leg which is mentioned in the ordinary text-books of anatomy has to be dropped. The incoming accessory nerves have a characteristic structure, being composed chiefly of small medullated fibers, with a few large medullated fibers and a fair number of non-medullated fibers. Evidence is adduced which suggests that the incoming nerves to the vessels in the limb may be specially concerned with the vascular supply to the muscles. The chief result of the investigation served to emphasize once again the dual paths of the vascular nerves to the limbs. It is obviously impossible to influence the whole of these by any proximal operation of peri-arterial sympathectomy. Hence the preference of American surgeons (Davis and Kanavel) for cervical or lumbar sympathectomy.—*British Journal of Surgery*, October, 1930, xviii, 70.

Low Blood Pressure.—Although the study of hypotension is still young in comparison with that of hypertension, it is already possible to establish the clinical picture of essential idiopathic hypotension. Wasserthal of Carlsbad, after a study of blood pressure covering 20 years, has been impressed with the increasing frequency of hypotension since the War. It is of course self-evident that a large proportion of patients at Carlsbad are suffering with gastric ulcer, gall-bladder disease, and ptoses of Stiller or Kretschmer type, but Wasserthal's statistics do not include any highly asthenic subjects. In several patients in whom hypertension had been observed over a long period, hypotension appeared without any evident cause. Similarly in a number of women who had been rendered sterile as the result of operation, a very marked hypotension was present with conditions of health otherwise entirely normal. These are phenomena of which the cause remains obscure. Without formulating any hypothesis, it is perhaps pertinent to recall analogous phenomena such as the in-

creasing frequency of anacidity and hypochlorhydria in former soldiers of the central venereal unit of the troops of Cracovia, observed in the winter of 1916-1917. Similar observations had been made by a number of other writers. On the other hand, there has been a disappearance of chlorosis, for which no theory has been suggested. Another analogy is the increasing frequency of venous thromboses, both spontaneous and postoperative. Excluding all cases of morbid hypotension due to anatomic, functional, constitutional, or familial factors, one must recognize that in recent years there has been a significant increase in the number of cases of hypotension of unknown causation in persons enjoying good health and even participating in sports. To this hypotension Wasserthal has given the name *hypotonia innocens*. It is important to recognize the frequency and harmlessness of this condition in order to avoid ill founded phobias due to too pessimistic a conception of the hypotensive state, and to prevent useless interdictions with regard to walking, engaging in sports and making use of baths and mineral water cures.—*Archives des maladies du coeur, des vaisseaux et du sang*, October, 1930.

Abuse of Tobacco and Coronary Sclerosis.—On the basis of two fatal cases in which coronary sclerosis was directly attributable to the abuse of tobacco, Karl Plenge writing in the *Deutscher medizinische Wochenschrift* of November 14, 1930, comes to the conclusion that it is not very unusual for nicotine to exert a toxic effect upon the coronary arteries. In both the cases at autopsy an arteriosclerosis was found, limited to the coronary arteries, especially evident in the ramus descendens of the anterior coronary. That these were not cases of ordinary arteriosclerosis is shown by the fact that such vessel regions as the aorta and the cerebral and renal arteries were practically exempt from involvement. The only respect in which the histologic findings differed from those of atherosclerosis was in the striking participation of the tunica media, in which in addition to cicatrices of connective tissue at places where muscle fibers and elastic elements had been destroyed, there could also be demonstrated entirely fresh necroses. The anamnesis and course of the disease pointed to a connection between these findings and the immoderate use of tobacco. Nicotine has long been recognized as a spasm producing poison. It acts through the mediation of the vagus upon the vasoconstrictors and thus induces a state of spasm, which leads at first to purely functional disturbances, but in course of time it also produces anatomic changes, both in the heart muscle and also in the arteries themselves. There is no doubt that angiospasm, even though sustained only for a short time, can produce such changes in the heart musculature that necroses and cicatricial indurations result. Cardiac aneurysms may then be produced which end in the formation of thrombi. Under these conditions thrombotic and embolic plugs may easily enter the coronary arteries, usually causing sudden death, this depending on the size of the vessel and the presence of anastomoses. In one of the cases described embolic closure of the ramus descendens caused sudden death while in the other the heart was slowly paralyzed as the result of vessel injury and of the severe myomalacia. Experience proves however, that sensitivity to nicotine varies in different individuals—a fact probably due to a constitutional cause, partly somatic and partly psychic.

Treatment of Angina Pectoris by Angioxyl.—C. Dimitracoff makes a report on 10 cases of angina pectoris in which he has employed the new desinsulinated pancreatic extract angioxyl of P. Gley and N. Kisthinios. In 9 of these cases the efficacy of the product was beyond dispute. An especially brilliant result was obtained in a case in which the patient was also suffering with duodenal ulcer and high blood pressure, all 3 conditions yielding to 18 injections of angioxyl. Not only did the extract relieve pain but its effect on the mental state of the patients was very striking, causing renewed courage and will to live. Only in the 10th case, in which aortitis and dilatation of the left ventricle were added to angina pectoris, did angioxyl prove ineffective. Here it produced only slight temporary relief, and in time the symptoms of decompensation and dyspnea returned with the anginal syndrome, despite a new series of 10 injections. Here, however, the pain was due more to the inadequacy of the left heart and the administration of ouabain and digitalis produced excellent results, although only temporary. In angina from effort and angina in decubitus the results were the same. In most cases a treatment of 20 intramuscular injections was sufficient—the patient receiving at each injection the contents of 1 ampule that is, 20 hypotensive units. This produced cures lasting 3, 4 or 5 months. In only one case was it necessary to give 2 and 3 ampules per injection.—*Progrès medical*, October 25, 1930.

Ultraviolet Light in the Treatment of the Dull and Backward Child.—Frank Sugden, writing in the *British Medical Journal*, November 29, 1930, p. 3647, states that he has been greatly impressed by the improvement in the mentality of many children receiving ultraviolet light treatment. The puling, querulous irritable, anemic self centered sleepless child who is often

pot-bellied and emaciated, is transformed into a robust, well-nourished, and perfectly healthy little animal, full of life and gaiety; all this happens within a few weeks. He cites the case of a boy who was miserable, sickly, nervous, lifeless, and with little interest in anything. He was treated with the mercury vapor lamp, exposures being given, both front and back, at a distance of 30 inches. The durations of the exposures were as follows: March 21st, three and a half minutes; March 24th, five minutes; March 28th and April 1st, seven and a half minutes; ten-minute exposures were given seven times during the month of April. Under this treatment the boy really began to live and enjoy life like a normal child, and made much more rapid progress educationally. He developed an interest in games, learning to swim and dive, concentrated better on all his work, and became much more cheerful. This case, the author states, is not unique. He has had many results equally satisfactory, and he cannot urge too strongly that those who have to deal with this type of child institutionally should give the ultraviolet light treatment a fair trial. It is reasonable to assume that mentally retarded children of the better classes would likewise benefit by this treatment.

The Medical Treatment of Anthrax—C. G. Brentnall compares the results in 11 cases of anthrax treated surgically during 1927 and 1928 with the same number of cases treated medically during 1929 and 1930. The two series of cases were similar as regards the site and severity of the infection. Of the patients treated surgically 8 were cured after an average hospital stay of 32.8 days, while of the 11 cases treated medically 10 were cured after an average hospital stay of 9 days. Anti-anthrax serum was employed in doses of 40 to 200 c.c. together with a daily dose of 0.6 gm. of stabilarsan or a single dose of neosalvarsan. Organic arsenic, if used, should be given in large doses. Smaller doses do not seem to have sufficient therapeutic effect to justify their use, and their cumulative effect is probably as dangerous as that of one or two large doses. Staphylococci appear to assist in inhibiting the growth of the anthrax bacilli in the cutaneous lesions. The presence of pus is not necessarily a contraindication to the existence of anthrax in a lesion. The bacteriology of the "pustule" is unreliable as a guide to the progress of the disease. Anthrax meningitis is apparently insidious in onset, and may be more common than is usually suspected. It might be well to look for nervous symptoms in all cases, and not to spare the use of lumbar puncture for both diagnosis and treatment. It is possible that by such means the heavy dosage that is occasionally necessary might be much diminished. From a study of the 22 cases in these groups the author finds that among tanners, cutaneous anthrax tends to occur more frequently during the winter and spring, and at such seasons mainly among those employed on dry hides.—*The Lancet,* November 29, 1930, ccxix, 5596.

Dietetic Treatment of Tuberculosis—To form a correct judgment of the value of dietetic treatment of tuberculosis, B. Köhler says it is necessary to have a large clinical material under personal observation over a long period of time. During a period of 2 years he has had an opportunity at the Munich Surgical Clinic to observe the results in 200 cases of tuberculosis involving the skin, bones, joints, or soft parts. The shortest period of observation was 2 months, but in most cases the observations covered a period of over 6 months and in many instances 12 months or longer. The form of diet employed was strictly that of Hermannsdorfer, which, like that of Gerson, omits salt and increases vitamins, but differs from the latter in allowing 600 grams of meat per week and in preserving a slightly acid character. The Hermannsdorfer regimen also doubles the protein content of the diet and recommends the administration of 160-200 grams of fat daily, while restricting carbohydrates to 220 grams per day. It gives dry food on the ground that the limitation of fluid to a minimum, together with salt withdrawal and carbohydrate restriction, leads to a general desiccation, and restrains the growth of agents causing inflammation. In some cases heliotherapy was also carried out. To overcome the insipidity of a salt-free diet a salt of bromine was used as a substitute. The benefits from this dietetic treatment are incontestable in lupus and skin tuberculosis. Not one case among the 13 observed failed to respond favorably. The results were equally good in tuberculosis of bones, joints, or soft parts if the cases were not too far advanced. In closed cases the patients took on weight, local pain and swelling regressed, and in the roentgen picture atrophy gave place to increased calcium content, and blurry outlines became clear. Fistulous cases also resulted in cure and cicatrization, when the focus was circumscribed and the discharge relatively slight. But in severe purulent cases of mixed infection with breaking down and exudation the dietetic treatment had little or no effect. As to conclusions founded on a study of 75 cases of pulmonary tuberculosis, Köhler reserves judgment until more time has elapsed. It must be emphasized that dietetic treatment can be successful only provided the dietary service of the hospital is organized exactly according to prescription. In cases of surgical tuberculosis the expert attention of a surgeon specialist must never be relaxed during this treatment. Emphasis is laid upon the recommendation that the dietetic treatment be carried out only in special wards reserved for this method. —*Münchener medizinische Wochenschrift,* October 24, 1930.

The Prolongation of Life.—Although the physician, of course, prolongs life in individual cases, Oliver H. Howe questions whether he prolongs the collective life of the race. The average length of life has increased from 33 years in 1800 to 59.1 years in 1929, but this is largely due to control of the diseases of childhood and adolescence. Insurance tables of expectation of life show little or no gain after the age of 30. It is a reproach to our profession that the period between 30 and 70 years has not recorded any advance in expectation of life. Deaths from heart disease, cancer, pneumonia, and Bright's disease account for 48.5 per cent of all deaths. The vast amount of experience, experiment, and research has provided us with a host of new resources and remedies, but they are not applied except on a wretchedly small scale. Few of the great discoveries of preventive medicine, except the prevention of yellow fever, are anywhere nearly fully applied. The stress of American life is an important factor in wearing out vitality. Some forms of heart disease, as well as arteriosclerosis and Bright's disease, seem to be connected with the wear and tear of life. The physician has an opportunity to know the daily activities of his patients and to advise them in many helpful ways, so as to reduce this wear and tear. Periodical health examinations may reveal some unsuspected conditions in the incipient stage, when they can most easily be remedied. The greatest care must be used, however, to avoid making the patient morbidly alert about his health. As no one man can possibly keep abreast of the field of internal medicine (to say nothing of other fields) consultations should be more frequent than they are. During the past twenty-five years the average age of physicians at death has increased from 60.3 to 64.9 years. This increase, Howe believes, is partly due to better care on the part of physicians of their own health and vigor. If they have any secret they should impart it for the benefit of their patients. Besides regulating the physical welfare of their patients, physicians have an unusual opportunity so to influence their minds as to assist every healing process. The physician should act as "guide, philosopher, and friend." This requires that he should individualize his patients, he should visualize their daily experiences, and see that they get the best things out of life. There can be no question that it lies within his power—and it is his manifest duty—to reduce the number of disheartened and discouraged people who, unassisted, may go down to untimely graves. By such services he may hope to prolong the average life of the human race.—*New England Journal of Medicine*, December 18, 1930, cciii, 25.

Normal Structure of Endometrium and Decidua and the Menstrual Cycle.—John H. Teacher, reviewing the orthodox theory of the menstrual cycle, says that in its extreme form this theory asserts that: (1) there is no menstruation without ovulation—ovulation must therefore go on all the year round in the absence of pregnancy or disease; (2) that ovulation occurs about the middle of each cycle dating from the commencement of the bleeding; that the ovaries work month about. To this theory he takes exception, preferring that of Heape formulated more than thirty years ago, and recently confirmed and made more precise by G. W. Corner, Hartmann, and others. Heape's main point was that ovulation and menstruation are more or less independent functions in certain fundamental respects. Corner refers to cases in which his monkeys, although menstruating regularly, showed only one corpus luteum between the two ovaries. The author has frequently seen this in the human subject, but usually the menstrual history was uncertain or not obtainable. He has, however, a few cases in which a single young corpus luteum was present in patients who had been menstruating regularly, and Corner refers to similar cases. According to the second theory, the menstrual cycle in the human subject normally proceeds all the year around, but ovulation and corpus luteum formation occur only from time to time. There is no regular date of ovulation, and we are ignorant of its origin. In the absence of fertilization it is probable that several ovulations occur in succession, possibly at monthly intervals, and from each ovary alternately. This would explain why the arrangement of the corpora lutea in series can be made in a large proportion of suitable cases. According to this theory the changes in the ovary and uterus both depend upon the fate of the ovum. Menstruation is a cyclical process which provides for the maintenance of the endometrium in a suitable condition for producing the decidua of pregnancy. The uterus is capable of developing a decidua of conservation whenever it is called upon to receive and nourish a fertilized ovum. In case of failure to implant the ovum or the rejection of the ovum soon after implantation, menstruation would occur from a membrane that could hardly be called anything but early decidua. From a medico-legal viewpoint, however, it would not be justifiable to diagnose the occurrence of pregnancy. Classical decidua or trophoblast must be found. The finding of such membranes in the specimens obtained by curettage for sterility would show that ovulation was occurring and that the prognosis, therefore, was hopeful.—*British Medical Journal*, November 29. 1930. ii. 3647.

LEGAL

CONFIDENTIAL COMMUNICATIONS BETWEEN PHYSICIAN AND PATIENT

By LORENZ J. BROSNAN, ESQ.
Counsel, Medical Society of the State of New York

A physician who had attended a patient in his last illness was requested by the insurance company with whom the deceased held a policy of life insurance to furnish to the company certain information as to the physical condition of the patient prior to his death. The policy was not contested by the company, but it requested the doctor to furnish the information for statistical purposes. The data requested by the company were of such a character, however, that if disclosed they might reflect upon the memory of the patient. The physician was desirous of obtaining the opinion of your counsel as to whether or not he should furnish the information sought. Your counsel, pursuant to a resolution of your Executive Committee, replied to the physician's communication, but since the question is one of general interest to the members of the Society we feel that the matter is worthy of editorial comment in this column.

The statute which prohibits a physician from disclosing information which he acquired in attending a patient in a professional capacity is Section 352 of our Civil Practice Act. This reads as follows:

"*Section 352. Physicians and nurses not to disclose professional information.* A person duly authorized to practice physic or surgery, or a professional or registered nurse, shall not be allowed to disclose any information which he acquired in attending a patient in a professional capacity, and which was necessary to enable him to act in that capacity; unless, where the patient is a child under the age of sixteen, the information so acquired indicates that the patient has been the victim or subject of a crime, in which case the physician or nurses may be required to testify fully in relation thereto upon any examination, trial or other proceeding in which the commission of such crime is a subject of inquiry."

What was sought to be accomplished by this statute has been judicially set forth in an opinion written shortly after its enactment. The court said in part:

"It is a just and useful enactment, introduced to give protection to those who were in charge of physicians from the secrets disclosed to enable them properly to prescribe for the diseases of the patient. To open the door to the disclosure of secrets revealed on the sick bed or when consulting a physician would destroy confidence between physician and the patient, and, it is easy to see, might tend very much to prevent the advantages and benefits which flow from this confidential relationship."

The privilege, of course, may be waived by the express act of the patient and there are certain situations where the law implies a waiver. The question of waiver by implication we have discussed in our editorial of October 15th, 1930, and it is unecessary now to repeat what we said in that editorial.

In the question under consideration, there existed between the parties the relationship of physician and patient, and it is also clear that the information sought to be elicited from the physician by the insurance company was acquired by the physician while in attendance upon the deceased in a professional capacity. It therefore follows that the prohibition against disclosure, as set forth in Section 352 of the Civil Practice Act, applies in this case.

In many instances the courts of this State have been called upon to apply the statute under consideration in actions brought by the beneficiary under a life insurance policy, where the company has refused to pay the policy claiming a breach of warranty on the part of the assured. To illustrate our point it is only necessary to consider a typical case, since in that case the court lays down a general principle of law applicable to all similar situations.

In a case decided by our Court of Appeals, the plaintiff's husband was insured by a fraternal organization of which he was a member. Upon his death his widow, as beneficiary under the policy, made demand upon the fraternal organization for payment of the policy. Payment was refused on the ground that the assured had falsely represented in the policy that neither of his parents nor any of his paternal or maternal grandparents nor any of his descendants, so far as he knew, had consumption. The widow then commenced an action against the fraternal organization, and the defendant interposed the affirmative defense of breach of warranty.

At the trial the defendant's counsel, in an endeavor to substantiate the affirmative defense of breach of warranty, offered to prove by the testimony of a physician that he (the physician) had treated for consumption two of the decedent's aunts. The defendant's counsel also offered in evidence the original death certificates of these two persons showing that they died from consumption. The plaintiff's counsel offered the objection that the testimony of the physician, as well as the original death certificates, came within the prohibition of the statute under consideration. The court sustained the objection. On appeal the

defendant's counsel claimed that this constituted reversible error, but the Court of Appeals decided that the lower court was correct in excluding the evidence, and said

It was admitted that the physician had no knowledge on that subject (alluding to the consumption of the insured's aunts) except such as he had acquired in his professional capacity and when the relation of physician and patient existed That testimony of this character is expressly prohibited under Section 834 of the Code (now Section 352 of the Civil Practice Act) cannot be denied That the proof offered and excluded was inadmissible I may assume to be a proposition too clear for argument unless the prohibition referred to has been repealed This court has held that the statements of the attending physician for the purpose of establishing the cause of death either of the insured himself or of his ancestors or their descendants although not parties to nor beneficiaries under the contract were not admissible They are excluded not only for the purpose of protecting parties from the disclosure of information imparted in the confidence which must necessarily exist between physician and patient The disclosure by a physician whether voluntary or involuntary of secrets acquired by him while attending upon a patient in his professional capacity naturally shocks our sense of decency and propriety and this is one reason why the law forbids it The form in which the statements are sought to be introduced is of no consequence whether as a witness on the stand or through the medium of an affidavit or certificate All are equally under the ban of the statute

The question arises as to whether it would be possible for the personal representatives of the decedent, under the circumstances here set forth to waive the privilege so as to permit the physician to disclose the information sought

Section 354 of the Civil Practice Act provides, after setting forth that the privilege obtains unless expressly waived by the patient

But a physician or surgeon or a professional or registered nurse, upon a trial or examination may disclose any information as to the mental or physical condition of a patient who is deceased which he acquired in attending such patient professionally, except confidential communications and such facts as would tend to disgrace the memory of the patient when the provisions of sections three hundred and fifty two have been expressly waived on such trial or examination by the personal representatives of the deceased patient or if the validity of the last will and testament of such deceased patient is in question by the executor or executors named in said will or the surviving husband widow or any heir at law or any of the next of kin of such deceased or any other party in interest

But these provisions do not apply to the question under consideration for two reasons First it will be noted that the statute only contemplates the disclosure of information by a physician as to the mental or physical condition of a patient who is deceased *"upon a trial or examination* secondly, the facts sought to be elicited in the instant case were such as might tend to disgrace the memory of the patient

The disclosure by a physician of information received by him in a professional capacity in violation of the statute already referred to, gives rise to a cause of action in the patient While this right of action is unquestionably a personal right of action similar to an action for libel or slander and hence dies with the patient, the prohibition against disclosure remains, and for the reasons stated the physician may not, under the circumstances here considered, after the death of the patient disclose any information received by him in a professional capacity before the patient's death

CLAIMED NEGLIGENCE IN REMOVAL OF CARTILAGE FROM NOSE

The plaintiff in this case, a mason's apprentice, was employed by a construction company in New York City In the course of his work, he received a fracture of the septum from a piece of brick which had chipped off another brick He was immediately sent to a doctor who, in turn, referred him to the defendant, a specialist handling cases for this particular construction company

The plaintiff complained of marked difficulty in breathing on both sides of his nose, and upon examination the defendant noticed a splinter of bone lying horizontally across both nostrils The defendant advised an operation on the basis of this examination Shortly thereafter, this operation was performed under a general anesthesia by the defendant, a part of the bone spicule having been removed This operation was accomplished by lifting up the mucous membrane, and by the use of approximately a dozen different instruments the bone and cartilage were removed submucously Both nostrils were packed with vaseline gauze

Upon the removal of the spicule bone, it was obvious that a small perforation would result but this condition was passed over because of the relative harmlessness of the perforation as compared with the previous marked difficulty in breathing There was, in fact, no other alternative if the difficulty in breathing were to be remedied by such an operation

The next day the gauze was removed from the patient's nose, and while his condition was reported as very satisfactory, he nevertheless was of a very critical and irritable frame of mind and clearly manifested himself as being thoroughly dissatisfied with the treatment he had received The patient was professionally discharged about a month later, the defendant in the interim having seen and treated the patient at intervals of four or five days The defendant stated that he took in all about one inch of combined bone and

cartilage, leaving about one-eighth inch perforation in the mucous membrane which will be a permanent perforation, and which was the basis for this action.

More than two years later the defendant physician, who had performed what he and his associates considered to be a thoroughly successful operation on the plaintiff, was served with a summons and shortly thereafter a complaint was served in which it was alleged that the defendant did not use due or reasonable care in treating the plaintiff and in endeavoring to cure him of his injury, but that rather because of his lack of professional skill, defendant had caused a hole in the septum between the nostrils, resulting in severe pain to the plaintiff. The answer to all the allegations of negligence on the part of the defendant was a general denial, and an affirmative defense of the Statute of Limitations together with a second defense of payment under the Workmen's Compensation Act in mitigation of damages were interposed.

The plaintiff failed to notice the action for trial and to file a note of issue, with the result that two years later the defendant successfully moved to dismiss the case for plaintiff's failure to prosecute, thus terminating the case in favor of the defendant doctor.

CLAIMED NEGLIGENT TREATMENT OF NEURALGIA

In this case the patient called at the office of a doctor who specializes in surgery and complained of pain in the right leg and hip. He said he had been troubled off and on for about five years.

Upon examination the doctor diagnosed the condition as neuralgia of the sciatic nerve. In order to guard against the possibility of a tumor pressing on the nerve he ordered an *x*-ray taken. In addition, an examination of the plaintiff's tonsils showed them to be badly diseased and he suggested that the patient have them removed. At this calling the doctor prescribed sodium bromide and salicylate by mouth. About a week later the patient returned, having neither obtained the *x*-ray, nor undergone the tonsillectomy. The doctor then recommended diathermy and atrophan by mouth, but gave him none of these treatments.

Several weeks later the patient returned still complaining, and at this time the doctor directed him to go to a hospital for treatment, which he did, and was cared for by a second doctor. This second doctor caused an *x*-ray to be taken, which was negative and demonstrated that there was no objective symptom for the pain in the sciatic nerve. He then injected into the patient's sciatic nerve a solution of 2 c.c. of 5 per cent novocaine immediately followed by 2 c.c. of 85 per cent alcohol. Said injections were made at the lower border of the gluteus-maximus muscle. The patient remained in the hospital but did not improve during the next two weeks and still complained of pain in his hip and leg. The second doctor then decided to perform a Brewer and Lambert operation for stretching the sciatic nerve and the patient consented to undergo such an operation. Under a general anaesthesia an incision was made, about four inches long, down to the sciatic nerve, exposing it at the lower border of the gluteus-maximus muscle. Then, with the fingers of both his hands the doctor grasped the sciatic nerve, raised it up and pulled it in opposite directions, thus stretching the nerve. Next he injected directly into the nerve at the exposed part 2 c.c. of 2 per cent novocaine and 2 c.c. of 85 per cent alcohol. The wound was closed and it healed without any infection or other complications and in about 10 days the patient was taken home from the hospital, apparently still rather lame. Neither of these doctors saw the patient thereafter.

An action was instituted naming both doctors as defendants, claiming that the diagnosis was wrong and the treatment improper. The plaintiff set forth in his complaint that the malady from which he suffered was "zeratic rheumatism" and that the negligent and careless treatment of the patient by the two doctors caused him to be permanently lame and disabled. About three years after the action was started a motion was made to dismiss the cause of action because of the failure on the part of the plaintiff to prosecute the action and the result of this motion was that the plaintiff's attorney consented to discontinue the suit, thereby terminating the matter.

NEWS NOTES

CERTIFICATION OF SPECIALISTS IN GYNECOLOGY AND OBSTETRICS

A movement for the certification of spacialists in gynecology and obstetrics is described in a circular issued by the American Board of Obstetrics and Gynecology which reads as follows·

"The American Board of Obstetrics and Gynecology, composed of nine members and examiners, elected by The American Association of Obstetricians, Gynecologists, and Abdominal Surgeons, The American Gynecological Society, and the Section on Obstetrics, Gynecology, and Abdominal Surgery of The American Medical Association, was formally organized in Niagara Falls, September 16, 1930. The function of the Board is to grant certificates indicating proficiency and specialization in Obstetrics or Gynecology, or both, to those who comply with its requirements.

"The nine members of the Board are:—

Dr. Walter T. Dannreuther, New York City
Dr. Fred L. Adair, Chicago
Dr. E. A. Schumann, Philadelphia
Dr. Paul Titus, Pittsburgh
Dr. Joseph L. Baer, Chicago
Dr. Jennings C. Litzenberg, Minneapolis
Dr. Robert D. Mussey, Rochester, Minn.
Dr. E. D. Plass, Iowa City, Iowa
Dr. G. D. Royston, St. Louis

"This Board has been in the process of organization since 1927. It puts into action a determined effort on the part of these three national organizations to improve the standards of practice of obstetrics and gynecology. It expects to accomplish this by various activities, such as the investigation and encouragement of graduate extension study facilities and active clinical assistantships for men desiring to specialize in these branches; and it will endeavor by regular examinations to determine the competence of specialists in obstetrics and gynecology who apply for the certificate. Certain outstanding specialists will be granted certificates on the basis of their attainments alone, but only by a vote of the entire Board after recommendation by the Committee on Requirements. A second group is asked to undergo a practical clinical examination; whereas a third and younger group has both written and clinical examination and must submit records of a group of cases in order to qualify.

"The national obstetrical and gynecological organizations, which have participated in the formation of the board and are sponsoring its activities, as well as other societies, attach considerable importance to its certificate. It is expected that both the medical and the lay public, including hospital directors, will soon come to utilize the certificate from this board as a means of discriminating between those who are well grounded as specialists in obstetrics and gynecology and those who are not.

"The board does not intend in any way to interfere with or limit the professional activities of any duly licensed physician, but it does aim toward standardized qualifications for specialists in obstetrics and gynecology.

"Any well qualified obstetrician and gynecologist should have no difficulty in obtaining a certificate and the board is desirous of receiving applications from those to whom this applies.

"The first examination for candidates will be held simultaneously in nineteen different cities of this country and Canada on Saturday, March 14, 1931.

"Detailed information and application blanks may be secured from Dr. Paul Titus, Secretary, 1015 Highland Building, Pittsburgh, Penna."

Another circular lists nineteen cities in which the written examinations will be held on March fourteenth. The examinations are described as follows:

"The examination will consist of ten questions on obstetrics and gynecology, and a minimum rating of 75 per cent will be required. Each candidate for Group 3 also will be required to submit typewritten reports on a total of fifty (50) obstetrical and gynecological operations which he has performed, and these case records are to be presented with his examination paper to his local examiner on March 14th.

"The practical, or oral, clinical and laboratory examination will be held in Philadelphia, Pa., on Saturday, June 6th, 1931, commencing at 9 A. M., and will be given to all applicants in group 2 and group 3. The candidates will be expected to identify and discuss three or four common obstetrical and gynecological pathologic specimens and the histologic sections taken from them. The clinical part of the examination will be conducted in a hospital where an individual case will be discussed in detail with each candidate. An endeavor will be made to adapt the details of the oral examination to each candidate's experience and practice, and will be particularly directed to ascertain his familiarity with recent obstetrical and gynecological literature, the breadth of his clinical experience, and his general qualifications as a specialist in obstetrics and gynecology."

The examinations and certifications constitute a step forward in establishing tangible standards for specialists.

NEW YORK STATE HEALTH COMMISSION

This Journal of January first, 1931, page 39, described the organization of the New York State Health Commission appointed by Governor Roosevelt last Spring, and listed the personnel of its fourteen members and the seventy-eight members of its sub-committees. This present article sets forth the scope of the investigations of the Commission, and the general principles of its conclusions:

Immediate Needs: The Commission feels that among the pressing immediate needs are:

1. More effective service in the control of tuberculosis, cancer, and the venereal diseases.
2. Protection of the public health through additional safeguards in the purification of water supplies and the prevention of stream pollution.
3. Better coordination of school hygiene and other health services.
4. More comprehensive measures to reduce infant deaths and deaths among mothers from causes incident to childbirth.
5. Better organization for the discovery, and the cure rehabilitation or care of crippled children.
6. The transcending need, however, which is fundamental to efficient effort in these and all other aspects of public health, is a reorganization of the whole system of local health service on the county, rather than the town and village system, with provision for qualified personnel to conduct all health activities.

County Units of Administration: The Commission has found that in every county of the state there are certain health activities being carried on on a county basis, either a county laboratory, a county tuberculosis hospital, county nursing, or school nursing; and that these elements of health department work could be very wisely coordinated.

The Commission has considered a vast amount of material and discussed a number of problems which exist in many different fields. It recognizes that in the various health activities of the county, the county health board is now essential, and that the organization of the counties should be brought about as rapidly as possible; and that in the larger counties, full-time, qualified health officers should be employed as soon as practicable.

Public Health Nursing: In some counties there is provided by the educational authorities some school nursing service, and other nurses by either tuberculosis authorities or employed by local health departments or voluntary associations without any central supervision. It is recommended that in rural districts the school nursing service be incorporated in the general health program of the county.

The Commission finds that in some sections a fairly adequate nursing service is provided, but in other sections of the state it is either minimal or does not exist. It believes that there should be a provision of nursing service in those areas which do not now obtain it.

Crippled Children: The Commission has found that there are a large number of children crippled from various causes, and that, in surveys which have been made, a considerable proportion of these children have been found who were not receiving proper treatment. The Commission will undoubtedly recommend that further steps be taken to find these children, and to see that proper medical care is provided for them.

Maternal Mortality: The Commission also notes that while there has been a constant diminution of deaths in infants from preventable causes, there has been little or no reduction in maternal mortality; and this indicates that more serious study should be given by medical and public authorities to the problem of the medical care of mothers, both prenatal and after childbirth.

Cancer Control: The Commission has also commented on the fact that the death rate from cancer has constantly increased, and that some intensive work should be carried on so that more adequate diagnostic service may be rendered and more adequate medical care given to a larger number of patients.

Venereal Diseases and Tuberculosis: The Commission feels that there should be more adequate facilities for the prompt treatment of veneral diseases, and that an additional number of beds are needed for tuberculosis patients which would be more readily accessible to the citizens of the state.

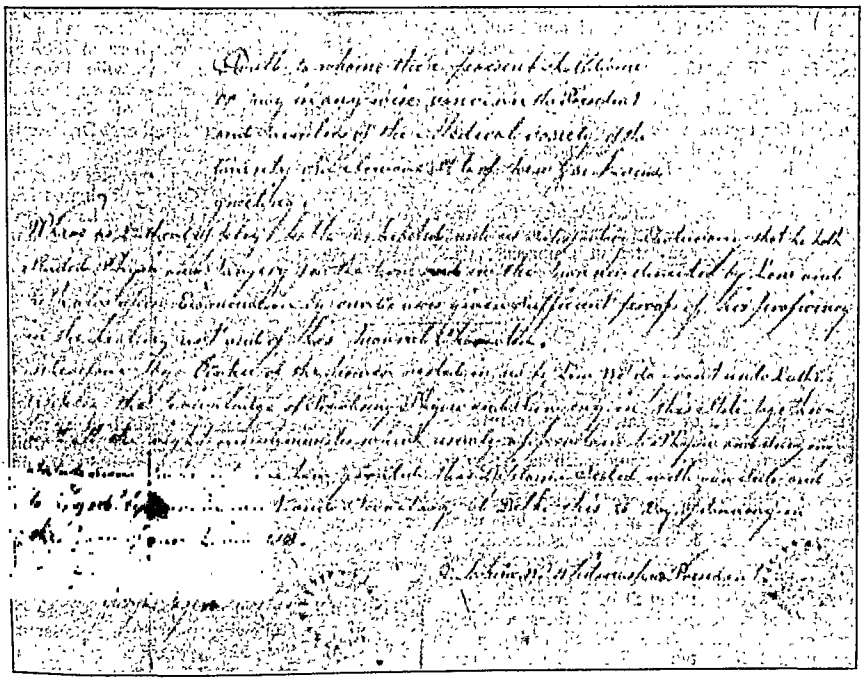
Welfare Law: The Commission also notes that sickness in general creates and increases poverty, cuts down the earning power of the citizens, and increases the cost of their care; and it points out that the newly amended public health law forces welfare officials to provide medical care for persons who, though otherwise self-supporting, cannot provide for the cost of illness.

Sanitation: The Commission has also discussed questions relating to sanitation, and notes that there is still considerable pollution of streams, that water supplies are not fully under state supervision, and that there is still no definite authority for providing sanitary conditions in state parks.

Medical Care: No final discussions have been held on several other topics, and the entire question of medical care has seemed so vast that it has not been possible as yet for the Commission to come to any decision in regard to the question.

DIPLOMA FROM THE DELAWARE COUNTY MEDICAL SOCIETY IN 1813

Dr. Robert Brittain, of Downsville, Delaware County, has sent us the diploma and license to practice medicine which was issued to his great-grandfather, Luther Appley, in 1813, by the Delaware County Medical Society, under the State Law passed April 4, 1806—the First Medical Practice Act in New York State. This license reads as follows:



To all to whome these presents shall Come or may in any wise concern the President and members of the Medical society of the County of Delaware, State of New York, sends greeting.

Where as Luther Appley hath exhibited unto us satisfactory testimony that he hath studied Physic and Surgery for the term and in the manner directed by Law and hath also upon Examination by our Censors given Sufficient proofs of his proficiency in the healing art and of his Morral Character. Wherefore by Virtue of the Power vested in us by Law we do grant unto Luther Appley the privilege of Practising Physic and Surgery in this State together with all rights and immunities which usually appertain to Physic and Surgery.

In testimony whereof we have granted this Diploma Sealed with our Seals and testified by our President and Secretary at Delhi this 28 Day of January in the Year of our Lord 1813.

JOSHUA W. WHITMASH, M.D. *President.*
GEORGE PAGE, M.D. *Secretary.*

Dr. Luther Appley (1) was a physician of considerable prominence. He was born in Canterbury, Connecticut, in 1790, and removed to Delaware County in 1809, where he practiced surveying. He studied medicine with Dr. Lewis Allen, of Deposit, Broome County, and later with Dr. Freeman Allen in Damascus, Wayne County, Pennsylvania. While he received a license from Delaware County in 1813, he also seems to have one from the State of Pennsylvania on November 24, 1821. He practiced medicine in Damascus, and was prominent as an officer in the Pennsylvania Militia. He also practiced in Philadelphia from 1835 to 1842, when he returned to Damascus and practiced there until his death in 1842.

Dr. Luther Appley transmitted his scientific zeal and his love of medical practice to his children's children, for six of his descendants in the succeeding four generations were physicians, two of them—Dr. Robert Brittain and his son, Dr. Knox Brittain—being still in active practice. This is the record number of physicians in any family line in New York State, so far as the facts have come to the knowledge of the editors of this Journal.

Dr. Luther Appley (1) had two sons who practiced medicine. The first son, William Land Appley (2) was born in 1812 in Damascus, Pa., and died in 1877 in Cochecton, Sullivan County, N. Y. He studied medicine with his father and practiced with him, and later in Cochecton. He received the honorary degree of M.D. from the New York State Medical Society in 1858, and in 1867 he was elected a permanent member of the State Society.

The second son of Luther Appley (1) was named Theron (2). He practiced in East Branch, Delaware County, and later in Damascus, Pa., where he died in 1889. He had a son, Otto (3), who graduated from Buffalo University and practiced in Damascus until his death a few years ago.

William Land Appley (2) had a son, William W. Appley (3), and a daughter, Ettie (3).

William W. Appley (3) was born in 1847 and graduated from the Albany Medical College in 1870. He then practiced medicine with his father in Cochecton and continued the practice until his death in 1930.

Ettie Appley (3), sister of William W. Appley (3) married Theron Brittain. They had a son, Robert Brittain (4), who was born in 1867 and now practices medicine in Downsville, Delaware County. He is the physician who supplied the Journal with the photograph of the medical license of his great-grandfather, Dr. Luther Appley (1).

Robert Brittain (4) has a son, Knox Brittain (5), who was born in 1901. He graduated from Cornell Medical School in 1925, and now practices medicine in Spencerport, Monroe County, New York.

HELP FROM WELFARE AGENCIES

Every physician often has occasion to refer a patient to an agency for advice and assistance. There are over one thousand such agencies in Greater New York, whose services are at the disposal of physicians on every conceivable condition, physical, social, and moral; but until recently there has been no central source of information. That defect has been remedied by the establishment of a central clearing house called The Welfare Council of New York City, composed of representatives of all the special and local organizations. The Council maintains a Bureau of Information which is like the Information Department of the Telephone Company.

The address of the Bureau of Information is 151 Fifth Avenue, corner 21st Street, telephone ALgonquin 4-7100. Any doctor desiring information regarding an agency for the care of his patient can obtain it by calling up the Council. If, for example, a doctor has had a chronic patient discharged from Bellevue with the statement that the Hospital can do no more for the case, the physician can call the Information Department of the Welfare Council and get information regarding an agency which will look after his patient. The Council has prepared a booklet listing the more common social problems which every physician meets, and a few of the organizations which are prepared to give help. For example, the first item is headed "Aged—Where to send old people or their relatives to learn about entering a home or securing other care."

The second item is headed "Appeals—Where a doctor can ascertain the standing of a welfare organization appealing for funds."

The conditions listed in the booklet were approved by the following committee representing four of the five county medical societies of Greater New York:

Dr. D. S. Dougherty, New York,
Dr. Alec N. Thomson, Kings,
Dr. E. C. Podvin, Bronx,
Dr. Carl Boettiger, Queens.

Copies of the booklet may be obtained at the headquarters of the county medical societies and from the New York Academy of Medicine or directly from the Welfare Council at 151 Fifth Avenue, New York.

The advisory services of the Information Bureau regarding institutions in Greater New York are available to physicians throughout New York State.

THE GOVERNOR'S ANNUAL MESSAGE

Governor Franklin D. Roosevelt delivered his annual address to the Legislature on the afternoon of Wednesday, January 7, 1931. The paragraphs which are of special interest to physicians are those on Health, Hospitals and Old Age Security.

Health: It was expected that Governor Roosevelt would discuss the subject of health at considerable length, in view of his appointment of the Health Commission whose work is described on page 106. But the Governor wisely confined his remarks to the Committee as follows:

"Last spring I constituted a special committee of citizens and experts, headed by President Farrand of Cornell University, to study a new health program for the State. This is the first time a comprehensive survey has been made since the splendid program sponsored by the late Dr. Biggs. The report of this committee will be transmitted to your honorable bodies at an early date and will, I am certain, mark a very definite advance in the general subject of public health for adults and children."

Hospitals: The Governor discussed Hospitals as follows:

"The overwhelming approval given by the voters of the State in the recent election to the bond issue for erection of hospitals, prisons and other buildings for the care of the wards of the State assures, with the cooperation of the Legislature, the completion of the definite building program outlined by me last year whereby by the year 1935 there will be adequate provision for all patients. It is especially gratifying to note the strides being made by medical science in mental hygiene. The percentage of cures is slowly but constantly rising and at the same time we are making progress in the prevention of mental disorders."

Old Age Security: Physicians desire to insure the comfort of life to all aged persons, and will approve the principles of the remarks of the Governor on Old Age Security:

"In 1929 I recommended to the Legislature a commission to report on old age security against want. The report of this commission resulted in the passage of the Old Age Security bill by the last Legislature, and actual payments under the new law went into effect on January 1 this year. I have many times stated that I am not satisfied with the provisions of this law. Its present form, although objectionable as providing for a gratuity, may be justified only as a means intended to replace to a large extent the existing methods of poorhouse and poorfarm relief. Any great enlargement of the theory of this law would, however, smack of the practices of a dole. Our American aged do not want charity, but rather old age comforts to which they are rightfully entitled by their own thrift and foresight in the form of insurance. It is, therefore, my judgment that the next step to be taken should be based on the theory of insurance by a system of contributions commencing at an early age. In this way all men and women will, on arriving at a period when work is no longer practicable, be assured not merely of a roof overhead and enough food to keep body and soul together, but also enough income to maintain life during the balance of their days, in accordance with the American standard of living.

"The commission which reported last year gathered ample data along these lines on which legislation may be based. I trust that your honorable bodies will give this great subject immediate practical consideration."

LEGISLATION

The Legislature convened on Wednesday, January 7, 1931, for its annual session, and will doubtless consider many bills having medical relations. Dr. Harry Aranow, Chairman of the Committee on Legislation, has anticipated considerable activity this winter, and has sent the following communication to the Chairman of the Legislative Committee of every County Medical Society:

Dear Doctor: January 7, 1931.

The 1931 Legislature has convened and it is exceedingly important that each county committee immediately establish a contact with the Senator and Assemblymen who represent it.

We hope that there won't be any more unfavorable legislation this year than in previous years, but one can never foretell with certainty and so it is highly important that we should build our fences at once. Then, too, we shall have some constructive legislation upon which we hope to get favorable consideration, and this will also call for instruction of your representatives by you.

May I suggest that you call a meeting of the members of your committee and ascertain who the family physicians are to your legislators and arrange to keep them informed up to the minute with the legislative proceedings as they will be reported to you in the bulletins?

I hope that you are making as great use of the bulletins as you can. Some committees meet weekly for a half hour or so and go over the bulletin, making such comments as it calls for; and the chairman reports them to our standing committee. Is it too much to expect that the number of committees taking such a cooperative interest will be greater this year?

Assuring you of my hearty appreciation of the cooperation you can give my committee, I am

Very truly yours,

HARRY ARANOW, *Chairman,*
Committee on Legislation.

SPECIAL COMMITTEE ON PHYSICAL THERAPY

Report to the Council, December 11, 1930

The Special Committee on Physical Therapy reports on its activities during the past month as follows:

1. *Educational:* The Committee endeavored to carry out the recommendation of the House of Delegates that more instruction in physical therapy be given to undergraduates and practicing physicians. It requested the Deans of Medical Schools in New York State to provide facilities for practicing physicians for the observation of the work in physical therapy. The Deans of the Medical Schools of Albany, Rochester and Syracuse signified their willingness to cooperate in this work, and the Dean of the College of Physicians and Surgeons declined to do so.

The Committee again informed all County Societies that, in cooperation with the Committee on Public Health and Medical Education, a postgraduate demonstration course in physical therapy, consisting of four lectures, is being offered, free of charge, to all County Societies; also that the State Committee stands ready to address any County Society on this subject. Requests for such addresses have been received from Essex and Nassau Counties, and arrangements are pending with Erie, Oneida and Schoharie Counties.

In order to discourage lecture courses given under commercial auspices, with their all too evident object of sales propaganda, manufacturers of apparatus were asked to cooperate in the Committee's efforts to foster teaching by medical colleges and by physicians of unquestionable standing. The Westinghouse Electric, General Electric, Liebel-Flarsheim, Burdick and Fischer Companies pledged their support to this policy, and one manufacturer asked for permission to circulate the Committee's statement on The Status of Physical Therapy, nation-wide.

2. *Organization of County Committees:* All County Societies were asked to reappoint special committees on physical therapy, or to appoint new ones where none had been appointed so far. The Counties of Broome, Schoharie, Livingston, Essex and Oneida appointed new committees this year, and seventeen Counties already had a special committee on physical therapy. The members of all of these Committees are being invited regularly to the stated meetings of the State Committee on Physical Therapy.

3. *State-wide Survey of Physical Therapy Activities in Hospitals:* A letter was sent to two hundred and fifty principal hospitals in the State, containing a brief statement about the relation of physical therapy to modern hospital work, and asking information as to whether these hospitals have departments under the control of a qualified physician, and offering the assistance of the Committee in establishing departments and in training physicians. So far almost one hundred and seventy replies have been received, and a good number of hospitals asked further advice. A tabulated analysis of these replies, together with a paper on "Physical Therapy in Institutional Work" will be sent to all hospitals.

4. *Legislative:* The Committee approved a proposal submitted by representatives of the Department of Education for more definite regulations of the practice of licensed physiotherapists.

RICHARD KOVACS, M.D., *Chairman.*

NASSAU COUNTY HOSPITAL

This Journal of November 1, 1930, page 1310, described a campaign to obtain a favorable vote on Election Day on the referendum to establish a general county hospital with special facilities for the care of contagious diseases at a cost of $1,750,000.

The proposition was carried by a vote of eight to one, with a comfortable majority in every election district.

The subject was first discussed by the Society in February, 1922; and was brought before the Board of Supervisors in June of that year; and an extensive report on hospital needs and conditions in Nassau County was given to the Board in December, 1923. The Board, however, took no action, and in 1924 the Medical Society decided to make their appeal to the people. The steps then taken were as follows:

1. The establishment of the *Nassau Medical News* in order to impart monthly news to the physicians and other leaders.

2. A public dinner in Garden City Hotel in December, 1928, at which the need of a hospital was discussed.

3. In January, 1929, a report to the Supervisors was made by Hon. Lewis J. Smith, Judge of the Children's Court, calling attention to the great need of the hospital.

4. In the summer another hospital survey was made.

5. In December, 1929, a two-day Public Health Institute was held under the joint auspices of the County Medical Society and the Red Cross, and was followed with addresses before civic clubs and women's organizations. These organizations joined in a petition to the Board of Supervisors

to appoint a commission to make an official survey of the hospital situation in the county.

7. The Board appointed the commission which reported favorably on a general hospital with two hundred beds, and including a liberal number for contagious diseases. The Board voted to submit the proposition to the voters at the next general election.

8. An active campaign for the proposition was conducted during the summer and fall. This campaign was described in the November issue of the *Nassau Medical News* as follows:

"Gifts of money were received from several public-spirited residents of the county and with the funds thus obtained there was started a campaign of education which resulted in front-page publicity in every paper of the county. More than fifty clubs and organizations were addressed by members of the society; an exhibit was held at the county fair; 65,000 pieces of literature were distributed by mail, by the doctors, the dentists, the druggists, public health nurses and welfare workers; endorsement was secured from prominent people in all walks of life; news releases were sent out to all the newspapers of the county; the representatives of the Metropolitan Life Insurance Company distributed to policy holders literature donated by the company and later, our own leaflets; radio talks were given by the district attorney of the county and by a representative of the society; both major political parties endorsed the movement and instructed their workers to help secure a favorable vote."

The establishment of the hospital has been entirely a Medical Society project, and is an excellent illustration of what a county society can accomplish by persistent action. The present attitude of the Society is indicated in the following paragraph in the *News:*

"Since the hospital has been considered a medical society project, we feel that the overwhelming vote it received is in effect an expression of confidence which amounts to a real responsibility and an obligation to continue our participation in the public health affairs of the county and our interest in the welfare of its people."

SENECA COUNTY

The Fall Meeting of the Seneca County Medical Society was held at the Willard State Hospital on October 9, 1930. At the morning business session Dr. Lester gave an interesting report as delegate to the State Society meeting. He reported that the resolution on the subject of sterilization proposed by the Seneca County Society was "Killed in Committee." Other matters of interest were mentioned comprising a very satisfactory report.

The President, Dr. A. J. Frantz, commenting on the resolution on sterilization, said that he was surprised at the feeble interest shown in it at the Seventh District Branch President's conference and at the State Society meeting. It seemed to him that everyone was very adroitly side-stepping an issue which should be given more careful consideration and hoped that in decades to come there might be something done about it.

Dr. Lester's report was accepted on unanimous motion.

An amendment to the constitution was presented by the following, due notice having been previously rendered to all members: Drs. Lester, Brandt and Gibbs, to-wit: That Chapter IX of the constitution be amended to read that four regular meetings shall be held each year, to occur on the *First Thursday* of the months of June, September, December and March; the March meeting to be the annual meeting.

It was moved on unanimous motion to lay the resolution on the table.

The following officers were elected for 1931:

President—Dr. L. W. Bellows.
Vice-President—Dr. R. F. D. Gibbs.
Secretary-Treasurer—Dr. F. W. Lester.
Delegate to State Society—Dr. W. M. Follette.
Alternate—Dr. E. P. McWayne.
Censors—Drs. F. W. Lester, C. B. Bacon, L. W. Bellows.

The afternoon scientific session was unusual and profitable. Dr. Martin B. Tinker of Ithaca spoke on the subject, "The Advantages and Methods of Use of Electro-Surgery with Special Reference to Goitre and Cancer." A clear description of the improvements in both equipment and technic was given, and the advantages and special indications of this comparatively new apparatus were lucidly described.

The second speaker, Dr. John Wyckoff of New York City, presented the last paper in the series of Post-Graduate lectures furnished by the State Society for Seneca County on Heart Disease. This was a culmination of an interesting series which was well attended. Dr. Wyckoff spoke on the subject, "Syphilitic and Arterio-Sclerotic Heart Disease." This large subject was presented clearly in miniature, and the use of various remedies was discussed in a very comprehensive manner. The paper was exceptionally worth while.

The third speaker was Dr. F. R. Wright of the Clifton Springs Sanitarium who spoke on "Some Thoughts on Diabetes Mellitus." The whole subject of past history of the disease, past dietary fads, present diet conceptions, and insulin was covered briefly but well. The history of insulin was related, and the reasons why various preparations given per os could not have any definite effect on the disease were well delineated.

There was considerable discussion of all the papers and much favorable comment.

ROBERT E. GIBBS, *Secretary.*

BRONX COUNTY

A regular meeting of the Bronx County Medical Society, held at Concourse Plaza, on December 17, 1930, was called to order at 9 P.M., the President, Dr. Gettinger, in the Chair.

The following candidates were elected to membership:

Drs. Arthur M. Freund, Jacob G. Hirsh, Samuel C. Levine, Abraham Lowenbraun, Morris Spindel and Herman Zazeela.

The President referred to charges of unethical advertising which were considered at the last meeting of the Comitia Minora.

The President reported that, at the suggestion of some of the members of the Comitia Minora and others, the chairman of the Committee on Medical Economics and he visited the Emergency Employment Committee, of which Mr. Seward Prosser is chairman. The purpose of the visit was to offer the cooperation of the Bronx County Medical Society. No tangible plan was submitted or has as yet been considered by the Comitia Minora. Dr. Gettinger called for an expression of opinion from the members.

Dr. Podvin stated that, as the President has well said, if the work is done by private agencies, it will be done in a way that will be neither satisfactory to the patients nor to the physicians at large. He expressed the opinion that it would be well within the province of this Society to resolve to offer its cooperation in the matter of medical relief for the unemployed, and to leave the details of the plan to be worked out by the Comitia Minora and whatever organization has this matter in charge. Following the discussion, it was moved and carried that the Bronx County Medical Society go on record as offering its cooperation in the matter of medical relief to the unemployed in this time of economic stress.

Dr. Bick reported for the Social Committee. The beefsteak dinner, with a novel entertainment, will be held at Ebling's Casino on Wednesday evening, January 28th. It will be for physicians only. Members are asked to invite their doctor friends in other counties. The price per ticket is five dollars, and any profit from the affair is to be devoted to the relief fund. Dr. Bick strongly urged the cooperation of the members.

The scientific paper of the evening was on the subject "The Therapeutic Use of Oxygen," by Dr. Alvan L. Barach.

I. J. LANDSMAN, M.D., *Secretary.*

ROCKLAND COUNTY

The annual meeting and banquet of the Rockland County Medical Society was held on Wednesday afternoon, December 3rd, 1930, at 3 P.M., at the Villa Lafayette, Spring Valley, New York. Fifty-five members and guests of the Society were in attendance. Among the guests were: Dr. William D. Johnson, of Batavia, President-elect of the Medical Society of the State of New York; Dr. Daniel S. Dougherty, Secretary of the Medical Society of the State of New York; Dr. Joseph S. Lawrence, Executive Secretary of the Medical Society of the State of New York; Dr. Samuel J. Kopetzky, of New York City, and Dr. Harold Ward, of Englewood, New Jersey.

The Secretary of the County Society reported an active membership of fifty-two, with two retired members. This includes nearly all of the practicing physicians of Rockland County.

The following officers were elected for the coming year:

President—Dr. Leo G. Weishaar, Nanuet
Vice-President—Dr. Stephen R. Monteith, Nyack
Secretary—Dr. William J. Ryan, Pomona
Treasurer—Dr. Dean Miltimore, Nyack

One new member was elected to the Society, and two members were transferred from Suffolk County to the Rockland County Society.

The principal address was given by Dr. W. D. Johnson, on the subject "The Destiny of Man in the Light of His Origin." His discussion was both serious and entertaining.

Dr. Joseph S. Lawrence discussed the subject "The Great Need and Value of a Closer Relationship of the Medical Society of the County with That of the State."

A program of music, entertainment, and good food made the occasion one of gaiety and fun in which the members of the medical profession of Rockland County forgot the cares of medical practice for an afternoon of sociability and enjoyment.

THE DAILY PRESS

COPPER IN THE BODY

The list of metals found in the body is constantly being increased as chemists adopt more and more refined methods of their detection The question is whether the rarer metals are necessary to life and function, or are accidental contaminations. An editorial writer in the New York *Herald Tribune* of December 29 suggests that in either event the body seems to get what it needs. The writer says:

"The work of Dr. F. B. Flinn, of Columbia, on the importance of copper in living matter, mentioned in the recent annual report of Dean William Darrach of the School of Medicine of that university, marks an attempt to make sure of some of the facts underlying observations among the most interesting in modern physiological chemistry. Copper, Dr. Flinn suspects, may be needed in extremely tiny quantities for the operation of bodily organs like the liver or for the proper manufacture of blood.

"The problem of the metallic necessities of living protoplasm is more practical, however, than mere curiosity about which elements happen to be in the human body and how they get there. In primitive times mankind ate so much dirt that any human stomach undoubtedly obtained, in the form of wood, bark, bones, mineral fragments and the like, ample quantities of all metals and probably of all other chemical elements conceivably needed. Nowadays the cult of cleanliness has altered this. On the admirable ground of excluding dangerous germs, all kinds of dirt are kept out of fastidious people's food. This has been known to interfere with sufficient supplies of iron and iodine, as well as of vitamins. Possibly it deprives us also of other elements, like copper or zinc or manganese, which the body needs. That is the importance of investigations like those of Dr. Flinn into the actual needs of living matter for traces of the various metals."

POISON FOG

The newspapers of mid-December carried stories of increased deaths during a period of dense fogs which persisted over northwestern Europe and aroused their greatest fear in the Meuse Valley in Belgium. Commenting on the fears of the people the New York *Herald Tribune* of December 19 has an editorial entitled "Poison Fogs and Foggy Minds," which closes as follows:

"The people of the Meuse Valley are certain that they lived through a poison fog. Every one feels the fascination of their fear and has a vague, subconscious desire to believe in it. Every one likes simple, dramatic explanations of his ills—such as poison fogs and parrot fever. There was psittacosis in the world in the recent parrot scare, but not enough to warrant the slaughter of the pollies. There may well have been poison in a fog in Belgium—certainly the mere suspicion is enough to warrant the most searching investigations—but not enough to justify the poison scares which are inevitable in northern Europe today whenever the gray clouds roll in from the sea. The fact is that despite man's most earnest belief in his rationality he enjoys on occasion the eerie sensation of being scared by something he cannot understand."

OLD AGE PENSIONS

New York State began a system of old age pensions on January first. The proponents of the plan are careful to divest it of the reprehensible terms of charity, dole, and subsidy, as is shown in the following editorial in the New York *Times* of December 22:

"It has been loosely called Old Age Insurance. But it is not that. The design is to give a measure of relief for those who in their later years are unable to support themselves. The work will be done under careful regulation by a State agency.

"The sums thus granted in aid out of State funds will not be a subsidy, a 'dole' or merely a temporary measure of 'relief.' They will be, rather, like the existing system of financial help for widows, a recognition both of service rendered and of the obligation of the community to care for citizens who are no longer able to care for themselves. For them to apply for help is no 'disgrace,' Mr. Folks asserts, when public relief is thus systematically offered and is needed. Moreover, the method may truly be called 'contributory,' since all residents of the State of New York will, directly or indirectly, help meet the cost of the plan through taxation. The results of this fine experiment will be studied with keen interest." (See page 109)

AN AMERICAN HEALER IN INDIA

The New York *Herald Tribune* of December 21 has a half column description of James Brandon, an American from Nashville, who gained a fortune by healing through the use of magic spectacles by which he recognized diseased functions of the body. The article says:

"Brandon was found dead in the squalid cave in which he lived and practiced aceticism, occultism and mystic healing. Since coming to India fifteen years ago he had amassed a fortune by treating the sick, lame, halt and blind with herbs, potions and magic prayers. It was testified at the inquest today that on his deathbed he complained he had lost his occult power because his 'God-given spectacles' had been stolen.

"Witnesses testified that a short time ago some Poona youths, as a practical joke, raided Brandon's abode, stealing all his property, including the spectacles.

"His Hindu friends declare the American recluse achieved many cures. Sufferers of all faiths came to him from many parts of India and he became known as the 'American Buddha.' Outside his darkened abode long lines of broken humanity could be seen daily seeking his supposedly supernatural powers of healing.

"The belief of James Brandon that through his spectacles he was enabled to see God and discover the causes of maladies from which human beings were suffering has a counterpart in the history of Joseph Smith, the founder of Mormonism. At Palmyra, N. Y., a century ago, Smith announced that he had found not only a set of golden plates inscribed with the 'Book of Mormon,' but a pair of crystals set in silver bows —a sort of pair of supernatural spectacles—by the use of which he was able to translate the hieroglyphics on the plates. He called these optical instruments Urim and Thummim, names used in the Bible to describe a method of divination employed by the ancient Hebrews, and believed to have referred to a way of casting lots."

SCIENCE AND RELIGION

The assumed conflict of science and religion has come up in the meeting of the American Association for the Advancement of Science, where the greatest scientists present their latest views on every subject from astronomy to human health. The New York *Times* of December 29, comments on the return of religious faith among scientists, and says:

" 'The intense interest of the moment,' wrote Mr. Gilbert Chesterton in his article in yesterday's *Times* on 'The Return to Religious Faith,' is that the Man of Science has suddenly refused to have anything more to do with 'this dreary business of nibbling negation and blind scratching and scraping away of the very foundations of the mastery of man.' Support for this statement will doubtless appear in the meetings of the American Association for the Advancement of Science beginning today in Cleveland. Five thousand scientists will there represent fifty scientific organizations. More than a thousand papers will be read, each presenting some added word of truth or of opinion or theory based upon research or reason, and all contributing to 'the vision of the plan of things,' which, as Mr. Chesterton remarks, lets us live 'once more in the morning of the world.'

"The president of this scientific federation is the world-famous Dr. Robert Millikan. He has accepted and adopted as his own the estimate that this world has already had a lifetime of at least a billion years and that man has doubtless a billion years ahead of him, with the possibility of learning to live 'a million times more wisely.' We are, indeed, but in the morning of life, and in a world in which science has, to use Dr. Millikan's own words in his book on 'Science and Civilization,' 'laid the foundations for a new and a stupendous advance in man's conception of God, for a sublimer view of the world and of man's place and destiny in it.'

"Here is testimony that the man of science is not engaged in 'nibbling negation' or in 'scraping away the foundations.' Religion is seen by him as the 'integrating factor' in this universe of atoms and ether, of mind and ideas, of duties and intelligence—a religion which grows with the growth of human knowledge. It only enhances the value of Dr. Millikan's affirmation that he was born a minister's son; for he must have known religion 'pure and undefiled' as he has come to know pure science."

The Editorial page of the *Times* of December 31 says further:

"During the past year science has found a new planet; it has conquered a new disease; it has flown to a higher altitude than man had ever before attained; it has verified a thousand years of Biblical history; it has built the highest bridge; it has begun the construction of the highest dam; it has extended the reach of the human voice around the globe and has led man into the conception of the infinite through mathematics. Neither drought nor flood nor financial depression nor any other terrestrial ill can stay the cosmic optimism of the science that not only has such practical application, but that has faith in a continuing creation and that cooperates with 'a Creator continually on the job.' "

BOOKS RECEIVED

Acknowledgment of all books received will be made in this column and this will be deemed by us a full equivalent to those sending them. A selection from this column will be made for review as dictated by their merits or in the interests of our readers.

SURGICAL CLINICS OF NORTH AMERICA Vol 10, No 5 October, 1930 (Pacific Coast Surgical Association Number) Published every other month by the W B Saunders Company, Philadelphia & London Per Clinic Year (6 issues) Cloth, $16 00 net, paper $12 00 net

LEGAL MEDICINE AND TOXICOLOGY By Ralph W Webster, M D, Ph D Octavo of 862 pages, illustrated Philadelphia & London, W B Saunders Company, 1930 Cloth, $8 50

A TEXT-BOOK OF MEDICINE By American Authors Edited by Russell L Cecil, A B, M D Sc D Second Edition Revised Octavo of 1592 pages illustrated Philadelphia & London, W B Saunders Company, 1930 Cloth, $9 00

A TEXT-BOOK OF GYNECOLOGY By Arthur Hale Curtis, M D Octavo of 380 pages, illustrated Philadelphia & London, W B Saunders Company, 1930 Cloth $5 00

A SYSTEM OF BACTERIOLOGY IN RELATION TO MEDICINE By Various Authors (Prepared under the direction of the Medical Research Council) Volume VII Octavo of 509 pages London, His Majesty's Stationery Office, 1930 Cloth, £8-8-0 a set, £1-1 0 each

ANAESTHESIA AND ANAESTHETICS By F S Rood, M B and H N Webber, M A Octavo of 292 pages, illustrated New York, William Wood & Company, 1930 Cloth, $4 50

BACTERIOLOGICAL TECHNIQUE. A Laboratory Guide for Medical, Dental, and Technical Students By J W H Eyre, M D, M S Third edition Octavo of 619 pages, illustrated New York, William Wood & Company, 1930 Cloth, $7 50

NEW AND NON OFFICIAL REMEDIES, 1930 12mo of 481 pages Chicago, American Medical Association, 1930 Cloth, $1 50

ANNUAL REPRINT OF THE REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION FOR 1929 12mo of 81 pages Chicago, American Medical Association, 1930 Cloth, $1 00

THE PUBLIC'S INVESTMENT IN HOSPITALS By C Rufus Rorem Octavo of 249 pages Chicago The University of Chicago Press, 1930 Cloth, $2 50

INTRODUCTION TO MEDICAL BIOMETRY AND STATISTICS By Raymond Pearl 2nd rev edition Octavo of 459 pages, illustrated Philadelphia & London W B Saunders Company, 1930 Cloth $5 50

A PRIMER FOR DIABETIC PATIENTS By Russell M Wilder, M D 4th edition 12mo of 138 pages, illustrated Philadelphia & London, W B Saunders Company, 1930 Cloth $1 50

OBSERVATIONS ON THE COURSES OF DIFFERENT TYPES OF BRIGHT'S DISEASE AND THE RESULTANT CHANGES IN RENAL ANATOMY By D D Van Slyke and others Octavo of 130 pages, illustrated Baltimore, Williams & Wilkins Company, 1930 Cloth $3 00 (Medicine Monographs Volume XVIII)

CANCER OF THE LUNG and other Intrathoracic Tumors By Maurice Davidson M A, M D Octavo of 173 pages, illustrated New York William Wood & Company, 1930 Cloth $5 50

BEHAVIOR PATTERNS OF THE ALIMENTARY TRACT By T WINGATE TODD M B Octavo of 79 pages Baltimore, Williams & Wilkins Company, 1930 Cloth, $1 00 (*Beaumont Foundation Lectures, Series No 9*)

A SYNOPSIS OF MEDICINE By HENRY LETHEBY TIDY, M A Fifth edition, revised and enlarged 12 mo of 1032 pages New York, William Wood & Company, 1930 Cloth, $6 00

OUR NEW PROGRESS Two Essays—Cornucopia and Caritas By JAMES BAYARD CLARK Octavo of 128 pages New York London, G P Putnam's Son's 1930 Cloth, $2 00

EMERGENCY SURGERY By HAMILTON BAILEY, F R C S Volume 1 Abdomen and Pelvis Octavo of 380 pages, illustrated New York, William Wood & Company, 1930 Cloth, $8 00

THE TREATMENT OF CHILDREN'S DISEASES with special formulas and drugs for childhood, and a short diagnostic summary of each clinical picture. By Prof Dr F Lust Authorized translation of the sixth German edition with additions by Sandor A Levinsohn, M D Octavo of 513 pages Philadelphia and London, J B Lippincott Company, 1930 Cloth, $8 00

INTESTINAL TOXEMIA (Autointoxication) Biologically Considered By ANTHONY BASSLER, M D Octavo of 433 pages illustrated Philadelphia, F A Davis Company, 1930 Cloth, $6 00

PRACTICAL TREATISE ON DISEASES OF THE DIGESTIVE SYSTEM By L WINFIELD KOHN, M D 2 volumes Octavo of 1125 pages, illustrated Philadelphia, F A Davis Company, 1930 Cloth, $12 00

THE TREATMENT OF SCHIZOPHRENIA By LELAND E HINSIE, M D Octavo of 206 pages Baltimore, Williams & Wilkins Company, 1930 Cloth, $3 00

PRACTICAL APPLICATIONS OF HEREDITY By Paul Popenoe 12mo of 128 pages Baltimore, Williams & Wilkins Company, 1930 Cloth, $1 00

A COMPILATION OF CULTURE MEDIA for the Cultivation of Microorganisms By MAX LEVINE, Ph D & H W SCHOENLEIN, M S Octavo of 969 pages Baltimore Williams & Wilkins Company, 1930 Cloth $15 00 (Monographs on Systematic Bacteriology, Volume 2)

DICTIONARY OF BIOLOGICAL EQUIVALENTS German English By Ernst Artschwager Octavo of 239 pages illustrated Baltimore, Williams & Wilkins Company 1930 Cloth, $4 50

INDUSTRIAL MICROBIOLOGY The Utilization of Bacteria Yeasts and Molds in Industrial Processes By HENRY FIELD SMYTH, M D & WALTER LORD OBOLD, M S Octavo of 313 pages Baltimore, Williams & Wilkins Company, 1930 Cloth, $6 00

A COMPEND ON BACTERIOLOGY including Pathogenic Protozoa By ROBERT L PITFIELD, M D & HOWARD W SCHAFFER M D Fifth edition 12mo of 317 pages illustrated Philadelphia P Blakiston's Son & Company, 1930 Cloth $2 00

BOOK REVIEWS

THE PRACTICAL MEDICINE SERIES. Comprising Eight Volumes on the Year's Progress in Medicine and Surgery. Series 1929. Chicago, The Year Book Publishers, 1929. General Medicine. Edited by GEORGE H. WEAVER, M.D., and others. 12mo of 829 pages, *illustrated. Cloth*, $3.00.

This work ranks high in importance. Recent advances of note are ably presented, with the editors' personal opinions upon them. The material is well selected and the editors' opinions are shrewd and concise. The book should be of especial value to the busy practitioner, for quick reference. The format is excellent. Suitable illustrations clarify the text. The sections deal with Infectious Diseases, Diseases of the Chest, Diseases of the Blood and Blood-Making Organs, Diseases of the Kidneys, Heart and Blood Vessels, and Diseases of the Digestive System and Metabolism. A. C. J.

THE NORMAL DIET: A Simple Statement of the Fundamental Principles of Diet for the Mutual Use of Physicians and Patients. By W. D. SANSUM, M.S., M.D. Third revised Edition. 12mo of 134 pages. St. Louis, The C. V. Mosby Co. Cloth, $1.50.

The author presents the fundamental principles underlying the selection of a normal diet in chapters dealing with the bulk requirement of the body, the acid-ash type of acidosis, the acetone type of acidosis, and the caloric, protein, mineral, vitamin, and water requirement of the body. Standard beliefs regarding these matters are well presented except in the chapter dealing with the acid-ash type of acidosis where the views of the writer are given. A list of symptoms is given as due to this type of acidosis and the author thinks that the "blood vessel disease which is responsible for high blood pressure and such complications as partial blindness, heart disease, kidney disease, gangrene and apoplexy," is also due to this condition of acid-ash acidosis. This is certainly an unproven theory, as the author admits.

A number of useful diet menus are given for normal and reducing diets. W. E. McCOLLOM.

A PHYSIOLOGY AND BIOCHEMISTRY OF BACTERIA. By R. E. Buchanan, Ph.D., & Ellis I. Fulmer, Ph.D., vol. 2. Octavo of 709 pages, vol. 3. Octavo of 575 pages. Baltimore, Williams & Wilkins Company, 1930. Cloth, $7.50, each volume.

The Physiology and Biochemistry of *Bacteria*. *Vols.* II and III. by R. E. Buchanan and Ellis I. Fulmer.

"Encyclopedic" is the only word that adequately describes this series of handbooks (Vol. I of which has already been reviewed in this journal). For it has been the object of the authors to present in this work, in systematic fashion, *all* of the worth while material that has been published in this field. In this object they have succeeded admirably. No matter what the needs of the student may be, he can rest assured that he can readily find his topic in the index and then turn to a complete and extensive discussion of that topic.

To give the reader of this review an idea of the scope of these two volumes, the following brief summary of the contents is given:

Volume II. 709 pages in all.

Section A. (25 pages). The recognition and measurement of effects of environment. Highly technical and mathematical; fundamental principles for advanced students.

Section B. (172 pages). Effects of physical environment upon microorganisms. Temperature, various rays and emanations, pressure, surface tension, etc.

Section C. (374 pages). Effects of chemical environment upon microorganisms. Germicides, antiseptics, immune bodies, growth products, etc.

Bibliography for Vol. II, 112 pages.

Volume III. 575 pages in all.

Section D. (30 pages). Symbiosis and antagonism.

Section E (374 pages. Effect of microorganisms on environment, including enzymes and the effect of microorganisms upon both organic and inorganic compounds.

Bibliography for Vol. III, 133 pages.

This valuable work should be available to everyone interested in bacteriology and biochemistry.

ARNOLD H. EGGERTH.

METHODS AND PROBLEMS OF MEDICAL EDUCATION. (Sixteenth Series.) Quarto of 251 pages, illustrated. New York, The Rockefeller Foundation, 1930.

This volume is given over entirely to descriptions, with floor plans and photographs of Departments and Institutes of Anatomy, Histology, and Embryology. Universities of the wide world are represented. Apparently much attention is being paid to plant and equipment. Dr. Lewis H. Weed, detailing a Plan for a Department of Anatomy, has written an excellent introduction.

(Seventeenth Series.) Quarto of 275 pages, illustrated. New York, The Rockefeller Foundation, 1930.

This volume continues the material of the sixteenth series. More Departments of Anatomy, Histology, and Embryology are described, with the same elaborate plan of illustration. An excellent article by Samuel R. Detwiler serves as an introduction. Apparently there is a new science of anatomy. C. A. G.

THE PATHOLOGY OF DIABETES MELLITUS.. By SHIELDS WARREN, M.D., with a foreword by Elliott P. Joslin, M.D. Octavo of 212 pages, illustrated. Philadelphia, Lea & Febiger, 1930. Cloth, $3.75.

Warren considers in this monograph not only the structural changes of the pancreas but also includes the pathology of all the organs involved in the complications or sequelae of diabetes.

He calls attention to the pathological description of the pancreas in diabetes, observed by himself and others. He stresses the fact that a number of these changes are frequently the result of autolytic changes occurring after death. He often observes the same pathological picture in the autopsy material of non-diabetics. His attitude toward the hydropic changes in islet cells, so commonly regarded as the important pathological lesion in long standing diabetes, is a very critical one. Out of 259 pancreases obtained from post mortem examinations of patients previously suffering from diabetes, he was unable to demonstrate any pathological lesion in 27 per cent. A fair number of these were from pre-insulin days. He does not regard with much importance, pancreatic vessel sclerosis as an etiological factor because of its relatively rare incidence in diabetic autopsies. He finds the same lesions just as common in non-diabetics.

There are very good chapters on the role of glycogen and lipoids in diabetes, studied from a histological standpoint.

This book is an excellent compilation of the most recent knowledge of the pathology of diabetes mellitus and is highly recommended by the reviewer.

WILLIAM S. COLLENS.

INTESTINAL TUBERCULOSIS ITS IMPORTANCE DIAGNOSIS AND TREATMENT A Study of the Secondary Ulcerative Type By Lawrason Brown, M D, & Homer L Sampson Second Edition, Thoroughly Revised Octavo of 376 pages, illustrated Philadelphia Lea & Febiger, 1930 Cloth, $4 75

Despite the amount of work that has been done on the subject of Tuberculosis and its complication the belief has continued even from the time of Hippocrates to the present that diarrhoea supervening in pulmonary tuberculosis presaged the early fatal termination of the case

It is really within the past decade, and principally due to the authors of this book that our diagnosis of the intestinal involvement has been placed on a surer foundation, and that our views of its incidence its symptoms other than diarrhoea, its curability and the means of cure have been correctly established

The careful, painstaking work and study reported in the first edition have now been checked in the light of the many criticisms favorable and otherwise which have been made, and the lapsed ten years have afforded opportunities for further study of patients x ray and autopsy records, and of later results in discharged patients

Examination of the gastro intestinal tract by enema of Barium as well as by its oral administration is the essential in diagnosis and as in pulmonary tuberculosis the result of treatment will depend on the time in the disease in which the diagnosis is made The number and quality of the roentgenograms copied in this book make in themselves, an interesting and quite thorough course in the changes taking place in the intestines in tuberculosis In addition, the book contains a wealth of information on the history of this complication, its pathological anatomy physiology clinical findings and the changes in the lungs during its presence.

Above all it brings the cheering news that this complication does not mark the fatal termination but that it is curable that the means of cure in addition to those for pulmonary tuberculosis are medicinal surgical, and Heliotherapy and that in proof of their statements are presented data scientifically obtained warranting acceptance and appreciation T A McG

MANUAL OF PHYSICAL AND CLINICAL DIAGNOSIS By DR OTTO SEIFERT and DR FRIEDRICH MUELLER Authorized translation from the Twenty fourth German Edition by E COWLES ANDRUS M D 12 mo of 543 pages illustrated Philadelphia and London J B Lippincott Company, 1930 Flexible leather $6 00

The above publication will be found to supply just that authoritative information needed by the student intern and physician in his daily ward rounds

We must all feel grateful to Dr Andrus for making available to the American profession this outstanding and most practical work

The volume while made up of 500 pages of printed matter and amply illustrated is yet of pocket size

The volume is a masterpiece for its succinct reliable and practical presentation of methods of examination and for collection of data H M FRIEDMATT

THE WRITING OF MEDICAL PAPERS By MAUD H MELLISH WILSON Third Edition revised 12 mo of 184 pages Philadelphia and London W B Saunders Company 1929 Cloth $1 50

The title of this valuable little handbook does not do justice to its contents It is really a condensed reference book of medical grammatical errors which should be frequently referred to by the general practitioner irrespective of whether he is inclined to do medical writing or not

Contributors to medical literature will find this little volume replete with suggestions helpful in the preparation of papers EMANUEL KRIMSKY

SPINAL ANESTHESIA SUBARACHNOID RADICULAR CONDUCTION BLOCK) Principles and Technique By CHARLES H EVANS M D Octavo of 203 pages, illustrated New York, Paul B Hoeber, Inc, 1929 Cloth, $5 50

The value of a book on Surgical Technique is in part determined by the ability of a novice to acquire from its pages a method that is generally successful and at the same time to avoid pitfalls so common to all surgical procedures In this respect Dr Evans has written a very safe and sane book

Chapter II on the selection of patients for Spinal Anesthesia can be read with profit by all

The Author fails to emphasize the importance of a modified Trendelenberg position immediately after the anesthetic has been injected

The study of physiology and accompanying phenomena is clear and concise

The work of Koster with an experience of many thousands of cases which sets aside many of our pre conceived ideas of spinal anesthesia is not mentioned

Altogether the Author is to be commended for producing a book which is clear but gives the impression that it is the product of his experience minus the knowledge learned by visiting other clinics S L F

COLLECTED PAPERS OF THE MAYO CLINIC AND THE MAYO FOUNDATION Edited by MRS M H MELLISH, RICHARD M HEWITT, B A, M A M D and MILDRED A PARKER B S *Volume XXI 1929 Octavo of 1197* pages illustrated Philadelphia and London W B Saunders Company 1930 Cloth $13 00

For many years the writer has reviewed annually these books the last of which appears as the twenty first volume It contains 1197 pages and has 270 pertinent illustrations The subject matter is as usual so varied that a detailed review is impossible Suffice it to say that there are the original articles or case reports covering every conceivable type of disease This book is highly recommended to the general practitioner and is almost indispensable to the general surgeon M N FOOTE

A TEXT BOOK FOR MIDWIVES By JOHN S FAIRBAIRN M A B M, B Ch (Oxon) Fifth Edition Octavo of 369 pages illustrated London and New York, Oxford University Press 1930 Cloth $8 00

A very comprehensive text book in its fifth edition Physiology bacteriology and anatomy are given much space The preface states that the more advanced school of practicing midwives have an insatiable thirst for knowledge but it is not so in this country A wonderful book for midwives with no possible criticism except the small size of the type Proper assimilation and use of the material in this book would qualify midwives for intelligent management of all the obstetrical emergencies C A G

LEAD POISONING Report of the Committee on Lead Poisoning presented to the Industrial Hygiene Section of the American Public Health Association at the Fifty eighth Annual Meeting at Minneapolis Minn October 4 1929 Octavo of 37 pages New York American Public Health Association 1930 Paper 75c

The report of the Committee on Lead Poisoning of the American Public Health Association presented in pamphlet form is an attempt to set standards for diagnosis individual treatment and industrial control To industrial physicians and others interested in occupational diseases this endeavor to place the real facts as to lead poisoning on a rational basis will be welcome. It will aid in recognizing the early signs of lead absorption it may curb the extremist who thinks contact with lead directly or indirectly is in itself evidence of poisoning A F SHIPLEY

OUR NEIGHBORS

HOUSE OF DELEGATES IN TENNESSEE

The December issue of the Journal of the Tennessee State Medical Association devotes thirty pages to a belated report of the proceedings of the House of Delegates of the State Association, which met in Nashville, April 8-10, 1930, taking the place of the usual scientific articles. The report seems to consist of the stenographic record of everything that was said.

Medical Defense—Regarding medical defense, the report says:

"Last year we reported six non-suits that could be refiled. Two of these have been refiled. These two, with the twenty-two on docket last year made a total of twenty-four suits from last year.

"To January 1st, 1930, we had six suits filed, or a total of thirty-five suits on docket in the ten months.

"One other suit was refused defense on account of the member's failure to pay his defense fee covering the time of the alleged malpractice. Also two threats were referred to the committee.

"As accurately as we can estimate, about seventy per cent of suits are filed on pauper's oath. Every defendant will not report on that point when written for that specific information. (If you write the doctor a questionnaire and ask him a dozen questions, you will do well if you get an answer to a few of them. Why, I don't know. It seems to be in the make-up of the doctor.)

"Perhaps more than fifteen per cent of trials result in non-suit. Less than six per cent of suits result in compromise, and less than two per cent in judgment against the defendant doctor. I don't know whether everybody knows about a non-suit. If you bring up a case and the man can't get all of his witnesses there, as in some cases they can't get a doctor to appear against another doctor, and the judge is about to charge the jury to render a verdict, the man suddenly takes a non-suit. He has a year to refile that suit. Many times they will rehash it again. Things get compromised. We have one suit in one county that has been non-suited four times. The cost of these cases is never less than $40 to the county, sometimes $100, $200, $300 and $500."

Professional Directory: By authority of the Board of Trustees and the House of Delegates a directory in the Journal has been opened to the membership for use. It was our idea that there is a need for such a directory in a state publication; that it will increase the revenue of the Journal to some extent and keep all of its pages allotted to advertising filled.

(The December Journal contains the professional announcements of twenty physicians, listed according to their specialties.)

"The abstracting department continues a popular feature."

Dues and Registration Fees—Regarding dues the report says:

"Our organization is one of the few that carries on activities such as we carry on with membership dues of $4.00 per year. A vast majority of the states have dues of $10.00 per year and upward. Don't misunderstand me now, I am not advocating an increase of dues. I am anticipating our needs and have devised some means by which our increasing financial needs can be met in a logical way without increasing dues. They are as follows:

"1. A registration fee of $2.00 per registrant should be charged at each meeting (of the Association). This fund to go into the treasury of the Association to reimburse in part for money spent in preparation for that meeting.

"2. One-half of the revenue for commercial exhibits goes into the general fund of the Association and the other half into the hands of the local committee on arrangements.

"3. A matter already acted upon by you—the creation of a directory department in the Journal."

There was considerable discussion over the charge for registration at the state meeting. Dr. Taylor said:

"The very men here in town who are too busy to attend these sessions except for the reading of one paper are not going to come here and pay $2 to register. I am personally against that, and I believe every man who considers it rightly is against the proposition of the registration fee. If we have to raise money, let us raise it in some other way."

Dr. Zemp replied:

"I can't agree with Dr. Taylor at all. The medical profession is getting to be like a bunch of preachers. They expect to get everything for nothing. We who attend these meetings and keep up with the medical profession and go around to the various sectional meetings certainly get some benefit from those meetings, and certainly a small registration fee is a very small price to pay for it. I guarantee that the man who stays away from a meeting on account of the $2 registration fee will not come anyhow."

The registration fee was adopted.

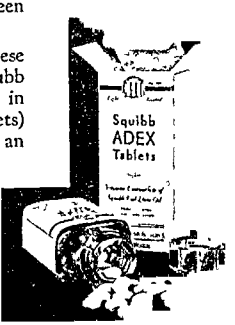
(*Continued on page* 120—*Adv. xii*)

NOW! Squibb provides ADEX TABLETS

A physiologically tested, highly potent and stable vitamin-concentrate of Squibb Cod-Liver Oil.

Cod-Liver Oil has long been recognized as a rich source of both Vitamins A and D, but universal use of the product has been prevented because of its characteristic odor and flavor.

These properties need no longer deprive your patients of these two important vitamins. After a decade of research, the Squibb Biological and Research Laboratories have been successful in developing, from cod-liver oil, a concentrate (Adex Tablets) containing many times as much Vitamin A and Vitamin D as an equal volume of the oil.



One Adex Tablet is equivalent in vitamin content to one-half teaspoonful of Squibb Cod-Liver Oil. Each tablet supplies not less than 1000 U. S P Units of Vitamin A and not less than 48 curative units of Vitamin D. The tablets are prepared under conditions which ensure maximum stability of vitamin content. Marketed in original bottles containing 80 tablets.

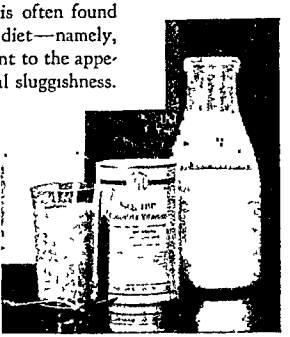
NEW! CHOCOLATE-VITAVOSE

For a Delicious, Vitamin-Rich Chocolate Drink by SQUIBB

From a vast amount of research work has come an explanation of the condition known as anorexia, or loss of appetite. It is often found to occur when one important factor is lacking in the diet—namely, Vitamin B. This factor is not only a remarkable stimulant to the appetite, it also aids digestion and helps to correct intestinal sluggishness.

There is now a new, pleasant way to supply Vitamin B in abundance—with Squibb Chocolate-Vitavose, prepared with Vitavose (wheat germ sugar), one of the richest sources of Vitamin B and iron.

Taken in milk, either hot or cold, Squibb Chocolate-Vitavose makes a delicious chocolate drink.



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(*Continued from page* 118)

The financial statement of the Journal was as follows:

"Statement of Medical Journal Receipts and Disbursements. For the Year Ended March 31, 1930.

"Receipts:		
Advertising	$4,900.67	
Cuts, Subscriptions, etc...	80.44	
Total Receipts		$4,981.11
"Disbursements:		
Printing 12 issues, March, 1929, to February, 1929, inclusive	$3,924.48	
Binding and Reprints....	49.00	
Salary, Secretary (2/3 of Salary Paid)	1,000.00	
Total Disbursements...		4,973.48
"Balance (Excess of Receipts over Disbursements)		$ 7.63"

THE "MEDICAL TIMES" AND "LONG ISLAND MEDICAL JOURNAL"

The medical profession of Long Island is homogeneous to a most unusual degree, being isolated by the surrounding water, and every part, even Brooklyn, having developed naturally from individual villages. The unity has been promoted by the Associated Physicians of Long Island, with its eight hundred members and its official organ,—the *Long Island Medical Journal.* Now the Journal, after twenty-four years of existence, is merged with the *Medical Times,* whose managers have come largely from Long Island. The January issue of the combined Journal says editorially:

"As an independent journal the *Medical Times* has won the confidence of twelve thousand individuals; now this confidence is also expressed by a number of bodies representing organized medicine.

"The Associated Physicians of Long Island, now a geographical center of seething activities in the medical sphere, is the fifth organization to register this confidence in one way or another. But in the last case an unusually significant recognition is involved, for the erstwhile organ of the Association, the *Long Island Medical Journal* itself, becomes on January first, 1931, of one flesh with the *Medical Times.* The new publication resulting from this consolidation will be known as the *Medical Times and Long Island Medical Journal.*

"The vigorous life of this young publication—

(*Continued on page* 121—*adv. xiii*)

(*Continued from page 120—Adv. xii*)

its first issue appeared twenty-four years ago has been such as to give a decidedly eugenic aspect to its marriage with the *Medical Times*. The professional progeny of these two trustees of the written word, who will address continents and hemispheres by reason of the far-flung and increased circulation of the new journal, should be a signally significant brood.

"Growth is the law of life. The 'metabolism' of our hospitals, medical schools, societies, medical libraries, clinics and centers is becoming more and more dynamic. Not the least factor making for improved professional metabolism is the sixth —the medical press. That the *Medical Times* has entered the fifty-ninth year of its life better endowed than ever with those elements which enable a publication to compete successfully in a changing world, is due to its adaptability to that world, its readiness to give and take, as shown in the present merger—for realists a significant sign of the times, medically speaking. There is a fine challenge in all this to the forces of organized medicine and independent journalism to go along together in a new way—for extremes to meet, if you like, and the courage that aims at better things to be well tested. The good of medicine itself should be the first, last and only consideration.

"So, in addition to the already great geographical character of the work done by the *Medical Times*, expression will now be given, in the columns of the new journal, to the genius that is germinating and flowering in the colossal medical center of Long Island, that 'Paumanok' beloved of her greatest son, one of America's immortals, Walt Whitman, who so often sang the praises of the 'Sea Beauty! stretch'd and basking!'

"The further destiny of Paumanok looms impressively in the medical scheme of things."

PUBLICITY BUREAU IN INDIANA

The Indiana State Medical Association maintains a Bureau of Publicity of three members who meet regularly. The minutes of the meetings of October 28 and November 11 are recorded in the December Journal of the State Association. They contain approvals of four news releases and provision for speakers for three clubs. They also record answers to questions, as follows:

"The following letter was received by the Bureau:

"'I recently treated the widow of a physician. Her illness resulted in her death. Her husband had been dead for some twenty-five years, and she is survived by two sons and a daughter. She owned some fairly valuable real estate

(*Continued on page 122—adv. xiv*)

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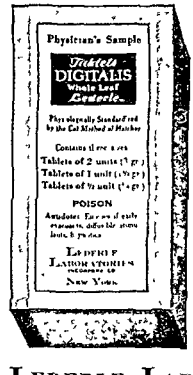
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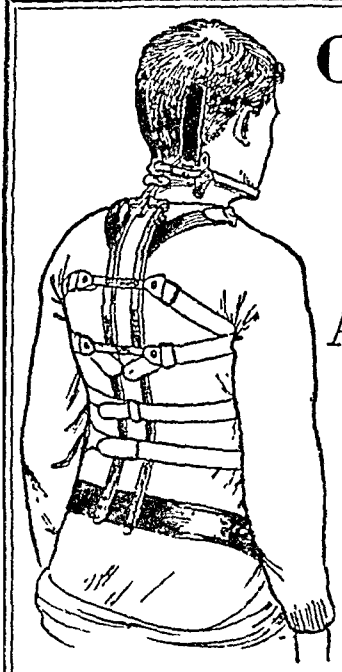
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of the

Medical Society

of the

State of New York

June 1-2-3, at Syracuse, N. Y.

Regular advertisers in this Journal given preference when applying for space in the Technical Exhibit Hall.

COMMITTEE ON PUBLICATION

(*Continued from page 121—adv. xiii*)

"'Should I make a charge for services against the family? I know that I should be somewhat governed by the prevailing local custom but am asking what might be the custom there.'

"The Bureau instructed the secretary to answer along the following lines:

"'The matter of charging for services rendered the patient in question seems to be governed by the personal relations between the physicians and his clientele, local custom, and the physician's own judgment. The Bureau feels that in the abstract there would be no violation of ethics in making a charge under the circumstances mentioned.'

"The following letter was received from a school nurse:

"'Please advise us how far we may venture in advising school children to go directly to an oculist for the care of any eye defects.

"'I am enclosing slips we use to report defects found and of course have had some criticism from the opticians and also one or two family physicians, who feel we should send all cases to them directly.

"'Please give us your statement as to the ethics of this procedure that we may advise our school board, one of whom is a chiropractor's wife, and another who has sent his children to an optician.'

"The Bureau requested the secretary to present this letter to an ophthalmologist asking that he suggest if there is any class of cases which might be referred to an optician or an optometrist and by such action make it possible for a grave condition of the eye to be overlooked. A report of this interview was to be given to the Bureau at its next regular meeting at which time the Bureau will prepare an answer to this question. The secretary was instructed to acknowledge the receipt of this letter and say that the questions would be brought to the attention of the Bureau at the next regular meeting.

"The following letter was received from *American Physicians and Surgeons,* The Midwest Company, Publishers, Minneapolis, Minnesota.

"'An important department in our forthcoming medical directory, *American Physicians and Surgeons,* will be that devoted to health resorts of the better class in every State. We aim to make this of real assistance to those who use the book by listing only resorts to which doctors would refer patients for the treatment of various ailments or for recuperation.

"'We have found it very difficult to obtain reliable information on the various resorts throughout the country, but we trust that you will be in a position to give us advice and assistance in preparing a final list for your State. Enclosed you will find a tentative list which we have prepared. As we wish to include only the

(*Continued on page 123—adv. xv*)

(*Continued from page 122—adv. xiv*)

most reliable and reputable resorts, we would greatly appreciate your advice as to the eligibility of those we have selected, together with any additions to the list you may wish to make.

"'Any information you may give us will be held in the strictest confidence, and we shall be very grateful for your cooperation.'

"The secretary was instructed to answer this letter along the lines indicated by the Bureau of Publicity. This organization has been reported by the Bureau of Investigation of the American Medical Association to be reputable.

"The following letter was received:

"'I have been asked to prepare a paper on Modern Tendencies in Diet and my husband has referred me to you. This paper is to be read before our local Women's Club. I would be happy if you will include some material on the vitamins.'"

The minutes also record several minor facts

PUBLIC RELATIONS COMMITTEE IN PENNSYLVANIA

The December issue of the *Pennsylvania Medical Journal* notices the action of the House of Delegates in establishing a Committee on Public Relations similar to that of the New-York State Society. The Journal says:

"One of the chief topics of critical discussion during the Johnstown sessions of our House of Delegates was the relations existing between the members of the organized medical profession in Pennsylvania and certain health agencies. Several delegates expressed the belief that separate committees should be created to attempt the establishment of more satisfactory relationships with the State Department of Health and with the State Nursing Board. After considerable debate the House decided that the existing Commission to Confer with Private and Governmental Health Agencies should become a permanent or standing committee, and that the subject of coordination between our Society and the State Department of Health should become one of its principal activities.

"Dr. I. H. Alexander, of Pittsburgh, who was reappointed chairman of the commission, is already active and has distributed the subjects referred to his committee to its various members.

"The committee's relation with the Pennsylvania State Dental Society has resulted in the

(*Continued on page 124—adv xvi*)



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COMMITTEE ON PUBLICATION

(*Continued from page* 121—*adv. xiii*)

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(*Continued on page* 123—*adv. xv*)

(*Continued from page 124—adv. xvi*)

"During the past year *Colorado Medicine* has received 65 books for review and 62 volumes of exchange journals. These books and journals become the property of the State Society and are available at the Medical Library in Denver

"The scientific section of the Journal has been ably edited by Dr. J. Rosslyn Earp, to whom the committee extends its thanks and appreciation

"Mr. Harvey Sethman joined the Journal as business manager in October, 1929. His diligence is evidenced by the following potent figures: In the first eight months of the present year the receipts for advertising have been $4,297.28, as contrasted with $2,880.53 for the first eight months of the year preceding, when no business manager was available.

"Another interesting comparison. Advertising receipts for the August issue in 1929 were $250.18. The advertising receipts for August, 1930, were $791.13, an increase of over two hundred per cent.

"For the first time in its history, *Colorado Medicine* is now operating at a profit, and it is to be anticipated that a substantial profit will be shown in the next annual report. The deficit shown in the present report is due to the fact that the advertising increase has benefited only the last five issues of the Journal, while the seven prior issues were run at the customary loss.

"The Committee extends its thanks to Mr Harvey Sethman for his efficient service as Business Manager of *Colorado Medicine*, the official organ of the State Society."

It is interesting to compare this report with that of last year as copied in the NEW YORK STATE JOURNAL of January 15, 1930, page 116.

MEDICAL ECONOMICS IN OKLAHOMA

The December number of the *Journal* of the Oklahoma State Medical Association contains a leading article in which Dr. E. P. Veatch discusses methods of bringing medical service within reach of the indigent in rural sections. Dr. Veatch divides the rural people into four classes:

(1) The well-to-do; (2) The farm owners; (3) Tenant farmers; and (4) Laborers; and continues:

"Under the present social order it is incumbent upon the county commissioner to decide who is sick and who is not. He must decide who is deserving or not deserving. He has never studied medicine a day, he has not studied the problem of the indigent sick. In cases in which he is in doubt or does not wish to decide, he reminds the sick and the physician that he is a member of a

(*Continued on page 126—adv. xviii*)

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(*Continued from page 125—adv. xvii*)

committee of three and that he cannot decide this. Thus he dodges the issue. He hides behind the other two commissioners and says that nothing can be done and that the first Monday of the month he will take it up with the other two commissioners and see what action can be taken. Neither the patient, the community, or the physician can put off this illness until the commissioners have time to meet and consider the merits of the case. In most cases when he wants a road or bridge built he hires an engineer. When he wants a public building constructed he hires an architect, but when it comes to passing upon a medical problem he considers himself thoroughly competent to pass on these conditions; and should he decide unfavorably, asks the neighbors to take care of the patients themselves or raise some money among the friends to pay for this service.

"The average fee paid by the county commissioners for hospital care is $15 a week on cases they approve. In the main no arrangement is made for the indigent sick outside of the hospital. That is at the expense of the country physician. These are taken care of usually in private hospitals at a loss.

"The problem of curative medicine with the people in class three or four must be met in one of two ways; first, a full time County Physician on a salary to look after this class of patients; second, an agreement with the physicians already practicing in the county to be paid for the actual expense of the care of this type of patient. It depends on the community as to which plan is the better. It is unfair to a physician to spend his time with patients who never can pay. He loses much of the better class of work if he does this. The public and the commissioners must be educated to the fact that the indigent sick is a social problem and should be taken care of through the regular channels of the county.

"This type of rural folk in class three and four are really deserving and will make American citizens if given a chance. Money invested in citizenship will surely bring in its return as much as money invested in public improvements. We have the idea it is right to spend all the money the county has to fix a mud hole in front of a man's house, but none whatever to care for the man within the house who is sick and has no credit, no money, and no way of receiving or paying for medical aid."

"The author believes that this is the solution. The county health office should be given the authority to pass on the physical condition of the patient, and an assistant be furnished to give the social and financial rating. This is how it would work. A physician sees a patient who never will be able to pay. He notifies the health office. This office immediately investigates and reports the

(*Continued on page 127—adv. xix*)

(*Continued from page 126—adv. xviii*)

case to the commissioners, with an opinion concerning the physical and financial condition. With these reports and that of the resident physician, they would have sufficient facts upon which to decide the merits of the case. This is the plan by which the indigent sick of the rural communities can receive proper medical attention and the physician be treated justly and with equality to all."

LEGISLATION IN WEST VIRGINIA

The January issue of the *West Virginia Medical Journal* contains the following presidential comments on educating legislators by Dr. C H. Maxwell:

"This is the President's Page I am proud of it. I hope to keep up its prestige, interest, and worth. The universal expression of loyal support of our Association makes one enter on his duties with a sense of the grave responsibility to the medical profession and the general public.

"We have been accused of being remiss in our duty to the general public, especially in preventing vicious or unnecessary legislation. We appoint a legislative committee and tell it to do the work. I felt that we should get closer to the ones in authority, so I sent a circular letter to each candidate for the legislature before the election, knowing that each one would read it in the quiet of his home and learn that the medical profession was ready to assist in having good laws passed Since the election I have sent the following to each member of the House and Senate:

"As a member of our legislature you will soon meet the other members in Charleston, and you will be called upon to assist in sifting the good bills from the bad ones. The doctors of the state have been accused of not doing their duty in helping to prevent legislation not to the best interests in the general public. This lack of cooperation has been due to their devotion of the welfare of their own immediate surroundings and they have not felt that their influence for good should extend to the entire state. But recently they have been aroused to the fact that they owe a duty state-wide in its scope.

"It would be well if the members of our legislature would consult their family physicians and the doctors in the legislature on all matters of public welfare and get their views in such matters. These views, in the main, would be correct, and be an aid to the legisla-

(*Continued on page 128—adv. xx*)

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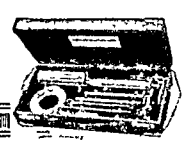
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THE WISCONSIN MEDICAL JOURNAL

The November number of the *Wisconsin Medical Journal* contains a report of the meeting of the House of Delegates held September 9th to 11th, in Milwaukee. The Editorial Board discussing new plans for the State Journal reported:

"During 1929, Dr. Doege, then President of the State Medical Society, presented to the Council a program which had as its chief ideal and aim the improvement of the quality of the scientific work done by Wisconsin physicians and surgeons. The basis of Dr. Doege's plan was the employment of a very high grade of physician who was, in the first place, to act as medical editor of the Journal. In the second place, Dr. Doege's idea was to have this man stimulate medical practice and thought of Wisconsin physicians through articles in the Journal, through personal contact, and by any other means available. As this proposal involved an expenditure of between ten and fifteen thousand dollars, it was considered out of reach of the State Medical Society's finances at that time."

The Board considered three plans: 1, a full-time editor-in-chief; or 2, a part-time head of the Journal; or 3, an unpaid editorial staff, as at present. But the Board reported that it had published an appeal to the members to write their opinions to the editor, and the response was one lone letter, concerning which the editor reported:

"As a result of that editorial, we have one letter of criticism, a very good one and very much to the point, a very much worth while criticism, and yet it is the first letter of criticism that we have had in a number of years, how many I do not know."

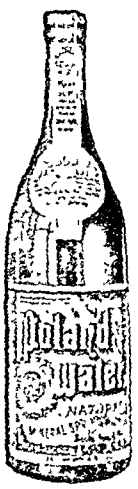
The employment of a full-time editor is dependent on an increase in the annual dues of the State Society. (See N. Y. STATE JOURNAL OF MEDICINE, March 1, 1930, page 302).

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NEW MEDICAL SCHOOL IN LOUISIANA

The January issue of the *New Orleans Medical and Surgical Journal* contains the following announcement of a new medical school in connection with the Louisiana State University:

"Governor Long in his announcement said that the first two years will be conducted at Baton Rouge; the last two years will be in New Orleans in the Charity Hospital. The general plan is that the new school will start to function next fall. There will be required of the students a year's service as an interne before receiving their degree. The Charity Hospital will have ample space not only for the new school but also for the Tulane Medical School. The Governor announces that it is his plan to give to the prospective medical students of Louisiana an education, which will be within their financial resources and which will increase the number of physicians practicing in the State, more particularly in the country districts. The new school will be a splendid addition to the medical activities of the State, and should be welcomed by everyone in the profession."

GRIEVANCE COMMITTEE IN WASHINGTON

The House of Delegates of the Washington State Medical Association, meeting on September 2, passed the following resolution:

"In the matter of a Grievance Committee, we recommend that, in view of the fact that the subject is too large to be decided hastily, it be referred to the Board of Trustees of this association and the Executive Committee of the Public Health League, with instructions to consider this question in all its angles, secure such legal advice as may be deemed necessary, and report their findings and recommendations to the House of Delegates at the 1931 session of the Washington State Medical Association.

"This resolution was adopted."

NEW YORK STATE JOURNAL of MEDICINE

PUBLISHED BY THE MEDICAL SOCIETY OF THE STATE OF NEW YORK

Vol. 31, No. 3 · NEW YORK, N. Y. · February 1, 1931

PULMONARY COMPLICATIONS IN SURGERY OF THE HANDICAPPED PATIENT*

By EDGAR W. PHILLIPS, M.D., ROCHESTER, N. Y.

From the Department of Surgery, The University of Rochester School of Medicine and Dentistry.

THERE has been, during the past few years, a growing tendency to study the end results in surgery. The need of such a step was well expressed by Cutler and Morton[1] when they wrote "Taking our mishaps one by one, they are soon forgotten and we may be led to believe that our results are better than they appear in cold figures." A study of the many statistics published upon the incidence of postoperative pulmonary complications warns us that these dangers should receive careful consideration when an operation is being advised. The lack of carefully weighing the benefits to be derived from an operation with the dangers incident to it, combined with the often very casual preoperative examination of the patient, has resulted in tragedies distressing to the patient and to the surgeon.

The collected figures of the incidence of postoperative pulmonary complications cover operations performed upon all types of patients. There is no special group of complications which are peculiar to the so-called handicapped patients; these patients differ from the average surgical cases only in that they have an increased incidence of all of the possible pulmonary complications and an increased mortality percentage of the morbidity. In an analysis of the literature up to 1921, Cutler and Scott[2] collected statistics of about 100,000 cases. In this large group, the pulmonary morbidity, following operation, varied from 1.2 per cent to 3.9 per cent. These authors feel that the percentage of pulmonary complications, following operations, is close to 3 per cent of all cases operated upon. With the improved methods of diagnosis and the increased interest in this subject, there seems to be little doubt that a larger percentage of these complications is being discovered. Coryllos[3] says that there is some degree of collapse of the lung in at least 10 per cent of all patients after surgical operations. It seems quite likely that, in the older statistics, many of these less marked changes were overlooked. The percentage of pulmonary complications, following operations upon the abdomen, is very definitely increased over operations upon the extremities. Boland and Sheret[4] state that 13.7 per cent of all abdominal operations are followed by pulmonary complications. The morbidity percentage is further increased in operations upon the upper abdomen. At the Lakeside Hospital, Studley[5] found postoperative pulmonary complications in 13.7 per cent of patients having upper abdominal operations. The mortality of these complications has been recorded as high as 58 per cent.

The various types of postoperative pulmonary complications are: acute bronchitis; bronchopneumonia and lobar pneumonia; massive atelectasis; pleurisy; lung abscess; empyema; thrombo-embolic disease; pneumothorax and the activation of a latent focus of pulmonary tuberculosis.

(a) Acute Bronchitis.—This condition is very likely to make miserable the postoperative convalescence of patients operated upon during a season in which acute respiratory infections are prevalent. This is especially true if the patient is operated upon during his convalescence from such an infection. The symptoms usually begin within twenty-four to forty-eight hours after operation. There is severe cough, with profuse expectoration; the patient is apt to be somewhat cyanotic and many rales are found upon examination of the chest. The prognosis generally is considered good and the presence of this com-

* Read at the Annual Meeting of the Medical Society of the State of New York, at Rochester, N. Y., June 3, 1930.

plication has not been considered serious. However, if time should prove that the interesting theories advanced by Coryllos and Birnbaum[6] are true, the presence of this complication may be regarded with apprehension. They think that the postoperative complications in the pulmonary parenchyma may have a common pathogenesis and that they are secondary to bronchial obstruction. The increased secretion incident to acute bronchitis may play a part in the subsequent development of more serious complications—either pneumonia or atelectasis.

(b) Pneumonia.—Whether the theory of aspiration; the embolic theory or the theory of bronchial obstruction will finally be accepted as the etiological factor in postoperative pneumonia, is rather unimportant. The main consideration is that we have done away with the term "ether pneumonia"; it has been found that the incidence of pulmonary morbidity is as great in patients operated upon with gas-oxygen anesthesia or with local anesthesia. Bronchopneumonia is a more common complication than the lobar type. Cutler and Scott,[2] in a collection of 31,368 cases operated upon in general surgery, found that 1.12 per cent developed pneumonia and of these, 46.1 per cent died. This mortality rate is well above that of the medical pneumonias except those occurring in the physically infirm. These postoperative pneumonias are generally caused by the saprophytic Group IV pneumococcus which organism is present in the upper respiratory tract of over 50 per cent of normal individuals. It is surprising that this pneumococcus of low toxicity should cause so high a mortality in postoperative pneumonias.

(c) Massive Atelectasis.—Much confusion still exists in the use of terms describing this condition. If we are to call the airlessness of a lung "massive atelectasis," the term should be reserved for that group of cases in which the pathogenesis is not some form of compression. Coryllos and Birnbaum[7] have suggested the name "obstructive massive apneumatosis of the lung." This seems descriptive and differentiates the condition from the atelectasis produced by compression.

A large amount of clinical observation and experimental work, upon this subject, has appeared in the literature during the past ten years. Time does not permit more than a brief discussion of this interesting problem. There have been several theories advanced to explain the etiology and these may be divided into three classes: (1) Decreased respiratory motion. (Pasteur attributed atelectasis to paralysis of the diaphragm. Bradford thought that an atelectasis, following wounds of the chest wall, was due to immobilization and retraction on that side of the chest). (2) Bronchial obstruction. The majority of those writing upon this subject feel that obstruction some place in the bronchial tree is necessary for the production of atelectasis. This obstruction is described by some as a reflex contraction of the bronchial muscles and, by others, as a mucosal swelling, but the majority have considered it to be due to plugging of the bronchi with mucus. (3) Some investigators have suggested that the origin of the disease lies in a vasometer reflex to which is later added plugging, by secretion, in some part of the bronchial tree.

Irrespective of what the original etiological factor is, everyone agrees that atelectasis cannot occur without complete obstruction some place in the air passages leading to the involved lung. It is also equally true that this condition is most commonly a postoperative complication in patients who have been subjected to abdominal operations. These patients have hypoventilation and Churchill and McNeil[8] have shown that the limitation of respiratory excursion leaves the patient with but 25 to 50 per cent of his preoperative vital capacity. This hypoventilation is the result of splinting of the abdominal and thoracic muscles, because of pain; abdominal distention; the use of a tight abdominal binder and the use of morphine for the control of pain during the immediate postoperative period.

The extent of atelectasis varies from the small, patchy involvement to a condition in which all the lobes of one side are rendered airless. In the marked forms, the symptoms are characteristic and the diagnosis is readily made if one is familiar with the picture. However, before Pasteur's rediscovery of the condition, it was commonly called pneumonia. The milder forms of lobular or patchy atelectasis are frequently overlooked. The symptoms vary according to the degree of involvement. In the massive forms of atelectasis, there occurs, usually within the first two or three days following operation, a feeling of tightness in the chest, accompanied by cough and expectoration, and the usual evidence of mild infection as expressed by temperature and pulse elevation. Examination of the patient reveals a characteristic picture: There is retraction and immobilization of the affected side of the chest, with narrowing of the interspaces, and retraction of the heart towards the side of the disease. Upon *x*-ray examination, there is obliteration of the lung field by a shadow and evidence of a raised diaphragm on the diseased side, together with cardiac displacement toward the involved side. The minor forms of atelectasis are quite likely to be missed as the symptoms and signs are not

marked and the condition is apt to be of short duration.

The observation of patients, who have started in with the characteristic symptoms of the initial period of an atelectasis but who have been spontaneously relieved of these symptoms, makes me feel that there is an abortive form of atelectasis. This was strikingly illustrated in the case of one patient who stated that his symptoms of about twelve hours' duration were suddenly relieved by a coughing spell during which he had the sensation of something breaking loose in his chest.

(d) Pleurisy.—Pain of pleuritic origin is usually the result of a small area of infarction from a sterile embolic process which lodges in the distal lung capillaries. It may be the forerunner of multiple emboli in the smaller vessels, or possibly of a fatal pulmonary artery blockage. Pleurisy, either wet or dry, may also be associated with postoperative pneumonia and, more rarely, is the result of the activation of a latent focus of pulmonary tuberculosis.

(e) Lung abscess.—Operations upon the nose or throat contribute many cases of lung suppuration. However, in any large series of lung abscesses, there will be found incidences in which this complication follows operations in other regions of the body. It may be the result of the breaking down of a postoperative bronchopneumonia, or an area of infarction, when the embolus producing the infarction comes from an infected field. The physical signs and symptoms of a lung abscess are so well known that they will not be discussed here.

(f) Empyema.—Infection of the pleural cavity is not a common postoperative complication. It may follow a postoperative pneumonia or a lung abscess. In addition to the cases originating from intrapulmonary lesions, infection may extend through the diaphragm from subphrenic collections of pus.

(g) Thrombo-embolic Disease.—It should be emphasized that embolism of the lungs is more of an incident to the postoperative period than a complication of the operation. Meyer[9] says that in the municipal hospital at Charlottenburg-Westend, where there is a surgical service of five hundred beds, no case of embolism of the lung occurred on this service in a period of one month while, during the same period, with the same number of beds, the medical service lost seven patients with pulmonary embolism.

The pathology of thrombo-embolic disease is not understood. Thrombotic processes in the prostatic and pelvic plexuses and in the femoral veins, are the common sources of emboli. The present knowledge of thrombus formation, which ascribes clotting within the vessels to changes in the blood constituents, rate of flow of the blood stream and changes taking place in the vessel walls, seems insufficient to explain the process. According to Walters,[10] physiological changes and adjustments, which follow surgical procedures, seem to be concerned in the formation of postoperative pulmonary emboli. These changes, he feels, are the result of a decrease in metabolic activities; a tendency towards a decrease in the rate of blood flow, with a decrease in blood pressure and changes in the cellular constituents of the blood.

Pulmonary infarction usually occurs a number of days after operation. The emboli are multiple and are most commonly located in the lower lobes. In non-fatal pulmonary embolism, there is often a very abrupt onset of dyspnoea; pain in the chest; cough and sputum containing a small amount of blood. Fever is often absent. The *x*-ray reveals a wedge-shaped shadow with its base at the lung periphery. There are all grades in the severity of the symptoms, from the mild case which resolves, without any residuum, in a few days, to a plugging of the pulmonary arterial system of so great an extent that death is almost immediate.

One of the greatest tragedies occurring in medicine is that of a fatal pulmonary embolism. As a postoperative complication, it generally occurs from seven to fourteen days after operation, at a time when the family and the surgeon feel that the patient has made a satisfactory recovery. At times, there are premonitory warnings, caused by showers of small emboli, but, frequently, the disaster comes suddenly. The patient may cry out with pain and the facial expression is that of great anguish. Extreme dyspnoea, with marked cyanosis, follows and the patient may die almost immediately. Sometimes the fatal outcome is delayed for a great many hours. Lord[11] in discussing a paper by Nystrum of Sweden, read before the annual meeting of the American Surgical Association on May 17th, 1930, said that of the 60 cases of fatal pulmonary embolism that he had studied, only 18 lived for ten minutes or over. In these suddenly fatal cases, the embolus is usually large and is situated at the bifurcation of the pulmonary artery, extending into both branches and practically occluding them.

(h) Pneumothorax.—Spontaneous pneumothorax as a postoperative pulmonary complication is rarely observed in operations that do not open the thorax. I have seen but one example of this complication and this occurred following a gastro-enterostomy performed because of obstruction, from carcinoma, in the third portion of the duodenum. The symptoms, physical signs and *x*-ray picture are characteristic and need not be discussed here.

(i) Activation of a Latent Focus of Pulmonary Tuberculosis.—Operations performed upon patients with a latent focus of pulmonary tuberculosis may cause an activation of the process and precipitate a downward course, eventuating in the death of the patient. Unrecognized active tuberculous lesions in the lung may also spread more rapidly as a result of anesthesia and the debility following an operative procedure. It is imperative that careful chest examinations be made, before a patient is submitted to an operation, in order that this complication may be prevented.

Prevention and Treatment of Postoperative Pulmonary Morbidity.—Most operations, today, are of the elective type and safety should not be sacrificed to hasten the procedure. The better the patient's general condition when he comes to the operating room, the fewer will be the postoperative complications. Surgical enthusiasm must be held in restraint in the presence of upper respiratory infections. The chest examination should be thorough in order to rule out bronchitis and tuberculosis. Those patients with myocardial weakness will be benefited by a period of rest and digitalization.

Hyperventilation, at the conclusion of the operation and repeated during the early postoperative hours, upon the appearance of symptoms suggesting pulmonary involvement, will lower the incidence of lung morbidity. Graham[12] says that all that is necessary to prevent massive atelectasis is to insure a proper inflation of the lungs. In the surgical clinic of the University of Rochester Medical School, hyperventilation, with carbon dioxide, has been used, at the suggestion of Dr. W. J. M. Scott, for four and one-half years and no case of atelectasis has developed in a patient receiving hyperventilation. The value of this type of hyperventilation has been proven by Henderson and Haggard[13]; using it for the treatment of carbon monoxide asphyxia, they discovered a notable decrease of postasphyxial pneumonia. Henderson, Haggard, Coryllos and Birnbaum[3] believe that apneumatosis is prevented and relieved, and the risk of pneumonia eliminated, by the inhalation of carbon dioxide.

Inhalation of carbon dioxide and oxygen causes the most active hyperventilation, However, increased distention of the lung may be brought about by encouraging coughing and deep breathing; the sparing use of opiates; the turning of the patient from side to side and by the struggling incident to the passage of a bronchoscope.

Prevention of Embolic Disease.—There is, apparently, very little that can be done to prevent thrombo-embolic disease. Walters[10] advises the use of desiccated thyroid gland tablets, in doses of two grains, in order to combat the decreased metabolism. He also encourages patients to move about in bed and flex their arms and legs and turn from side to side. Since following out this treatment in a group of 4,500 cases having had major surgical procedures, there was an incidence of fatal pulmonary embolism in less than 0.09 per cent. In a larger series of cases between 1917 and 1927, the incidence of fatal postoperative embolism was 0.34 per cent.

In Germany and the Scandinavian countries, many attempts have been made to remove the emboli from the pulmonary arteries. Trendelenburg, in 1908, first proposed this procedure but it was not until 1924 that Kirschner saved the first patient by this heroic operation. Since then two recoveries have been credited to Meyer[9]; two to Nystrum and two to Crawfoord in Giertz's Clinic. In patients, with massive pulmonary embolism, who live for at least ten minutes and who can, definitely, be said to be dying, this operation seems justified.

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SURGERY OF THE HANDICAPPED PATIENT: THE CHOICE OF THE ANESTHETIC*

By W. J. MERLE SCOTT, M.D., ROCHESTER, N. Y.

From the Department of Surgery, the University of Rochester, School of Medicine and Dentistry.

USUALLY the choice of an anesthetic is a matter of personal preference and convenience to the surgeon and patient. In most operations of election it is unimportant in regard to the ultimate outcome whether a general, a spinal or a regional infiltration anesthesia be employed. Each surgeon has his personal preferences and most of us tend to become routinists in this matter. In the group of handicapped patients, however, the choice of the anesthetic becomes a matter of progressive importance as the degree of the handicap increases. Operations of election in such individuals can of course be postponed or denied to the patient. Operations of urgency or necessity, however, must be carried out. Consequently it is incumbent upon us, by the choice of our anesthetic, to diminish the harmful effect of the handicap as much as possible, or at least not to increase it more than necessary.

Fifteen years ago the number of anesthetic agents from which to choose was decidedly limited. In this country ether was used with few exceptions, though nitrous oxide-oxygen and local anesthesia were skillfully employed by a minority. In the last decade, however, we have made very considerable advance with our anesthetic agents. New ones such as ethylene, avertin, and sodium amytal have been added for clinical use and valuable improvements have been made in the administration of the previous ones, particularly in connection with the advantageous use of carbon dioxide during and at the end of inhalation anesthetics and with improvements in spinal anesthesia.

The perfect anesthetic has not yet been found. Such an agent should produce entire absence of disagreeable sensations for the patient combined with complete muscular relaxation without any immediate or late deleterious effects. Each of the anesthetics to be considered aproaches this ideal in some ways more closely than in others, so that each has its particular advantages complicated by its own disadvantages. As the handicaps vary greatly in their characteristics, it is necessary in each instance to pick that anesthetic which is best adapted to the individual situation. It seems advisable, therefore, to consider briefly the advantages and disadvantages of each one.

CHOICE OF ANESTHETIC

	Advantages	*Disadvantages*
Ether	Universal Applicability Relaxation Large Margin of Safety	Metabolic Changes Pulmonary Irritation
NO_2O_2	Rapid Recovery Minimum Metabolic Changes	Poor Relaxation Venous Congestion
Ethylene	Advantages of NO_2O_2 Better Relaxation	Explosibility Relaxation Incomplete
Spinal	Muscular Relaxation Contracted Intestine	Irreversible Drop in Blood Pressure Rare Nerve Injury
Basal	Loss of Mental Trauma Less Postoperative Discomfort No Venous Congestion	Irreversible Hypersensitivity
Local	Minimum Trauma and Metabolic Changes	Time and Space Limitations

Discussion of Anesthetic Agents

Ether produces in general a very satisfactory anesthetic with good relaxation. Its chief drawbacks consist in metabolic changes and post-operative discomfort. In high concentration it may produce pulmonary irritation, though this factor has certainly been over-emphasized. Nitrous oxide-oxygen is superior to ether in the speed with which induction can be comfortably completed and the rapid recovery of consciousness after operation. In a well carried out anesthetic there are very few metabolic changes. The chief defects consist in poor relaxation, venous congestion and a tendency to an increase in blood pressure. Ethylene has the advantages outlined for nitrous oxide-oxygen added to which there is better relaxation of muscle spasm. Against its usefulness is its explosibility and the fact that relaxation with it is not ordinarily as complete as with ether. There is no doubt that the explosive hazard of ethylene is slight when proper precautions are taken. This has recently been the subject of a report by a special committee of the American Medical Association to study anesthesia accidents. Spinal anesthesia had for many years been used for a limited group of patients, particularly in amputations of the leg for arteriosclerotic or diabetic gangrene. The more recent applica-

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tion of ephedrin to stabilize the blood pressure and a better understanding of the mechanism of its serious reactions greatly increased the field of usefulness of this anesthetic. Its particular advantages consist in muscular relaxation and contracted intestines. Its disadvantages are its irreversibility, the depression of blood pressure, and rare nerve injuries that occur with it. While it is usually a most satisfactory anesthetic, it still has a greater hazard from serious accidental sequelæ than the inhalation anesthetics. This danger is slight and is not to be thought of where the advantages of this particular form of anesthetic outweigh them. For example, it is almost always my anesthetic of choice for cholecystectomy. The muscular relaxation and the ease with which the abdominal contents can be excluded from the field more than outweigh this very slight risk. However, in the usual, uncomplicated, inguinal hernia without obesity, it seems to me that its routine employment in place of local or inhalation anesthesia is undesirable. The basal anesthetics, avertin and sodium amytal have been introduced in the last five years. At first, the attempt was made to employ them as the sole anesthetic agent. This was followed in both cases however by unfortunate results due to the varying effects of the substance upon different individuals. With such doses, patients recovering from amytal have a prolonged excitement period. With avertin used in these doses several fatalities occurred. In both cases then the dose has been reduced and a basal anesthetic is induced which occasionally is sufficient alone but usually has to be augmented by either local or inhalation anesthesia. The advantage of such a procedure is the loss of mental trauma, lessening of postoperative discomfort, and from the technical standpoint, the absence of venous congestion when nitrous oxide-oxygen is used as the supplement. With each of these basal anesthetics the patients go to sleep but the depth of the sleep varies with each person. The disadvantages consist in the irreversibility of the action and the individual differences in effect. Used as basal anesthetics, however, both of them seem safe and possess very real advantages in certain cases. Much more extensive clinical trial will be necessary before the comparative advantages between these two can be stated. Sodium amytal is given intravenously and ordinarily is associated with practically no fall in blood pressure but does seem to depress the respiratory reflexes more than avertin. The latter is given by rectum. Its solution must be carefully tested by a simple procedure before administration, as any decomposition causes the formation of a substance irritative to the rectal mucosa. While avertin is ordinarily associated with a drop in blood pressure of 20-30 mm., it rarely requires even the administration of ephedrin to peg this. Also the addition of nitrous oxide-oxygen usually rapidly raises the pressure if it does drop. This sequence, avertin followed by nitrous oxide-oxygen, has in our hands given very satisfactory results. Barbituric compounds in large doses have been given by mouth for basal anesthesia, but we have had no experience with their oral administration for more than a hypnotic effect. With local anesthesia (including infiltration block and caudal injection) there is a minimum of trauma and of metabolic effects. This is ordinarily an ideal anesthetic where it can be applied with complete satisfaction. Its limitations are chiefly those of time and space in the blocking of all nerves to the area involved

Effect of the Handicap on the Choice of Anesthetic

In actually choosing the best anesthetic for a given handicapped patient, two factors must be kept in mind. First, the advantage of that particular anesthetic in relation to the type and degree of handicap; and second, the disadvantage of that anesthetic in relation to the latter. Consequently it is impossible ordinarily dogmatically to say that one anesthetic or another is preferable for all instances of a given handicap. The factors pro and con must be carefully weighed in each case, though there are certain general principles which apply. Perhaps this situation can be expressed in a formula as follows:

The choice of anesthetic = advantage x handicap—disadvantage x handicap. Let us see now how this is applied to individual types of handicaps.

Diminished cardiac reserve. Nitrous oxide-oxygen is a very simple and satisfactory inhalation anesthetic in the majority of patients. The rapid recovery and minimum metabolic changes as advantages are very satisfactory with this handicap. However, the venous congestion and anoxemia associated with it greatly augment the negative side of the expression. Consequently this anesthetic should not be used in the presence of markedly diminished cardiac reserve. Ether on the other hand has no serious effect upon the heart, in fact it probably has a mild stimulating action. It does not produce venous congestion and is a satisfactory anesthetic for moderate degrees of diminished cardiac reserve. Well compensated valvular lesions are not serious handicaps from the standpoint of the anesthetic. However, if the myocardium is maximally in-

volved, there is no anesthetic that is less harmful than local anesthesia in carrying out a minimum procedure under it.

Diminished kidney function. Here the factor of metabolic effects is important and consequently an anesthetic should be chosen that does not harm this element. Nitrous oxide-oxygen, with a minimum of ether if necessary for relaxation, answers very well where the operation is more extensive than can be done under local anesthesia. The basal anesthetics and full ether anesthesia should not be used in this case.

Hypertension and arteriosclerosis. An anesthetic is not desired that throws an added strain on the arterial system and also under these conditions a sudden drop in blood pressure is probably more serious than in normal individuals. In marked degrees of hypertension, ether is probably superior to nitrous oxide-oxygen as a consequence of the former limiting factor. And in view of the particular danger of a sharp drop in blood pressure, spinal anesthesia and avertin are also contraindicated here. Moderate degrees of hypertension do not constitute a serious handicap. In arteriosclerotic disease of the extremities, local or spinal anesthesia is particularly satisfactory.

Obesity. Extensive local infiltration is undesirable on account of the lack of resistance and consequent greater liability to a low grade wound infection in adipose than in other tissues. Severe grades of obesity constitute major handicaps for surgical procedures. Spinal anesthesia is very satisfactory in such cases even for operations that in normal individuals are too simple for this anesthetic such as inguinal hernia. The possibility of cardiac impairment must also be borne in mind in obesity.

Diabetes. With modern methods of control of this condition it rarely need be a serious handicap at the time of operation. Even in most severe grades, the diabetic condition and acidosis can be brought under control within a few hours. Ether is in general contraindicated. If an inhalation anesthetic is used, nitrous oxide-oxygen and ethylene are preferable. However, it is better to give some ether for relaxation than to be seriously handicapped during the operation by rigidity. Spinal anesthesia is an excellent choice if it is technically satisfactory.

Hyperthyroidism. The use of pre-operative preparation with iodine has greatly simplified the problem of operations for hyperthyroidism. Occasionally, however, we are confronted with a patient who is no longer susceptible to improvement in this way, particularly where iodine has unwisely been used too long by the patient or his physician. In such uncommon instances the patient may be in much worse condition than before iodine was given. The alleviation of mental anxiety is an important element in the handling of such patients. The method of "stealing the gland," given us first by Crile with the dummy nitrous oxide inhalation, is very effectively carried out with these basal anesthetics. With amytal, the patient can be told that he is getting glucose intravenously; while with avertin the procedure is very simple, the anesthetist at the same hour for two mornings preceding the day of operation gives the patient rectal tap water. There is no variation from this program on the date of operation except that the avertin solution is substituted for the tap water. The patient goes to sleep without knowing that he is to be operated upon and is transported to the operating room without awakening him. The addition of nitrous oxide-oxygen after avertin does not cause venous congestion as it frequently does when administered alone.

Intestinal obstruction. In the early stages, spinal anesthesia has great advantages over inhalation agents as the intestinal motility is not interfered with and it is not a constant struggle to keep the abdominal contents from pushing up into the operative wound. In the later stages, if actual gangrene of the bowel has occurred, there may be the danger of rupturing the weakened area by augmenting the peristaltic force. If the peripheral vascular deficiency of the late stage has occurred then the danger of a fall in blood pressure becomes significant. At this stage probably no operation is justifiable that cannot be carried out under local anesthesia, usually an enterostomy, and exploration is postponed until the condition of the patient warrants it.

Toxicity-Cachexia. When far advanced, the same reasoning as employed in the late stages of intestinal obstruction applies to this whole group. The patient's reserves will not withstand an operative procedure that is too extensive to carry out under local anesthesia.

Blood loss, shock, anemia. Obviously no operation should be started before the blood volume available for circulation is sufficient to meet the needs of the latter. Specifically if the blood pressure has progressively dropped below 90 with acute hæmorrhage, operation is contraindicated until the circulatory condition has been improved, unless the bleeding is from a large artery. It is perhaps not so generally realized that the blood pressure may be normal or slightly increased with a long continued or repeated blood loss if the process has occurred slowly. This arises through compensatory vaso-constriction to enable the vital organs to

be served. Such a patient, however, is on the verge of a serious break in the circulation from even a very small decrease in the available circulating blood. Consequently a degree of vasomotor paralysis, which, occurring in an ordinary individual, is without great significance, may be fatal in this case. Specifically, I believe that spinal anesthesia and avertin are contraindicated in all cases where there has been any serious impairment in the circulating blood volume whether this is from acute blood loss, shock, or severe anemia. Local or the inhalation anesthetics are preferable for this handicap.

Pulmonary disease. In active or late tuberculosis, operation should be avoided if possible. Probably the secondary results of the operation itself are much more important in lighting up such processes than is any direct effect of the inhalant upon the lung tissue itself. Minute emboli, arising from thrombosis of the small vessels which invariably accompanies any wound and lodging in the involved lung fields, are important causes of lighting up such latent or pre-existent pulmonary disease. Possibly also other circulatory changes arising from the reaction to the operation or to absorbed products from the operative field are significant also in this regard. There is a general prejudice against the use of ether in such cases. This probably has some basis for it and should be regarded. With pre-existent lung pathology when operation is necessary, local anesthesia should be employed if feasible.

Diminished vital capacity. Post-operative pulmonary complications have a much higher incidence whenever the vital capacity is diminished from any cause. Consequently this should be considered and prophylaxis instituted against this danger particularly in such cases. If the patient does not have tuberculosis he should receive hyperventilation at the end of operation and his position in bed frequently changed to overcome the hypostatic factor. The cardiac function should also be considered. A careful study of a group of patients with epigastric incisions shows that invariably after this procedure the lungs occupy a diminished volume and hypoventilation is present. Work is being carried out at the present time in an effort to overcome continuously this hypoventilation without inducing secondary harmful effects. Probably this factor of preventing hypoventilation is the most important one in connection with the anesthetic problem in these patients with diminished vital capacity.

Conclusions

1. The choice of the anesthetic, usually a matter of personal preference and convenience, becomes important in the handicapped patient.
2. Each anesthetic has certain advantages complicated by its own disadvantages.
3. In each case the choice of the anesthetic is derived from carefully weighing its advantage against its disadvantage for the particular type and degree of the handicap.

HISTORY OF THE MEDICAL SOCIETY OF THE COUNTY OF RENSSELAER

By W. B. D. VAN AUKEN, M.D., TROY, N. Y.

The report of the Historian at the one hundred and twenty-fifth anniversary dinner of the Medical Society of the County of Rensselaer, held in the Hendrik Hudson Hotel, Troy, N. Y., December 10, 1930.

SIXTEEN years before General Grant was born, in the days when doctors of medicine were paid by voluntary donations from their patients, consisting of fruit, vegetables, wood and other necessities of life, a group of twenty physicians comprising all the medical men of Rensselaer County, gathered together July first, 1806, and organized the Medical Society of the County of Rensselaer. This was six months before the date of the actual founding of the New York State Society. Fifteen years before our society was organized there was only one doctor in the entire county. On our thirty-ninth birthday there were twenty-five, on our seventieth, forty-one, on our eighty-fourth, eighty-seven, about one hundred on our hundredth and tonight we find one hundred and twenty physicians in Rensselaer County.

A few of the men who organized our society were called Aaron, Benjamin, Abner, Moses, Ashner, Eli, Hezekiah, Samuel, John and David.

Doctor Reed B. Bontecou at the age of eighty-two was the historian at our centenary dinner given at the Troy Club on February twenty-second, nineteen hundred and six. His report is now a part of permanent records in "Landmarks of Rensselaer County, New York," by George Baker Anderson. This report is too lengthy to abstract and those interested may read it by applying to the Rensselaer County Court library.

Doctor Bontecou, a nationally known surgeon, was called the Napoleon of Surgery. He was among the first in the country to have closed a typhoidal perforation of the bowel. He was assisted at this operation by his student, Doctor H. C. Gordineer, whom we have all known and whose memory we hold dear. In eighteen forty-four, Doctor Bontecou reported witnessing the

ligation of the left subclavian and amputation of the right shoulder while in New York, both of which were done without anæsthesia He was the first man to call the attention of our society to the use of Diphtheria antitoxin He said that membranous croup first appeared in Troy in eighteen fifty-eight and reported several cases cured by antitoxin in eighteen ninety-five Doctor William P Seymore in the same year mentioned eight recoveries out of nine cases of membranous croup which he had treated by intubation, in four of which he used antitoxin Doctor Bontecou was an accomplished naturalist In the early 'fifties he was sent down to the Amazon by the Smithsonian Institution where he collected some flora and fauna.

Doctor John Wright, a preceptor of Doctor Bontecou, was the first man to make ether and chloroform in Troy He used it to anæsthetize a pet raccoon Doctor William P Seymore another of our early members was an occasional sufferer of typhlitis as it was called He told Doctor Bontecou that when he had the next attack, he wanted Bontecou to remove his appendix Records are not available to show whether Doctor Seymore died with or without his appendix Appendectomy was a new operation in those days, Doctor D W Houston being among the first, if not the first, to do an appendectomy in this city

Doctor Leroy McLean, Surgeon-in chief at the Troy Hospital in eighteen seventy-four, performed a series of six Oesophagostomies for the removal of false teeth, the first of its kind in the country, antedating Doctor Cheever of Boston Doctor E D Ferguson with his state-wide popularity as a consultant, his unusual and magnetic personality, as well as his ability as an organizer, was also a great builder, as well as a great insurrectionist of our society His picture is among those in our society room at the Health Center

Members of our Medical Society have been among the founders of all the hospitals of Troy The Troy City Hospital was the first Doctor Matthias Burton was the first doctor to work in that institution It was located on the corner of Fifth Avenue and the New York Central railroad In those days the chief method of transportation was the railroad and canal boats It was not uncommon for Doctor E D Ferguson to flag freight trains or any other train to get out in other parts of the state as a consultant A number of years later some of our members were instrumental in the foundation of the Samaritan and still later, the Leonard Hospitals

Our society has not been without its storms In addition to the loss of forty per cent of our members who were in active Civil War service we were nearly ruined by a break in our ranks which occurred in eighteen eighty four Two years previous (eighteen eighty-two) the New York State Medical Society had declared themselves in favor of consulting with homeopathic physicians This was contrary to the code of the American Medical Association and also contrary to the ethics of Doctor Ferguson and a number of his followers Through his leadership part of our society divided into a New York State Medical Association, not in favor of homeopathic consultations leaving the regular Rensselaer County Society a component of the State Medical Society, under the leadership of Doctors Blatchford, Seymore and Bontecou Fourteen years previous to the split Doctor Hubbell was called on the carpet of our County Society for condescending to consult with one of the irregular homeopaths and that prejudice had not died out

Doctor Ferguson's influence was state wide and as president of the Secessionists he continued his activities through eastern New York, holding meetings at his office and elsewhere

A number of our members were in the habit of attending both society meetings One of them, our present treasurer, Dr O F Kinlock, held office as secretary in both organizations at the same time In nineteen hundred and five, the New York Medical Association dissolved and most of its membership united into one body, our present Medical Society of the County of Rensselaer In spite of the merger in nineteen hundred and five, a contention still existed against homeopaths and it was not till nineteen hundred and eight that this was thrashed out and the first homeopath, Doctor Holmes of Lansingburg, was elected to our membership

Doctor Bontecou's report as historian gave the names of all the presidents with their term of office from eighteen hundred and six to eighteen hundred and ninety-seven, and to complete his work, I have listed here the presidents and their secretaries from eighteen ninety-seven to nineteen thirty one

Presidents	*Secretaries*	*Year*
J W Morriss	D G Buchanan	1897
M A Wheeler	D G Buchanan	1898
J B Harvie	M D Dickinson	1899
M D Dickinson	James Love	1900
G L Bradbury	Records not available	1901
G L Bradbury	Records not available	1902
W Frieder, Jr	W Kirk Jr	1903
W Frieder, Jr	W Kirk Jr	1904
Hiram Elliot	J A Barnes	1905
C H Travell	H W Carey	1906
J B Harvie	H W Carey	1907
D W Houston	J F Coughlin	1908
A W Carey	J F Coughlin	1909
F R Stillman	J F Coughlin	1910
M Keenan	J F Coughlin	1911
J H Coughlin	A J Hambrool	1912
J H Lyons	A J Hambrook	1912
J H Lyons	A J Hambrook	1913
H C Gordinier	J J McShane	1914
W Kirk	J J McShane	1915
E W Becker	P I Harvie	1916
E Howard	William Trotter	1917
T Hull	C I Stalter	1918
C J Patterson	W Kirk	1919

Presidents	*Secretaries*	*Year*
C. J. Patterson	W. Kirk	1920
W. J. Fleming	W. Kirk	1921
C. A. Hemstreet	D. W. Houston, Jr.	1922
F. M. Sutzman	D. W. Houston, Jr.	1923
P. L. Harvie	Wm. H. McShane	1924
J. H. Flynn	Wm. H. McShane	1925
J. H. Reed	J. D. Carroll	1926
A. J. Hambrook	D. A. Calhoun	1927
J. J. Rainey	D. A. Calhoun	1928
A. F. Benson	Wm. Van Auken	1929
C. F. Sproat	J. F. Connor	1930

Our society has had eighty-three presidents since its beginning, twenty-eight of whom served two years, three, more than two years and the rest only one year. I believe the finest set of minutes were kept by Doctor J. F. Coughlin, whose term of office as secretary was four years; the longest of any secretary during the past twenty-five years.

Quackery and public advertising have been kept from our midst through the agency of our society. The first one to advertise was the last. In seventeen ninety-three, Doctor John London, the third physician to settle in Troy, ran an advertisement in the *American Spy,* a Lansingburg publication. It ran as follows: "The subscriber, having finished the studies of Physic and Surgery and man-midwifery at the University of Edinburgh and practiced in Europe for some years past, now offers his services to the inhabitants of Troy." In nineteen hundred and nine, a certain Mr. Delfino who illegally posed as a doctor left town as a result of our activities.

As far back as our records are available our regular meetings were held in the afternoon, until eighteen hundred and ninety when the hour was changed to eighty thirty p.m. Our usual meeting place was in the basement of the city hall or the common council chambers. In nineteen hundred and three our regular meeting place changed to the County Court House and in October, nineteen hundred and twenty-five, to the Health Center, corner of Seventh Avenue and State Street.

The last revision or amendments to our constitution and by-laws was made in nineteen hundred and six, at which time the seal of the society was procured. Five hundred copies of an approved diploma for membership were ordered in nineteen hundred and eight.

Our average attendance at regular meetings for the past twenty-five years, with a membership from ninety to one hundred and twenty-five varies between twenty and forty-five.

A notorious fact of history is the continued annual depletion with an occasional deficit treasury. In eighteen hundred and eighty our annual dues were two dollars to the State society and one dollar for our local society. In nineteen hundred and five our local fees were raised from one dollar to two dollars, where they remained till last night when an amendment was duly made to our by-laws requiring three dollars instead of two dollars.

During the past twenty-five years our society has been responsible for the endorsement of the plans for a new Tuberculosis Sanitarium (1908-1910). For an action favoring a large appropriation for the new State Medical Library (1911), for the improvement of Troy's water supply (1891-1911), and hence the almost total obliteration of typhoid fever which was annually taking many lives in Rensselaer County, as well as making invalids of hundreds of people for weeks and months at a time. For the improvement of the city's milk supply (1905-to date), thus greatly reducing the incidence of sore throat, and other infectious diseases as well as the prevalence of Tuberculosis.

Innumerable scientific papers, some of world-wide and lasting importance have been presented by our membership and by merited specialists from other medical centers for instruction and assistance to our members. We still have with us a surgeon, Doctor J. B. Harvie, who was one of the first to do a Gastrectomy, May eleventh, eighteen hundred and ninety-nine. It was the fourth successful case on record; the first being done in Switzerland, the second in Boston and the third in San Francisco. Our society has been blessed by authors of medical text-books, by scientific men who have been in demand by other societies as lecturers and by our nearby college of medicine as instructors and directors of departmental activities.

All these advances have been made in spite of the scarcity of material for humane dissection as well as the indifference and objection of the public to post mortem examinations. Our progress has been very creditable when one considers the antivivisectionists who have been persistent in their efforts and when one thinks of the objections that have been raised to the simple quarantine of communicable disease and the early opposition to Diphtheria protective inoculations.

The years of nineteen hundred and sixteen to nineteen hundred and nineteen were very trying times. Fifty-eight per cent of our ablest members were gone to the World War and the remainder were besieged on the one hand by the demon, compulsory health insurance, which we believed would ruin the very foundation of medicine, and on the other, by the terrible influenza epidemic, which took its horrible toll of lives and taxed us to the utmost. But we have passed by all these obstacles and are now stronger and better men for such experience.

Our society is now ready to enter another one-quarter of a century of activities. May we ever hold fast the lessons learned by our forefathers and advance to a newer and better knowledge of how to prevent and to overcome the greatest of all misfortunes—ill health.

INCIDENCE OF POSTPARTUM HEMORRHAGE*

BY WILLIAM SIDNEY SMITH, M.D., F.A.C.S., BROOKLYN, N. Y.

From the Department of Gynecology and Obstetrics of the Brooklyn Hospital

THE obstetrical division of the gynecological and obstetrical department of the Brooklyn Hospital averages a trifle over nine hundred admissions a year: ward and private patients in nearly equal numbers. There is no ambulance service connected with the hospital, yet each year there are a number of referred obstetrical emergencies. Patients are delivered by the head of the department, his associates and assistants; by internes and clinical assistants under supervision; and a few patients are cared for by the courtesy staff.

With the above paragraph as a short analytical description of the division, let us briefly review the incidence of postpartum hemorrhage in nine thousand consecutive ward and private deliveries, covering a period, from January 1, 1920 to January 21, 1930.

The author is at once confronted with the question, how much blood loss may a patient have at the end of the third stage of labor, in order to properly classify it as a postpartum hemorrhage? In some clinics there is an attempt made to measure the blood lost at the end of labor, and where this technique is followed it may be easy and accurate to say that a blood loss in excess of 500 or 600 cubic centimeters should be considered a hemorrhage.

At the Brooklyn Hospital, we have never attempted to measure nor to estimate this blood loss in figures. Our custom is to note whether the patient has slight, moderate, or excessive bleeding at the end of labor, and to note any clinical manifestations that may be the result of the bleeding. In these nine thousand cases all those who had more than a moderate postpartum blood loss have been classed in the hemorrhage group—even though the hemorrhage was noted as moderate and without clinical evidence of blood loss, nevertheless, the case was recorded in the hemorrhage group in order to have the standard conform as nearly as possible to that of Ahlfeld,[1] Cragin,[2] DeLee,[3] and Williams.[4] To evaluate these case records as fairly as possible, all questionable or borderline cases were submitted to my colleagues, Dr. Eliot Bishop, and Dr. Florence Wilson, before final decision.

It is of interest to give a short history of the evolution of the technique of the third stage of labor which is used at the Brooklyn Hospital. In 1899, Robert L. Dickinson[5] published an illustrated article in the *Brooklyn Medical Journal*, the title of which was "Lifting and Manipulation of the Uterus Through the Abdominal Wall to Control Postpartum Hemorrhage"—The author clearly states that he refers to bleeding from an empty uterus, and his technique was to raise the uterus out of the pelvis by abdominal manipulation while the patient was under anesthesia. One hand grasped the lower uterine segment to pull it upward out of the pelvis and to compress it while the other hand grasped the fundus and compressed that portion of the organ. He makes the point that, unless the uterus is pulled up out of the pelvis, the vessels in the broad ligament are lax and pour out blood, and also that unless the uterus is pulled out of the pelvis it is impossible to grasp enough of the organ to compress it efficiently.

Dickinson's method of manipulation and lifting the uterus did not come into general use at the Brooklyn Hospital until fifteen years later, when it was adopted by the late Ralph H. Pomeroy. He also taught that, in patients who have a tendency to excessive bleeding at the termination of the second stage, the only safe uterus is the empty uterus. For this reason it was his custom, if the patient were under anesthesia, to express the placenta as soon as there was any evidence of separation, which is usually about the time of the first uterine contraction after the birth of the child. Another point on which he laid great stress is, "that the time to stop a postpartum hemorrhage is before it begins." His technique was, after expressing the placenta, to raise the uterus out of the pelvis by exerting pressure backward and upward with his fingers placed just above the pubes. This maneuver brought the uterus out of the pelvis and it was held out of the pelvis for a short time by an assistant who stood at the patient's side. If there were more bleeding than usual, Dr. Pomeroy, himself, took a position at the right side of the patient, and placed his right hand, ulnar border down, across the lower uterine segment, and exerted pressure upward and backward against the spine. The action of his right hand placed the broad ligaments on the stretch, and compressed the lower uterine segment. At the same time, he placed his left hand, ulnar border down, just above the fundus. He thus held the uterus, as one might hold a ball, between his two hands, and could compress it, exert stimulation and prevent the organ from ballooning with blood. As soon as the uterus began to contract properly, an assistant took his place and held the fundus until it remained contracted. Occasionally, it would be necessary to use a lifting vaginal gauze pack to hold the uterus out of the pelvis for several hours. For the last twelve years of Dr. Pomeroy's life, during which period I was actively engaged in assisting him, I never saw him pack a uterus.

W. Stoeckel[6] concludes from a study of nearly a million cases in 1925, that the mortality from

* Read at the Annual Meeting of the Medical Society of the State of New York, at Rochester, N. Y., June 4, 1930.

postpartum hemorrhage due to atony of the uterus is twice as great in patients in whom the utero-vaginal tamponade is used, as it is when this method is not employed, and H. C. Burgess[7] states that he himself has never packed a uterus.

When George H. Ryder[8] published his paper on the use of pituitrin at the end of the second stage of labor, Pomeroy at once accepted the proposition and used it as routine practice on hospital patients delivered under anesthesia. He thought pituitrin given at the beginning of the third stage of labor hastened and strengthened the first contraction of the uterus, and was an aid to his practice of expressing the placenta at the first uterine contraction.

Our third stage technique is as follows:—Patients are delivered under anesthesia with two doctors gowned and gloved. One cubic centimeter of obstetrical pituitrin is given as soon as the child is born. The operator holds the baby by the feet, the assistant cares for the cord and places the baby in a reception box. About three minutes after the administration of the pituitrin, the operator places his hand on the fundus and waits for the uterus to contract, at which time gentle pressure is exerted on the fundus or at the cornu, and the placenta is usually expressed easily. The uterus is then pushed up out of the pelvis by abdominal manipulation and held there. Occasionally, a placenta is retained for a longer or shorter period. If there is no bleeding we leave it alone, and frequently send the patient to bed. Strict instructions are given to watch for bleeding and if that complication occurs we attempt to empty the uterus by expression, and if that is impossible we extract the placenta manually, for we believe that in order to control hemorrhage the uterus must be empty. If the patient is delivered in emergency without anesthesia or with only one doctor in attendance we do not give pituitrin until the baby has been cared for and the doctor is ready to give his entire attention to the uterus.

Let us now consider the postpartum hemorrhages in these nine thousand consecutive deliveries of ward and private patients covering practically a ten-year period.

TABLE 1

Total deliveries	9,000	
Hemorrhages	67	.74%
Mortality	2	.023%

TABLE 2

Hemorrhages

Immediate	52	Mild	43
Delayed	15	Moderate	19
		Severe	5
	67		67

There were sixty-seven postpartum hemorrhages in this group which gives an incidence of a trifle more than seven-tenths of one per cent; fifty-two of the hemorrhages were immediate, that is, they occurred before the patient left the delivery table. Fifteen were delayed, which means that the hemorrhage occurred after the patient was returned to bed. There were forty-three mild hemorrhages, and by this term I mean a blood loss which was slight and was controlled by means of pituitrin and lifting the uterus out of the pelvis by abdominal manipulation. In most of these cases there were no clinical symptoms of hemorrhage which required treatment. Nineteen of the hemorrhages were moderate, which means that there was considerable bleeding and enough clinical evidence of hemorrhage to indicate treatment with clysis. Five of the hemorrhages were severe. Three of this group were treated with blood transfusions, either immediately or within forty-eight hours after delivery, and two others received clysis and transfusion.

TABLE 3

Treatment

Clysis	19
Transfusion	3
Clysis and transfusion	2
Vaginal pack	11
Uterine pack	1

In a patient whose uterus has a tendency to remain flabby and when there is a continuous trickle of blood from the vagina after the termination of the third stage, we use a vaginal pack of damp gauze, as much as may be necessary. If we are really concerned about the possibility of a delayed hemorrhage, we apply a tight abdominal binder above. All vaginal packs are removed in not more than twelve hours, and preferably in six.

The one patient in whom an intra-uterine pack was used illustrates some of the fallacies in the treatment of postpartum hemorrhage. A twenty-year-old primipara delivered herself spontaneously of a five-pound baby after a ten-hour labor. One cubic centimeter of pituitrin was given immediately after the birth of the child. The uterus did not contract properly and rather profuse bleeding began. The attending doctor was unable to express the placenta. Bleeding continued and the patient began to show some signs of shock for which the foot of the delivery table was raised and a clysis of 1250 cc. of saline was given beneath the skin. I make the point here, that the placenta should have been removed from this patient before she lost enough blood to show signs of shock. If the placenta could not have been expressed, then it should have been extracted manually, and at once. Twelve hours after delivery, the patient was still bleeding slightly and her condition was rather poor. She was given a

blood transfusion of 500 c c and after half an hour the placenta was manually extracted and in intra uterine pack was inserted However, one hour later there was some bleeding in spite of the intra-uterine pack Five hours later the patient's condition was poor and a second blood transfusion of 1300 c c was given Her condition gradually improved, the intra uterine pack was removed after twenty-four hours, and she was discharged from the hospital in excellent condition twenty days later.

TABLE 4

Deaths

There were two deaths in the 9,000 cases reported in the Brooklyn Hospital (see table 1), a rate of 023 per cent The two cases were as follows

1 Toxaemia of pregnancy in a chronically ill anaemic patient with induction of labor at the

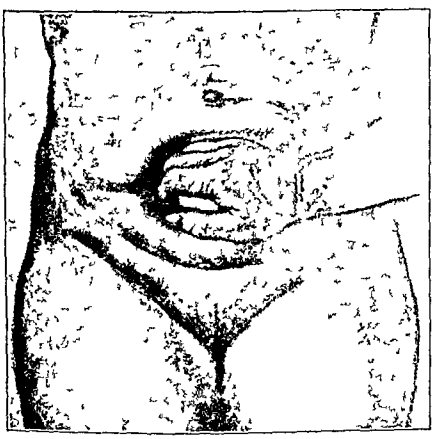


FIGURE 1

The usual seizure of the empty uterus The hand grasps as large an area of the surface as possible by slipping the fingers down the posterior uterine wall somewhat diagonally The flabby abdominal wall permits this

sixth month A very slight blood loss several hours after delivery, probably was enough to upset the circulatory balance and cause death

2 Moderate hemorrhage occurring one hour after delivery in a patient with central placenta previa who had lost considerable blood before the termination of labor

I am not at all sure that the toxaemia case should be classed as a hemorrhage death One of my colleagues believes that it should not be classed in this group I will give a brief history of the case before judgment is passed

A forty year old primipara entered the hospital in 1924 with a diagnosis of neuritis and anaemia of unknown origin After she had been in the hospital for two months and had skipped two periods a pregnancy was discovered She was discharged in poor general physical condition The patient was readmitted at the sixth month of

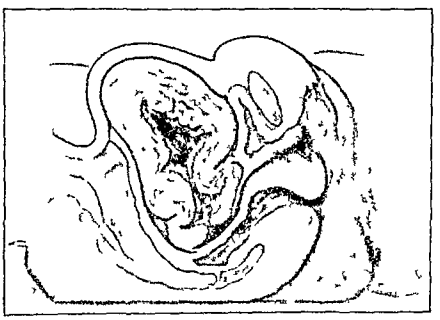


FIGURE 2

The emptied uterus grasped from above and crowded into the pelvic cavity Counterpressure against bony walls is only possible on a limited surface posteriorly or laterally The doubled up or 'squatted' uterus has a gaping cavity Actual uterus from Barbour's frozen section

pregnancy still suffering from anaemia and loss of weight Nephritis and accompanying high blood pressure were added complications A rectal tube was inserted into the uterus to induce labor, which started forty-eight hours later, and in six hours the patient delivered herself spontaneously of a two-pound macerated fetus No pituitrin was given at the end of labor The placenta was allowed to separate spontaneously, and it came away thirty seven minutes after the birth of the child There was very little bleeding at the time and the patient was returned to bed in apparently about the same general condition as before labor Five hours after delivery, the nurse noted that the lochia was rather profuse The patient was given two hypodermatic injections, one of morphine sulphate grs 1/6 and one of ergotole mxx Slight bleeding continued which was no greater in amount than rather profuse lochia, and no particular alarm was felt for the patient After four hours of this slow leak the pulse rate began to increase and the blood pressure began to drop A hypodermoclysis of 1000 c c of saline was given beneath the skin and preparations were made for a blood transfusion, but the patient died before it was given My opinion is that this was a relative postpartum hemorrhage; that is, a very slight blood loss upset the circulatory balance in an anaemic and toxic patient Was this death due to actual blood loss, or was it due to shock and hemorrhage into her own veins?

band of the patient, an obstetrician and gynecologist of note, and also my colleague, Dr. Eliot Bishop, consider this is not a case of postpartum hemorrhage. If we accept their opinion then in this series of nine thousand cases we have had but one death, an incidence of .012 per cent.

The second death occurred in 1922. The patient was a thirty-six year old Italian who had nine previous pregnancies. She was at term and gave a history of considerable bleeding two days, and again a few hours before admission to the hospital. There was no bleeding when the patient was admitted, and she was in fair condition with a normal blood pressure, a slightly elevated pulse and an audible fetal heart. A diagnosis of central placenta previa was made by vaginal examination which caused profuse bleeding. The vagina was at once packed full of damp gauze and the patient anesthetized. The operator succeeded in doing a Braxton-Hicks version without great difficulty, introducing two fingers through the cervix and placenta and grasping a foot. A considerable gush of blood was controlled by gentle traction on the child's leg. This traction was continued, labor pains began, and the child was delivered more or less spontaneously two hours after the version. The placenta came away at once and was followed by considerable hermorrhage. The vagina was packed full of damp gauze, but no abdominal binder was applied. This procedure controlled the bleeding and though the patients pulse was rapid her general condition was not alarming. One half hour later, as there was no vaginal bleeding, the patient was returned to bed. Shortly thereafter blood began to show through the vaginal lifting packs. Fresh vaginal packs were inserted, but the patient died in a few moments, a victim of repeated hemorrhages.

TABLE 4
COMPARATIVE TABLE
POSTPARTUM HEMORRHAGES

	Deliveries	Incidence		Mortality
Sloane Hospital	2,000	10.5%		Not reported
Johns Hopkins Hospital	1,000	13% 1%	Lost 600 cc. Lost 1500 cc.	About .05%
Chicago Lying-in	45,000	2%	Severe Hem.	.007%
W. Stoeckel Berlin	971,487	8%	Lost 1500 cc.	.28%
Berwind Maternity	4,200	2.4%		Not reported
Jewish Hospital Brooklyn, N. Y.	2,293	1.5%		.04%
Manhattan Maternity	13,000	1.7%		.03%
Bellevue Hospital 2d Div.	4,396	1.5%		.11%
Woman's Hospital	1,041	1.3%		.2%
Brooklyn Hospital	9,000	.74%		.023%
Montreal Maternity	18,720	.32%		.01%

A review of the literature gives some interesting statistics for comparison. Cragin[2] cites a series of 20,000 deliveries at the Sloane Hospital, prior to 1916, in which there were 2118 patients who had a postpartum blood loss of sixteen ounces or over, which gives an incidence of 10.5 per cent. He does not mention any deaths.

Williams[4] observes 600 c.c. postpartum blood loss in 13 per cent of 1,000 consecutive deliveries and notes 1500 c.c. or more blood loss once in 100 deliveries, or 1 per cent. He states that with proper treatment a fatal case should not occur more often, on an average, than once in 2,000 or 2,500 deliveries. DeLee[3] states that in 45,000 consecutive deliveries at Chicago Lying-in Hospital Dispensary there were only three deaths from postpartum hemorrhage, but that there were twenty more patients who came very near death. He feels that severe postpartum hemorrhage occurs in about 2 per cent of deliveries, and that in experienced hands a death is rare. Rice,[9] at the Manhattan Maternity in 1916, notes an incidence of 222 postpartum hemorrhages in 13,000 consecutive deliveries, or 1.7 per cent, and that there were four deaths in his series, or .03 per cent. Hornstein,[10] at the Berwind Maternity in 1922, finds 100 postpartum hemorrhages in 4,200 consecutive deliveries, an incidence of 2.4 per cent. The deaths in his series were not noted. In 1925, W. Stoeckel,[6] formerly of Leipzig and now director of the gynecological department of the University of Berlin, in a very elaborate monograph, "Pathology and Therapy of Postpartum Hemorrhage," reviews not only the literature regarding postpartum hemorrhage, but also analyzes 971,487 labor cases about which he gained information through questionnaires. The monograph is divided into two parts, that which concerns the normal, and that which relates to the pathological third stage of labor. He believes the upper limit of blood loss in a normal case is 500 c.c. Among the 971,487 labors, 582 women died of hemorrhage, but only .28 per cent died of hemorrhage due to pure "atony" of the uterus. The others died of rupture of the uterus, placenta previa, etc. Of the total number who had excessive bleeding, 7,918 lost more than 1500 c.c., and of this number 3.5 per cent died. He goes on to say that, in the prophylaxis of atonic bleeding, massage is the best uterine stimulant; manual removal of the placenta should be done earlier and more frequently than it has been done; and that the mortality from "atony" of those who employ utero-vaginal tamponade is twice as great as the mortality of those who are opposed to this procedure. Burgess[7] cites 18,720 deliveries at the Montreal Maternity covering a period from 1906 to 1924. In this series there were sixty postpartum hemorrhages, or .32 per cent with two deaths, or .01 per cent. Ronsheim[11] reviews 2,293 deliveries at the Jewish Hospital in Brooklyn, N. Y. during 1928. He notes thirty-one cases of postpartum hemorrhage, five of which were of

a serious nature, and that death occurred in one patient. His incidence of hemorrhage is a trifle less than 1.5 per cent, and his mortality is .04 per cent. The late Harold Bailey[12] reviewed 4,396 deliveries from the second division of the Bellevue Hospital Maternity service in 1928, and he reports 66 hemorrhages, or an incidence of 1.5 per cent. There were five deaths, or .11 per cent. A personal communication from Woman's Hospital, New York City, reports a series of 1041 deliveries during the last two years. Fourteen of this series or 1.3 per cent had a postpartum hemorrhage. Two patients died which gives a mortality of .2 per cent. One of these patients had a second degree hemorrhage and died on the eighth day from acute nephritis, and the other had a first degree hemorrhage but died the same day from shock and hemorrhage.

SUMMARY

1. The incidence of postpartum hemorrhage in a number of large obstetrical departments varies between 13 per cent and .32 per cent while the mortality varies between .28 per cent and .007 per cent. The average incidence is 3 5 per cent and the average mortality is .09 per cent.

2. By the Dickinson-Pomeroy method of third stage technique the incidence of postpartum hemorrhage at the Brooklyn Hospital is .74 per cent and the mortality is .023 per cent.

3. We believe that in the control of postpartum hemorrhage the intra-uterine pack is not necessary, and that the lifting vaginal pack, with or without an abdominal binder, may occasionally be required.

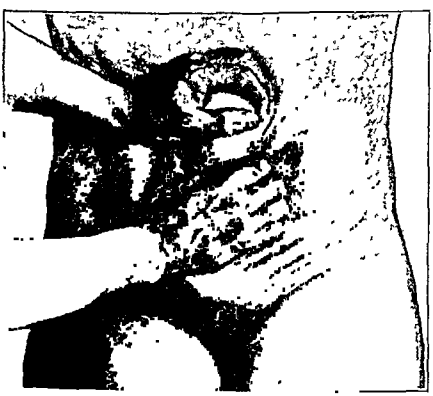


FIGURE 3

The entire uterus is lifted out of the pelvis by seizing it through the abdominal wall, and compressed against the spinal column. The lower hand grasps and manipulates the cervix. Lifting is only feasible where the round ligaments contract poorly.

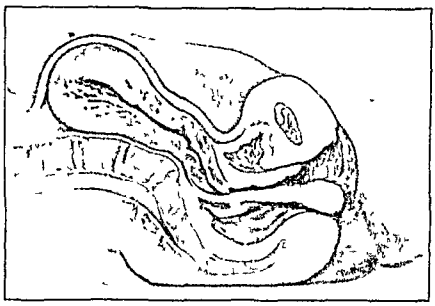


FIGURE 4

Section showing uterus immediately after expulsion of placenta raised out of pelvis to make cervix accessible for seizure and press fundus against spinal column. Pressure is exerted all over uterine walls, cavity is collapsed, uterine arteries are under tension.

4. The dicta that "The only safe uterus is an empty uterus" and that "The time to stop a postpartum hemorrhage is before it begins" should be remembered.

5. The Dickinson-Pomeroy method of third stage technique consists of: (a) The administration of pituitrin as soon as the child is delivered, provided the patient is under anesthesia and an assistant, as well as the operator, is present. (b) The prompt expression of the placenta at the time of the first uterine contraction after delivery of the child. (c) The immediate lifting of the empty uterus high out of the pelvis by abdominal manipulation, with a grasp which lifts and compresses the lower uterine segment against the spinal column with one hand and compresses the fundus, with or without massage, with the other hand. (d) The occasional use of a second dose of pituitrin and the administration of ergot. (e) The occasional use of the lifting vaginal pack, with or without an abdominal binder.

6. The incidence of and mortality from postpartum hemorrhage in this large series of cases at the Brooklyn Hospital, is so low that the Dickinson-Pomeroy method of third stage technique should be considered standard.

CONCLUSIONS

1. Unceasing vigilance in the control of small blood losses at their start, is the method by which the obstetrician may lessen the incidence of postpartum hemorrhage.

2. It is evident that the intra-uterine pack is not necessary in the prevention, or treatment of postpartum hemorrhage.

3. The incidence of, and the mortality from

postpartum hemorrhage in this large series of cases is so low that the Dickinson-Pomeroy method of third stage technique should be considered standard.

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Note:—The illustrations in this article are reproduced from original drawings by Dr. R. L. Dickinson as published in *Brooklyn Medical Journal*, in 1899.

DISCUSSION BY GEORGE HOPE RYDER, M.D., NEW YORK, N. Y.

This paper of Dr. Smith's has interested me greatly. Prevention of hemorrhage in the third stage of labor is one of the most important things in obstetric care. Too much praise cannot be given those in the Brooklyn Hospital for adopting and using the Dickinson-Pomeroy method of holding the fundus after the birth of the child. This method, as described by Dr. Smith, with the meticulous care in the prevention of hemorrhage, and the personal attention of the operator himself, gives one a thrill of joy in the hearing. The excellent results obtained, only 67 cases of postpartum hemorrhage in 9,000 deliveries, an incidence of .74 per cent, is above criticism. This method, I am convinced, if universally adopted, would do much to lessen the terrors and evil consequences of postpartum hemorrhage, throughout the country. It is really appalling to see the careless indifference of many obstetricians to hemorrhage, in the third stage of labor. The operator so often gives his attention to the baby, or to other matters, and allows a hemorrhage to flow steadily on, till suddenly symptoms of beginning shock and collapse in his patient, awaken him, with a start, to frantic efforts to stop a hemorrhage which never should have begun. Such hemorrhages, even when not immediately dangerous, often have bad after effects, lessening resistance to infection, diminishing the chances of successful nursing, and preventing a prompt return to health and happiness. And, unfortunately, as we know, the immediate effects are sometimes fatal.

Too much praise cannot be given to the authors and teachers of this method, and most gratifying it is to hear it described.

The estimated hemorrhage is not scientifically accurate. However, I believe it is surprisingly so practically. At the old Sloane Hospital, under Dr. Cragin, it was the custom to weigh all hemorrhage, which could be caught in a basin, and to estimate the amount lost besides. The two added together, was the total hemorrhage. Frequently I have asked the nurses and doctors present at a delivery, to guess the amount caught in the basin, before measuring it; and the estimate of those constantly in the delivery room, I have found remarkably accurate. I believe the estimate of blood loss, as described by Dr. Smith, with the careful observance of symptoms in the mother, is probably quite accurate. His statistics are therefore very remarkable, especially as the deliveries were conducted by many different doctors, including, associates, assistants and internes. Most heartily do I agree with his two slogans, "the time to stop a postpartum hemorrhage is before it begins," and "an empty uterus is the only safe one."

However, admirable as I believe the Dickinson-Pomeroy method to be, I do not believe the method as outlined is sufficient. Holding the fundus skillfully, eternal vigilance in the third stage, the administration of pituitrin at the beginning of the third stage, the vaginal pack behind the cervix for some, these we have seen give excellent results. But they are not enough.

I believe intra-uterine tamponade is the sheet anchor, on which we must rely at times, to keep us off the rocks of disaster. This with the routine administration of some good preparation of ergot postpartum, often in repeated doses, will alone give us complete protection in bad cases. Dr. Smith's paper does not mention the use of ergot postpartum as a routine.

At the old Sloane Hospital our slogan was, "when in doubt, pack and pack early." Dr. Smith has mentioned Dr. Cragin's statistics for postpartum hemorrhage in the first 20,000 deliveries at the Sloane Hospital. It was my good fortune to help Dr. Cragin prepare all the statistics for these 20,000 deliveries. As Dr. Smith has said, there were 2,218 postpartum hemorrhages in these 20,000 deliveries, an incidence of 10.5 per cent. He says the mortality is not mentioned. This I find is listed as 2, 2 in 20,000, or 1/100 per cent for the whole number of deliveries, or 2 in 2,218 cases of postpartum hemorrrages, 9/100 per cent.

These postpartum hemorrhages are listed as follows:

1st Degree Hemorrhage (16 to 24 oz.) 1,286 —6.4 per cent.

2nd Degree Hemorrhage (24 to 32 oz.) 528 —2.6 per cent.

3rd Degree Hemorrhage (32 oz. or over) 304 —1.5 per cent.

Deaths 2 (as mentioned), one in a woman with a torn cervix, following Caesarian Section, not packed.

Deaths from hemorrhage from all causes in 20,000 deliveries, are listed as follows:

Placenta previa, 13.
Accidental hemorrhage, 4.
Ruptured uterus, 14.
Ruptured ectopic, 2.
Postpartum Hemorrhage, 2.
Total all hemorrhages 35.

It was the custom to pack with intra-uterine tamponade all cases under suspicion of hemorrhage. All severe placenta previas, accidental hemorrhages, bad toxaemias, flabby or unduly distended uteri, or uteri tired from prolonged labor —all were packed at once. It was believed that early prompt packing in doubtful cases was the best prophylaxis against postpartum hemorrhage

Because of Dr. Smith's paper, I looked up my own private records in reference to postpartum hemorrhage. I find that in 1,200 consecutive deliveries of private patients, I have 9 postpartum hemorrhages listed. By postpartum hemorrhage is meant the loss of 16 ounces or more of blood, the same estimate as was used in the early Sloane records and at the Brooklyn Hospital. Nine postpartum hemorrhages in 1,200 deliveries, or an incidence of .75 per cent, almost exactly the same incidence as in the series of Dr. Smith's which was .74 per cent.

Of these 9 postpartum hemorrhages; 8 had uterine tamponade.

There were no delayed hemorrhages.

No transfusions were necessary.

There were no deaths.

7 had no temperature, at any time, of 100 6/10 or over.

2 had temperatures of 100 6/10, but for one day only.

All were given preparations of ergot postpartum.

Looking further into these statistics, in this connection, I find that in the 1,200 deliveries, intra-uterine tamponade has been performed 12 times, or in 9 3/10 per cent of the cases;

23 were after normal labor.

76 followed operative delivery per vaginam.

13 were done as a routine measure in Caesarian Section.

51 followed labors of 12 or more hours duration.

61 followed labors of less than 12 hours duration. This includes the 13 Caesarians.

8 of the 112 packed had hemorrhages severe enough to be listed as postpartum hemorrhage, i e, 16 oz. or more.

104 had blood loss estimated as less than 16 oz.

83 had no temperature during the puerperium, of 100 6/10 or over.

29 had temperatures of 100 6/10.

Of these 29,

20 had temperature lasting 1 day only.

9 had temperatures lasting more than one day, listed as follows;

4 due to pyelitis

2 due to grippe

3 due to mild uterine infection, not influencing the course of the convalescence.

It seems safe to say that in no case did the tamponade of the uterus do any harm. There were no deaths from shock or hemorrhage No delayed hemorrhage. No transfusions were necessary, and there were no infections of moment. In the 112 tamponades, there were only 8 severe hemorrhages, as stated. The other cases were packed as a prophylactic measure. In some, brisk hemorrhage was starting but was quickly stopped. In others, there was no hemorrhage, but because of atony of the uterus, prolonged labor, undue distention in twin pregnancies, or because of placenta previa or accidental hemorrhage, the tamponade was done to prevent bleeding.

My method of conducting the third stage of labor is much like that outlined by Dr. Smith. Four minims of pituitrin is administered at the beginning. The placenta is expressed or extracted manually at once, in the presence of severe or persistent bleeding. Pituitrin cc. ½ and ernutin cc. ½ by hypodermic injection are given together immediately after the uterus is empty. The ernutin is repeated at intervals of two hours, for three doses in primiparae and for four in cases of multiparae. In case of doubt, the uterus is packed at once with 5 per cent iodoform gauze. The containing jar holds 8 yards of this gauze, 12 inches wide and folded to 1 inch. The packing is done after manually exploring the cavity of the uterus and removing clots or retained membranes, usually under gas and oxygen anaesthesia. One hand with the gauze is passed into the vagina and the uterine cavity is packed with two fingers, against the other hand on the fundus. The gauze jar is held by an assistant. The packing can be done quickly and without shock by this method, and practically without instruments. The sooner it is done, if done at all, the safer.

Doubtless many of these 112 cases packed would have bled very little if not packed. Others, I think, undoubtedly were spared severe postpartum hemorrhages. However, after packing many uteri postpartum, I can truthfully say I have never regretted having packed one, and I have never seen any harm done by intra-uterine packing when this method is used

The gauze is usually removed in 48 hours.

Considering these two sets of statistics, those of the old Sloane Hospital, and mine in private practice, where in each, the policy was to use intra-uterine tamponade at once, in case of doubt; we see that in the first there were 2,118 cases of postpartum hemorrhage in 20,000 deliveries, an incidence of 10.5 per cent, with a mortality of only 2, or 1/100 per cent. In the other there were 9 postpartum hemorrhages in 1,200 deliveries, an incidence of 75/100 per cent, with a mortality of nil.

In Dr. Smith's statistics at the Brooklyn Hospital there were 67 postpartum hemorrhages in 9,000 deliveries, an incidence of 74/100 per cent, with a mortality of 2, or .23 per cent (2.3/100%). The great care shown in the third stage, has brought the occurrence of postpartum hemorrhage down far below that in the old Sloane Hospital (10.5%), and about even with that of mine in private practice; but the mortality, 2 in 67, or 2 8/10 per cent is higher than that of either of the others, 2 in 2,118, or 9/100 per cent in one case and nil in the other.

Allow me to take up for consideration Dr. Smith's three conclusions. His first reads, "Unceasing vigilance in the control of small blood losses at their start, is the method by which the obstetrician may lessen the incidence of postpartum hemorrhage."

This conclusion I cannot indorse too heartily. I believe it most sincerely.

His second conclusion reads, "It is evident that the intra-uterine pack is not necessary in the prevention or treatment of postpartum hemorrhage."

From this conclusion I must dissent just as heartily as I agreed to his first. I think his statistics in no way tend to prove this, but on the contrary tend to disprove it. In other words they tend to prove what I believe, that intra-uterine packing *is* necessary in the treatment of postpartum hemorrhage, and at times is the only measure which will save life.

In Dr. Smith's series of 67 postpartum hemorrhages, only one had intra-uterine tamponade, but two died, both without intra-uterine tamponade. The intra-uterine pack used, I am inclined to believe, may have saved a life, and the same measure promptly used might have saved the lives of the two who died. In other words, if the intra-uterine pack had not been used at all in this series, there well might have been 3 deaths. And if it had been judiciously used three times, there might not have been any deaths at all, in the series.

Considering the one woman who *was* treated by intra-uterine tamponade, we can not feel sure that she would have died without it, but certainly, if she was carefully packed, it was an important factor in her recovery.

Let us examine the two cases that died.

One was a toxic woman in not too good condition. This woman was delivered beautifully One can only admire the method of delivery. She was safely delivered. So far, so good. But what then? After watching her and carefully holding the fundus for a while, she was sent to the ward. There she continued to leak blood slowly and constantly, till finally she died. I believe that if this woman, after her careful and skillful delivery, had been promptly packed at once, then given a hypodermic injection of some ergot preparation, repeated if necessary (watching the blood pressure before doing so)—I believe, in all probability she might not have died. Certainly this constant blood leakage, in an anaemic, toxic, weakened woman, was very dangerous.

The second case was that of a placenta previa. Here again, the delivery was all that could be desired, skillful, careful and according to the best obstetric principles. Again, so far, so good. The woman was delivered in good condition. But what then? After half an hour, she was sent to the ward, where she died of repeated hemorrhages. I can see no reason to believe otherwise than if this woman had been promptly packed, and given repeated doses of ergot hypodermatically, her life might have been saved.

In Sir Walter Scott's beautiful poem, "The Lady of the Lake," there are these lines:

"Ill fared it then with Rhoderick Dhu
That on the ground his targe he threw,
Whose brazen studs and tough bull hide
Had death so often dashed aside."

The Scottish chieftain Rhoderick Dhu, in his duel with James Fitz James, threw away his shield and lost his life. The obstetrician who throws away his intra-uterine packing may lose the life of his patient.

Dr. Smith's third conclusion is, "The incidence of, and the mortality from postpartum hemorrhage in this large series of cases is so low that the Dickinson-Pomeroy method of third stage technique should be considered standard."

To this I cannot agree. The incidence is low, wonderfully low. 67 in 9,000 deliveries. But 2 out of these 67 died, 2 8/10 mortality. With intra-uterine packing, this mortality might have been nil. The Cragin series, with its treatment by intra-uterine tamponade, gives a much higher incidence, 2118 in 20,000 deliveries, but a much lower mortality, 9/100 per cent. The Dickinson-Pomeroy method, supplemented by ergot and intra-uterine tamponade in case of need. This is another matter. This might well be standard. One might well call it familiarly in abbreviation, the "D.P.C. Method," standing for the Dickinson-Pomeroy-Cragin Method.

In closing, again let me express my admiration for, and my approval of the Dickinson-Pomeroy method, which its teaching of care and control in the oft-neglected third stage of labor. But allow me to plead for the use of ergot postpartum and the intra-uterine tamponade, in case of need.

DISCUSSION BY ELIOT BISHOP, M.D., BROOKLYN, N. Y.

As the reader of this paper has stated, I went over these records with him at some length, and I must take issue with him in his reaction. Statistics, most of us feel, are unreliable: they can be distorted to suit one's purpose. In this particular instance I think that Dr. Smith has leaned over backwards in both his incidence of hemorrhage, and in at least one fatal case. He came to his conclusion as to the 67 cases after having read that other reporters had used 500 cc. of blood loss as the amount above which hemorrhage is considered.

A few days after this paper was written an interne made a careful observation on a patient who, he felt, had bled much more than usual, so much so he became concerned. The blood loss was measured, and found on a generous estimate to be 400 cc., which would not list this patient in the hemorrhage group. As we have not been measuring the amounts of blood loss, it is quite likely that many of these 63 patients had less than 500 cc. of blood. On the contrary, many patients listed as having bled excessively did not show anything in the way of symptomatic effect —no pulse elevation, pallor or air hunger. In fact, the latter symptom occurred in but very few instances. I feel very strongly that only 43 cases of Dr. Smith's series should be listed in the hemorrhage group, which would reduce his percentage of incidence to .48 per cent.

In discussing the subject of mortality, I feel that the first case which, as he stated, was the wife of a well-known specialist in our line, ought not to be classed as a hemorrhage. Her husband takes the same stand. This patient had no more bleeding than the average person after she was returned to bed. She was a patient who was vitally sick, though not moribund, and the shock of labor and the ordinary blood loss of the average patient would be sufficient to make her lose her circulatory balance.

I think as a representative of the Brooklyn Hospital that we would be perfectly justified in striking out that first case, which would cut the death rate in half, or to .012 per cent.

As to the second case, many reporters of postpartum hemorrhage have considered only those that bled from atony of the uterus, and the cases of placenta previa are considered entirely separately. If the Brooklyn Hospital statistics were compared with these others it would also have to be omitted. However, to both Dr. Smith and myself this was a postpartum hemorrhage.

Let us again discuss this last case from the point of view of the intra-uterine pack, the use of which neither Dr. Smith nor I can counsel. In the case of placenta previa with bleeding, the source of which must be, in the major part, from the uterine arteries, we feel that a vaginal pack is essential because of its effect on kinking these arteries. Now then! If there has been a laceration, or only a predisposition to laceration of the cervix or lower uterine segment, it would seem to me that a pack against such tissue would extend the laceration. To carry the picture further, if we pack the fundus of the uterus we are packing an area entirely unnecessary, an area away beyond the source of blood loss. This patient was cared for by a clinical assistant, of no great experience. How well he did the version, in what condition he left the cervix, no one can tell. Our method of supervising him and his work we consider as a necessary part of the educational duty of the hospital.

While these remarks may seem in the nature of a rebuttal, they cannot well be put forward by Dr. Smith, because they do not adjust themselves to his premises. We greatly appreciate Dr. Ryder's courteous and painstaking review of the subject. What we cannot accept is his advocacy of an intra-uterine pack. If you will allow my correction of Dr. Smith's figures we feel that the record we have obtained in these 9,000 labors will hold with any series.

DR. WILLIAM SIDNEY SMITH (Concluding)

We use some preparation of ergot postpartum in a majority of the patients. It is not routine, however.

I wish to thank Dr. Ryder for the manner in which he brought out his argument for the uterine pack. I cannot agree with him, however. In packing a uterus the operator packs a hollow viscus, the cavity of which does not remain constant in size. It is impossible to say that the uterus will not fill up with blood behind the pack. Even in the hands of a skillful operator and in the best of aseptic surroundings it is difficult to pack a uterus. The dangers are fourfold, namely: (1) difficulty in executing the maneuver, (2) possibility of perforating the uterus with the packing forceps, (3) infection, and (4) shock to the patient. Surely, we must listen to such an observer as W. Stoeckel when he concludes from the study of nearly a million cases that the mortality from postpartum hemorrhage due to atony of the uterus is twice as great in patients in whom the utero-vaginal tamponade is used, as it is when this method is not employed. I think the exceptionally low incidence and mortality from hemorrhage in these 9,000 cases who were treated without the use of the intra-uterine pack is good evidence that the Dickinson-Pomeroy technique is competent, and that the pack is not necessary.

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For list of officers of County Medical Societies, see this issue, advertising page xxxvi

Next Annual Meeting, Hotel Syracuse, Syracuse, N. Y., June 1, 2, 3, 1931.

POST PARTUM HEMORRHAGE

Every medical student is taught the method of controlling post partum hemorrhage by compressing the emptied uterus *downward* into the pelvis. On page 141 of this Journal Dr. W. S. Smith is reporting nine thousand consecutive cases of delivery in the Brooklyn Hospital, Brooklyn, N. Y. by the method of lifting the uterus from below and compressing it against the promontory of the sacrum. An examination of the drawings will show why the method of *lifting* the uterus up to the brim of the pelvis is much more effective than forcing it *downward* into the cavity of the pelvis where there are no resisting parts.

PRESIDENTIAL COMMENTS ON CURRENT EVENTS—No. 15

Public opinion has been directed to medical care in many ways during the last three years. The subject has been studied enough to permit a better conception of its status than was possible even six months ago.

Many half truth statements have been made and a considerable degree of hysteria shown in thoughtless consideration. A striking thing has been the ability of laymen to clothe the half truths in such interesting language that they have a public appeal. Current literature has been quick to publish these interesting stories. Much of the discussion of medical care has been unscientific. Nevertheless, it has served a purpose in directing thought to the subject, and out of it all is beginning to come a degree of unexpected orientation.

In an effort to discharge the obligations of the office of President, I have made this year a comprehensive study of medical activities. medical care, the costs and availability of medical facilities in or for every county in New York State, including the functioning of the Public Welfare Law in each county of the State. The fees of physicians, in general, are not a major factor in the costs of medical care. When the studies of the National Committee started, it was quite apparent, in public opinion outside of medical opinion, that the studies were expected to show that the fees of physicians are a major factor. My own studies thus far show that the fees of physicians, in general, in New York State are not a major factor. In fact, I have found so many cases where the doctor does the work with little expectation of pay that the thought occurs to me that if the true situation were known, it would arouse more public admiration for the profession than now exists.

The Public Welfare Law in every county in which its machinery has been set in motion is taking care of the sickness of those who cannot pay for adequate medical care as well as is now done for those who can pay. Some of the counties of the state are administering this law about as perfectly as human effort ever functions. This is true of all of the counties in which the principle of conference has been used between the medical profession, the hospital superintendents, and the Public Welfare Commissioners. This result has largely been brought about by the Public Relations Committee of the Medical Society of the State and the Public Relations Committees of the County Medical Societies. Of course, there are counties in the state that have not yet established correct administrative organization of this new Law.

Matters of administration considered in a friendly conference between the local hospital, the local profession, and the Public Welfare Commissioner under the direction of the County Medical Society, have regularly resulted in a common understanding that has worked out to the satisfaction of the Public Welfare Commissioner, the hospital, and the local profession; and the indigent patient has received as good treatment as any other person paying under similar expenditure.

The problems of medical care, at least for the State of New York, will work out as the result of conferences now being carried on by organized medicine, stimulating into action the cooperation of the profession of medicine, the hospitals, and the Public Welfare Commissioners.

Nearly all of the counties in New York State have within their boundaries a well equipped hospital. Only three are without hospitals. Many of them are the equal of any other hospital when measured by the results of treatment. I have not been able to find a single case denied admission. Under the Public Welfare Law no case need ever be excluded because of lack of ability to pay. I have visited the hospitals in several of these counties; to mention only a few,—Tioga, Chenango, Wyoming, Jefferson, St. Lawrence, Ontario, Yates, Clinton, Otsego, Suffolk, and Nassau. There is no problem of medical care in these counties.

Strange as it seems, the unscientific and the many half truths appearing in current literature have started enough study to show that the situation regarding medical care is due more to extravagant demands for luxury in sickness than to the costs of competent service, if confined to actual needs. The profession of medicine, if to be blamed at all, is only to be blamed for acceding to the demands of many people in sickness for unnecessary specialism, more than necessary use of laboratory facilities and instruments of precision, and unnecessary expenditure for nursing and insistence upon luxuries, such as, flowers and taxis for friends to come to see them,—two things at least that, perhaps, in health they never ever thought of.

There is a border line class between those who can pay for medical care when divested of its scientific and service luxuries, and those who come under the Public Welfare Law. This is the class whose income does not lift it far enough above the line of providing the necessities of life and who can pay very little for sickness and not at all for a major sickness. For this class, the border line class between the well-to-do and those provided for by the Public Welfare Law, something must be provided.

Perhaps, an expansion of the Public Welfare Law will in time take up this border line class and by proper public education create a public demand that will care for all of this class of self-respecting people who earn too little to provide adequately for sickness outside of the necessities of life. In that case, some form of insurance would be needed; and this would have the approval of the medical profession—the most essential factor in the whole question of health and sickness service.

WILLIAM H. ROSS, M.D.

LEGISLATION

The members of county medical societies are in earnest in their attempts to devise means of giving all practical forms of medical service to all classes of people. Physicians have always been willing to relieve human ills of both body and mind, but they require the assistance of others. In the olden days the burden of assisting the doctor fell upon charitable neighbors; but now the people recognize their civic duty to provide medical and allied services through the municipalities, the State, the counties, the towns, or the cities. The Welfare Law which went into effect only a few months ago promises to solve the more evident problems of the relation of physicians to those financially unable to provide medical services for themselves and their dependents.

The Legislature of New York State will doubtless be asked to consider new plans for more extended and definite applications of the principles of the Welfare Law. When the bills are introduced in the Legislature the time available for their consideration will be brief, —less than three months at most. Every change and amendment of a bill will require time, and the observance of rules which delay action and possibly may give an appearance of opposition when only constructive importance is intended.

It is the duty of physicians throughout the State to read the bulletins of the Committee on Legislation and the Legislative reports in this Journal, and so be ready to give intelligent support to the actions which are decided upon by the members of the Committee.

LOOKING BACKWARD

This Journal Twenty-five Years Ago

Dr. George R. Fowler—This Journal of February, 1906, contained the following appreciation of Dr. George R. Fowler of Brooklyn, who died on February 6, 1906, aged 58:—

"Dr. Fowler was a man of indomitable energy. His capacity for work seemed almost without limit. Notwithstanding the vast amount of hospital and private work which he did, he found time to give a large measure of his energy and thought to the general interests of the medical profession. He was always active in the affairs of his medical societies, and was always found taking a firm stand for what he believed to make for the best interests of his profession. He was one of the active movers in the amalgamation of the two great societies of the State of New York. One of the last things to receive his attention was a movement to make accessible to all the members of the State Society the books of the library of the Medical Society of the County of Kings. He had hoped to see consummated a plan to give members of the State Society the privilege of having sent them, upon request, volumes from this large library. With these objects for the general good in his mind, he went to Albany to attend the centennial meeting and reunion of the State Societies. He was stricken with appendicitis on his way to the capital city —the very disease from which he had rescued thousands—and after an illness of ten days, in which every resource of science was exhausted. he gave up his life on February 6, 1906. A system which had been overtaxed by years of unremitting work, failed at the critical hour; and this splendid and much beloved man died because of the great labor he had done for others."

MEDICAL PROGRESS

The Principles of and Some Results in the Radium Treatment of Buccal Carcinoma.—G. E. Birkett, writing in the *Canadian Medical Association Journal*, December, 1930, xxiii, 6, states that radium has improved out of all recognition the outlook in buccal carcinoma, and at the same time it has enriched our knowledge of the disease. Radium treatment has conclusively proved that metastasis to the lymphatic glands is by embolism. It has also shown that there exist quite marked variations in buccal carcinomas with corresponding variation in sensitivity. Almost every carcinoma of the base of the tongue will be of an embryonic, undifferentiated and radiosensitive type; consequently there is a good chance of local cure in almost every case. Epitheliomas of the cheek, lip, floor of the mouth, and anterior third of the tongue are almost invariably of a highly differentiated type, and hence less markedly radiosensitive than those of the preceding type. Practically every case is superimposed on a chronic glossitis of syphilitic origin. In such cases diathermy may have to be used if radium is unsuccessful. In the middle third of the tongue both histological types are found. Prolonged irradiation with gamma rays of low intensity yields the best results. Needles of active length, say 30 cm., are infinitely easier to insert than six separate seeds and they are superior to the seeds. Overtreatment rather than undertreatment should always be the aim, since second applications do not meet as active response as the first. The treatment of the lymphatic area may be summarized as follows: (1) If no glands are palpable, observation at monthly intervals. (2) If glands are palpable and removable, block dissection either combined with implantation of radium or followed by external distance irradiation: (3) If the glands are fixed, implantation of a large number of needles, 30 or 40, after thorough exposure of the neck. By employing methods based on those of Regaud, the author obtained apparent cures for the primary site in buccal carcinoma for 1926, 1927, and 1928 in 38.7, 47.3, and 60 per cent of the cases and where the primary and secondary sites were considered in 27.5, 36, and 45 per cent. In other words the results improved with experience. This emphasizes the importance of concentrating radium treatment at large centers. Radium treatment is a conservative method, in which, if successful, function is restored almost to normal. It possesses many advantages over surgery.

Symptoms and Pathogenesis of the Hemorrhagic Diathesis.—H. Letheby Tidy, writing in the *British Medical Journal*, December 27 1930, ii, 3651, takes the position that the essential cause of the bleeding in the hemorrhagic diathesis is an increase in the permeability of the capillary endothelium. The platelets attempt to protect the weak spots, and are thus removed from the circulation. Increased demands for platelets fall on the bone marrow, which may or may not respond successfully. The normal action of the spleen in destroying defective constituents of the blood increases, and the spleen tends to enlarge spodogenously. This explanation does not tell why the capillary permeability varies and whether there is a primary action of the spleen causing this permeability. In the past the hemorrhagic diathesis has been classified into the following groups: purpura simplex, purpura rheumatica or Schönlein's purpura, Henoch's purpura, and purpura hemorrhagica. The more correct view has been gaining ground that these groups possess common factors, and to some extent represent degrees of severity. As a complete entity the hemorrhagic diathesis falls into three groups: (1) Pure primary hemorrhagia of all grades, the symptoms attributable to anemia being the most prominent. (2) Pure primary urticaria of which the characteristic symptoms are abdominal colic and joint pains. (3) Combined hemorrhagia and urticaria, which includes Henoch's purpura and purpura rheumatica. In this group the most prominent symptoms are due mainly to the urticarial factor, but this factor does not cause any drain on the blood-forming organs and the spleen does not enlarge. There is no constant characteristic change in the blood cells. No sharp dividing line separates the hemorrhagic diathesis from splenic anemia, but Banti's disease and hemophilia are separate entities. In hemophilia there is the lengthened coagulation time and the normal platelet count. Purpura does not occur in hemophilia. Banti's disease terminates in hepatic cirrhosis and ascites, neither of which occurs in the hemorrhagic diathesis. In Banti's disease there is no purpura. In severe cases of the hemorrhagic diathesis splenectomy is indicated if anemia is advancing and leucopenia is present in addition to a low platelet count, but is contraindicated unless the platelets are diminished in number. Blood transfusion should in all cases be performed before operation for splenectomy. No definite results can be ascribed to the use of hemostatics or calcium salts. Intravenous injections of adrenaline 1 in 1000 have been known to

check the hemorrhages in children, and success has been reported from the injection of t.a.b. vaccine.

Treatment of Malignant Tumors with Radioactive Bismuth (Radium E).—H. Kahn, writing in the *Deutsche medizinische Wochenschrift* of December 12, 1930, says that bismuth is the only heavy metal that is deposited electively in tumor cells, and the only one that produces improvement without considerable toxic secondary effects. Injections of bismuth, however, even when combined with irradiation, have had very little permanent effect. Experiments were therefore tried with a view to strengthening the effect of inactive isotopes afterwards by active ones, that is, instead of irradiating from outside, attempts were made to transfer the irradiation into the tumor cells themselves. To do this an active bismuth isotope was necessary, and since all other bismuth isotopes are very short-lived, radium E was practically the only radioactive substance through parenteral administration of which one might hope to influence the tumor cells without doing injury to the body cells. As was expected, injections of bismuth preparations containing radium E into mice with inoculation carcinoma resulted in 6 per cent of the injected mass being found in the tumors. On an average 18 times as much radium E was found in the tumor as in a corresponding amount of normal tissue. Similar results were observed in human beings in whom demonstrations could be made after operative treatment. The author's radiograms showed the same selective deposits even more clearly, when microtome sections of tumors and organs were laid upon a photographic plate in the dark-room. Radioactive bismuth is excreted chiefly through the kidneys, and but little through the liver and intestines, which organs accordingly exhibited far stronger concentrations of active bismuth. But unlike most other radioactive substances, especially mesothorium, radium E has no affinity for the reticuloendothelial system and the spleen. Hence no appreciable injury has been observed after injection of radium E, despite the fact that the equivalent of 3 mg. radium per dose has been injected intravenously. It is too soon as yet to express a judgment as to the value of therapeutic attempts with radium E in connection with human tumors.

Duration of Breast Feeding: A Comparative Study.—Joseph Garland recalls the statement of enthusiasts that 99 per cent. of modern mothers can and should nurse their infants. This, he finds is not the situation in and around Boston. An increasing number of mothers are temperamentally incapable of nursing their young for any material length of time, and still greater numbers seem to be physically incapable of it even after a conscientious effort has been made. It must be generally acknowledged that bottle feeding no longer entails the dangers which were formerly associated with it, for if it is carried out properly, its success so closely approximates that of maternal nursing that the results are practically indistinguishable. Garland studied two groups—a group of private patients and a clinic group—of 200 cases each, to ascertain the average duration of breast feeding in different types of patients, and, as far as possible, the nursing schedule which seemed to be most successful in promoting nursing. The major reason for weaning was found to be an insufficient amount of milk in both groups, despite special efforts made to continue nursing. Electric and water pumps, while effective, were rarely tolerated for any great period of time, and the technique of manual stripping was firmly rejected by the majority of those by whom it was attempted. Breast feeding was, in general, less successful and earlier terminated in the private case group. Only 27 per cent. of the mothers in the private patient group nursed beyond an arbitrary period of five months, as compared with 51.5 per cent. of the clinic mothers. Nearly the same number in each group made a practical failure of nursing, discontinuing the effort after a month or less, 52 in the private case group and 50 in the clinic group. The evidence seemed to be in favor of the four-hour schedule in the private case group, but was not well carried out by the clinic group. The distinct impression gained is that success in nursing depends more upon the ability and desire of the mother than upon any arbitrary factor such as a defined schedule of nursing hours. If any set rule should be established it is this: that every mother, *other things being equal,* should be encouraged to nurse her infant for a reasonable length of time; that she should be instructed in methods of increasing and continuing her supply of milk, and that the duration of nursing should be left to the discretion of the individual physician.—*New England Journal of Medicine,* December 25, 1930, cciii, 26.

The Recognition of Latent Thrombosis.—The increase of thrombosis and embolism since the War points, in the opinion of v. Hagen, to the need of utilizing every means of diagnosis and of piecing together small bits of testimony to insure the early detection of danger. In an illustrative case a patient who had been allowed to sit up in bed on the third day following a myomectomy suddenly devel-

oped severe pain in the right shoulder, which persisted 3 or 4 days, then disappeared. The patient was allowed to get up on the 10th day after operation, but died suddenly on the 13th day without the least premonitory symptom beyond a temperature of 37.7° C. (100° F.) taken 3 hours before. It was later recalled that she had complained of extreme sensitivity of the skin over an area extending from the top of the shoulder to the deltoid tubercle. The case was therefore one of a so-called Head's zone, which corresponded to the nerve supply from the 3d or 4th (or 5th) cervical segment, in which the visceral sympathetic nerves of the lungs debouch. In such a case the transfer of the irritation from the sympathetic tracts into the cerebrospinal nerves is made in the spinal cord itself, constituting the so-called viscero-sensory reflex. There is no doubt that an embolus had lodged in the right lung on the 4th day after operation, the origin of which was in a thrombosis of the pelvic veins. It was small enough to pass through the heart and to arrive in the right upper lobe without causing any local pain in the lung but, instead, projected a sensitivity into the entire cutaneous region corresponding to the common spinal segment. This viscero-sensory reflex must have pointed to an embolic lung affection on account of its sudden appearance, and should have been regarded as a strict indication for a stay in bed. While the coincidence of a latent thrombosis with a Head's zone is not an everyday observation, it teaches that if such a zone appears after an operation or in the course of a chronic confinement to bed, one should think of a possible thrombosis which has caused what might be called a "still" embolism in the viscus corresponding to the cutaneous zone.—*Münchener medizinische Wochenschrift,* November 14, 1930.

The Toxicology of Thallium.—After reviewing the literature of the pharmacology and chemistry of thallium, G. Roche Lynch and J. M. Spencer Scovell report three cases of fatal poisoning in three brothers. The three boys, aged 10, 7, and 5 years, as the result of a mistake in making up the prescription, received 39, 36 and 28 grains of thallium, respectively. The intention was to give the two eldest boys 3.9 grains and 3.6 grains, while the youngest was to have had 2.8 grains, *i.e.,* 8.5 mg. per kilogram of body weight. The two eldest boys died on the following day, the youngest on the third day. From the post-mortem examination it appears that in large toxic doses thallium acts as a mild irritant to the stomach. It poisons the more highly specialized cells of the body, causing marked fatty degeneration in heart and liver and necrosis in the kidney. These changes are rather like those seen in the phosphorus group of poisons, but differ in that the fatty degeneration is most marked in the myocardium. In this respect thallium seems to be unique. After a review of the literature of fatal cases of thallium poisoning the authors conclude that thallium acetate should not be used as an ordinary routine treatment for ringworm of the scalp. The drug is a highly toxic substance showing a marked similarity to lead, both in its chemistry and in its toxic symptoms, and the far-reaching effects of the poison are much greater than is generally supposed. It has a definitely selective action on all forms of nervous tissue, and it has been demonstrated that even in infinitesimal doses, it causes slight degenerative changes in the brain cells of rats. It is therefore most unlikely to leave the human brain entirely unchanged; it seems impossible to be certain that it does not hinder further brain development. The margin between an epilating and a toxic dose is extremely small and allows for no idiosyncrasies, whereas with the *x*-rays the dosage is very accurate, and if a mishap occurs it is at least local.—*The Lancet,* December 20, 1930, ccxix, 5599.

A Method of Reduction and Fixation of Pouteau-Colles's Fracture.—Raoul Hoffmann outlines in the *Schweizerische medizinische Wochenschrift* of November 15, 1930, his treatment of Colles's fracture, which consists in reduction by mechanical traction under local anesthesia, and maintenance of the parts in physiologic position with *direct* fixation of the fragment. The patient sits on a low chair with his entire arm extended on a table the top of which is on a level with his shoulder, so that the axilla, supported against the table edge, furnishes counter-extension. *No steel rod need be* passed across the metacarpals. All that is needed is the familiar 4-tailed bandage, with strips 75cm. long and 10 cm. wide, put on in imbricated manner over the carpus and metacarpus, after which a few turns of an ordinary bandage are applied, making a homogeneous support that holds very solidly to the member, from which no amount of force can displace it. A cord passed over a pulley or bottle with a weight of 10-15 kg. at its other end makes mechanical traction upon the hand and wrist, and overcomes all resistance of muscles and ligaments in 10-15 minutes at most. A final blow with the thumb upon the back of the epiphysis will complete the reduction if it has not occurred spontaneously. Usually the fragment is so well restored to place that all it has to do is to stay there, and the type of splint matters little. Hoffmann uses a Hülsemann splint of flexible

steel, the convex surface of which is adapted to the middle of the palmar surface of the forearm, where it is held in place by two straps, one at the upper end of the forearm and the other exactly at the level of the broken fragment, thus constituting a lever of the first rank. A projecting piece of splint maintains the wrist and metacarpus in physiologic position, elevated at an angle of about 20° in dorsal extension, with the fingers entirely free for use from the first hour. After a week, or two weeks at most, the splint is removed daily for the mobilization of the joint.

Pleural Effusions in General Practice.—W. Arnott Dickson, writing in the *British Medical Journal*, December 20, 1930, ii, 3650, expresses the opinion that in the examination of cases of chest disease the possibility of effusion is not sufficiently kept in mind, and that there is a lack of clear teaching as to what should be done when effusion has been found. Excluding effusion which is a sequel of injury to the chest wall, and which is really surgical, he discusses two varieties: (*a*) clear; (*b*) thick. A transudation of clear fluid of low specific gravity, noninflammatory in nature, and associated with edema elsewhere is most frequently found in heart disease. It should be removed when it is causing distress, and as often as is necessary. A clear effusion, often coming on insidiously, and without evident cause, the so-called *primary* or *idiopathic* effusion is usually due to pulmonary tuberculosis. This type of effusion often goes undiagnosed because of the erroneous belief that breath sounds are invariably absent over the fluid. The golden rule is: when in doubt, put in a needle. In the treatment of a tuberculous effusion, the fluid itself, if at all possible, should be left severely alone, and the patient should be treated for pulmonary tuberculosis in a sanatorium. Should simple aspiration be resorted to, it is best not to withdraw more than a pint at a time, and the actual withdrawal should occupy ten minutes. In thick effusions the presence of blood has no real significance. The immediate requirement is to establish the identity of the organism responsible for the pus. In pneumococcal empyema, in the presence of a high pulse rate after the crisis the exploring needle should be used as a matter of routine. The critical question in connection with operation is, "Has the pneumonia subsided?" Until this can be answered in the affirmative, open operation should be deferred. The pneumococcal empyema, with its creamy yellow pus, found about four weeks after the onset of the illness, should be handed over to the surgeon at once for adequate drainage, which usually means resection of a rib, under local anesthesia. The streptococcal cases must on no account be operated upon at once, or the chances of recovery are immediately reduced. The chest must be aspirated as required to reduce pressure, over a period of about three weeks, until the fluid becomes frankly purulent and adhesions have formed.

Vasomotor Rhinitis.—Joel J. Pressman suggests that the term "turgescent rhinorrhea" be used as a substitute for the term "vasomotor rhinitis," since our lack of knowledge of the physiology does not warrant the use of the latter. There is evidence that the condition may be glandulomotor or lymphaticomotor, as both glands and lymphatics are supplied by sympathetic nerves. In practically all cases in the group turgescence and rhinorrhea are constant factors. The etiology can be allergic or nonallergic, and in each case it is necessary to determine which is the causative factor. Certain local nasal conditions, such as deviated septa, polyps, and sinus infections are often present in turgescent rhinorrhea and may represent either the primary etiology or be a complication of an allergic state. The etiology cannot be determined by therapeutic trial. The criteria by which we can distinguish allergic from nonallergic turgescent rhinorrhea are the history, examination of the nose, study of nasal secretions, histologic studies of the nasal mucosa, and the determination of sensitivity to foreign proteins. Allergic rhinitis gives characteristic histopathological changes, which may be markedly altered by secondary suppuration. In uncomplicated allergic rhinitis there is marked and consistent subepithelial infiltration of eosinophiles, dilatation of the glandular structures, intercellular edema and at times dilatation of the vascular channels. With a superimposed suppurative rhinitis the microscopical picture cannot be distinguished from that of an infectious rhinitis in which allergy plays no part. There is no reason why the rhinologist should not follow the fruitful expedient of the general surgeon and attempt to establish the diagnosis by performing a biopsy in all cases of doubtful etiology. Allergic studies should be carried out before attempting to treat any case, even though it may appear that local conditions are the etiologic factor. Exception may, however, be made when, for example, a large polyp is present or there exists a chronic extensive sinus infection which will eventually require surgical treatment. Because of the frequency of complications, it is almost obligatory on the part of the allergist to subject each case of allergic rhinitis to a thorough and complete otolaryngological examination.—*Laryngoscope*, December, 1930, xl, 12.

LEGAL

A JUST CENSURE

By Lorenz J. Brosnan, Esq
Counsel, Medical Society of the State of New York

We are all familiar with the fact that there are certain lawyers who, in representing a plaintiff in a lawsuit, will endeavor to force a settlement from the defendant by threats of criminal prosecution if a settlement is not forthcoming. So far as the ethics of the situation are concerned, it makes not the slightest difference whether the lawyer follows up the threat by a criminal prosecution. A member of the Bar who indulges in practices of this kind reflects discredit not only upon himself, but upon the profession of which he is a member.

A short time ago there was brought before one of our Appellate Courts a disciplinary proceeding initiated by the local Bar Association in connection with the activities of a certain lawyer who in a civil case threatened a defendant with criminal prosecution. Although no criminal prosecution was attempted, the Appellate Division severely censured this attorney for his misconduct.

The letter written by the lawyer against whom disciplinary proceedings had been taken in this matter read as follows:

"In behalf of my clients, I instituted action against you for the recovery of damages to my client's automobile and damages for personal injuries sustained by them as a result of an accident wherein your taxicab collided with an automobile operated by my client. My process servers made many attempts to effect service upon you but without success. I was, therefore, compelled to procure an order of the court permitting service of the process upon you by substitution.

"Up to the present time I have not received an answer to the summons, and I am, therefore, in a position to enter judgment against you by default. *If I am put to the trouble of proceeding against you personally on the judgment referred to, I will be compelled to institute criminal proceedings against you for failing to cover your taxicab by proper insurance policy under the law.* I have been more than lenient with you and will refuse to tolerate any more of your nonsense.

"I, therefore, trust that you will see the advisability of taking this matter up with me immediately upon the receipt of this letter.

"This is my final notice."

The lawyer admitted writing the letter, but claimed that the letter was written with a view to getting the defendant, a taxicab driver and owner, to turn the matter over to his insurance company, the lawyer being of the belief that the owner was covered but had simply neglected to refer the claim to the insurance company. His interpretation of the letter was that it was simply a notice that prosecution for the violation of a penal statute would follow if it developed that there was no insurance. The Appellate Division, however, in its opinion disposed of this explanation in the following language:

"We think the letter presents the alternative of payment or criminal prosecution."

The learned Referee to whom this matter was in the first instance referred reported to the Court as follows:

"Neither the motive of the respondent in the present proceeding, nor the outcome, can alter the principle involved. There should be no confusion in the mind of any lawyer as to the distinction between criminal and civil proceedings. The former are brought for the protection of society, and the latter for the enforcement of individual rights. It is within the province of any citizen to bring violations of the criminal law to the attention of the appropriate authorities. Had respondent, whether in proceedings against B, after a default judgment, or in any other manner, found that he was uninsured, he might properly have caused charges to be preferred against him. The question here is whether a member of the Bar may ever, prudently and properly, make demands of a defendant in a civil suit coupled with threats of criminal proceedings unless those demands were complied with. Of course, differences in degree are to be recognized. It is one thing to threaten criminal proceedings in connection with the assertion of certain claims, and it is another thing actually to institute such proceedings. So also it may be one thing to make such threats, unless damages are paid or money demands complied with, and another thing to couple those threats with lesser demands. The precise threat in the letter under consideration is found in the following passage:

"'If I am put to the trouble of proceeding against you personally on the judgment referred to, I will be compelled to institute criminal proceedings against you for failing to cover your taxicab by proper insurance policy under the law. I have been more than lenient with you and will

refuse to tolerate any more of your nonsense. I, therefore, trust that you will see the advisability of taking this matter up with me immediately upon receipt of this letter.'

"It is true that B could turn aside the threat, either before judgment or after judgment, if he was in point of fact insured. In such event the threat could have no terror for him. But it seems equally true that in case he had not taken out insurance or had permitted it to lapse or to be cancelled, he was threatened with criminal proceedings which he could only avoid by making adjustment with respondent. It is also true that respondent obtained the legitimate result which he claims to have been seeking. It still remains a question whether he used legitimate means to do so. There is a threat in the letter which cannot be read out of it."

In severely censuring the lawyer in question the Court said:

"We are of the opinion that the letter in question was improper, and that in writing and sending it respondent was guilty of unprofessional conduct. This court has heretofore expressed its disapproval of using threats of criminal prosecution as a means of forcing a settlement of civil claims. Thus in . . . (citing a case) an attorney was censured for having written a letter demanding the return of an engagement ring and other valuables, with the statement therein that the recipient of the letter was liable to criminal prosecution, but that if she returned the property no further proceedings would be taken. In . . . (citing a case) an attorney was censured for having written a letter in which he wrote that unless the person against whom a claim for damages for personal injuries showed 'some substantial evidence' of his willingness to compensate the client for her injuries, 'I shall have no other alternative but to immediately criminally prosecute you for assaut against my client.' Respondent in that case had endeavored to get the addressee of the letter to sign an affidavit admitting that he had committed a misdemeanor in not stopping his car after the accident.

"Where the threat to begin criminal proceedings is followed by the actual institution thereof the offense is still more serious, and in . . . (citing a case) an attorney guilty of making such threats, followed by an attempt to secure the indictment of the person threatened, was suspended for one year only, in view of his youth and inexperience. In its opinion the court, through Presiding Justice Ingraham, expressed the opinion that 'a lawyer is never justified in using a criminal proceeding to collect a civil debt or enforce a civil right.'

"Respondent has been guilty of a violation of the principle which condemns any confusion of threats of criminal prosecution with the enforcement of civil claims. For this misconduct he should be severely censured."

The Appellate Division in its opinion in this case, in no uncertain terms, places its stamp of disapproval upon practices of this character. We believe that every lawyer who has a proper regard for the obligations that attach to his office will agree that the severe censure visited upon the lawyer in question by the Court was entirely justified.

ALLEGED NEGLIGENT TUBERCULIN INJECTIONS

In this case a young woman called at the office of the defendant, a physician and surgeon, specializing in eye diseases. She complained of soreness in the left eye and gave a history of recurrent attacks of inflammation in her eye for a period of seven years following an attack of ear infection. The doctor advised that she should submit to a series of treatments consisting of tuberculin injections. Eight injections of progressively increasing strength were given her and then she failed to return for further treatment. These injections were each given subcutaneously in the arm, and all care was taken in each instance to sterilize the needle. The fluid injected was prepared by the house surgeon from ampules furnished by the City Board of Health.

A suit was instituted against the doctor who examined her and it was claimed that the patient did not at any time have an ulcer of the eye, but had merely what was termed a "squint" and that the injection given was improper treatment for the condition. The plaintiff further claimed that as a result of these allegedly improper injections a rash had broken out all over her body and caused her great discomfort and suffering.

A physical examination of the plaintiff was had and an extensive skin disease was found. The skin in large areas was scaly and thickened, with reddish blotches. It was, of course, asserted that the condition had been much worse prior to the examination and subsequent to the injections. The condition seemed to the examiner to be Lichen, but there was no symptom to indicate a causal connection with any act for which the defendant was responsible.

The case came on for trial in its regular order, and when it was called the defendant was ready to proceed but the plaintiff was not. A motion was made to dismiss the action and was granted, thereby terminating the matter in the doctor's favor.

NEWS NOTES

DUTCHESS COUNTY PUBLIC HEALTH AND PUBLIC RELATIONS

Read at the Annual Meeting of the Dutchess-Putnam Medical Society, January 14, 1931.

The Committee on Public Health and Public Relations begs leave to offer the following report of its activities for the past year.

Three years ago, this Committee was appointed by your Society and set about to do its work as outlined by the State Committee of Public Relations, and during those years a good deal has been accomplished to bring about the co-relation of the Medical Society and the various agencies doing health work; and in the minds of your Committee the accomplishments have been due entirely to the willingness on the part of the laity to co-operate with their medical brethren.

There has never been a time when everyone who is at all interested in the promulgation of public health has refused to put their shoulder to the wheel and assist in every way possible the various ideas and plans which the Medical Society has thought wise; and at the same time your Committee knows of but one instance, which will be discussed later, where the opinion of your Committee was disregarded.

It is fitting at this time to extend to the Dutchess County Health Association, the heartfelt thanks of the Society for its earnest co-operation and support in every effort to bring about a realization of the aims and principles of this Committee. Particularly do we wish to thank Miss Dorothy Carter for her loyalty and untiring efforts in behalf of public health, and while expressing deep regret at her departure from our midst to a field where her usefulness will be much appreciated and of benefit to everyone. We feel that her successor, Miss Frances Clark, is well qualified to take on the mantle of responsibilities as has been shown in her desire to continue the assistance which is so greatly needed for the successful culmination of the important projects which now confront us all.

One year ago, the Committee made certain recommendations, which were confirmed by the Society, and in this connection it may not be amiss to mention that several have been carried out.

The campaign of toxin-antitoxin against diphtheria has been continued by the individual members of the society, not with any widespread publicity, as in former years, but with quiet, continued work among each one's clientele, with the result that our County now is not in the laggard class in this respect. The examination of the school child has been somewhat modified. More stress has been laid on such examinations by the family physician, with the result that many children have been thus examined, not with any better results, but with more comfort to the little patients and a great satisfaction in the fact that State medicine is not advancing at the alarming rate some would think.

The tuberculosis prevention has been advancing and at the present time x-rays are being taken in many instances, among the schools, to determine the incipient case. This should be encouraged with the view to lowering the mortality of this dreaded disease in the age group, which is greater than all others.

The pre-natal clinics have been continued and increased, and it is pleasing to note that the interest and attendance is more than in previous years, which is gratifying to all who are concerned in the reduction of maternal mortality.

The pre-school clinics are progressing and your committee has in mind, in response to a request from the Commissioner of Health of the State, to inaugurate more of these clinics during the coming year, with the idea that the entire county may be covered, and no child of tender years be prevented from regular routine physical examination. Only by means of such efforts can the infant mortality be reduced to a point where we can point with pride at our record.

All of these efforts have been possible only with the full co-operation of the medical profession and the various health organizations, and the willingness on the part of both to work together for a common cause.

The Board of Supervisors has been particularly gracious in appropriating money for honorariums to the physicians conducting these various clinics and for increasing the number of public health nurses in our county.

They are to be thanked and commended for their interest in public health and prevention of disease and your committee knows of no solicitations, which have been shown necessary, being refused.

The City of Poughkeepsie has created a Department of Child Hygiene with a director, and it is hoped that this will be fruitful in bringing about the desired results, namely, the

prevention of the unnecessary large sacrifice of human life during the tender years of infancy.

One year ago, the committee recommended that this Society endorse the plan of a County Health Department for Dutchess County, and at the time it was considered by the Board of Supervisors, by the appointment of a committee to study the situation. A careful review of conditions in this county was made by your committee and it was deemed expedient to defer, for the time being, any efforts to bring about the establishment of this department, and while your committee has not changed its ideas on this subject, it does feel that the postponement of its inception, for a short while, will work to better advantage to the profession, to the laity and to the powers which must be financially responsible for its completion.

In this connection, your committee feels that a few words of criticism may not be amiss.

The State Department of Health, through its official representative in this district, has been most urgent in its efforts to bring about the establishment of the county health department, contrary to the advice of this Committee and other members of the profession, and the attitude by him has been such, that it is feared the establishment of such a department has been longer postponed than would have been necessary.

One of the first principles evolved by the State Committee on Public Relations, was the co-relation of the profession with the various health agencies, notably, the Department of Health, and it is to be regretted that this difference of opinion has arisen between the profession and the one agency which should be the first to co-operate.

In the words of Elbert Hubbard "Any system can be defeated by one single man who places himself out of harmony with it."

The unemployment situation with its naturally decreased incomes, and the relation of our profession to this condition, was presented to the society for consideration and referred to this committee.

After very serious thought your committee feels that any action of a definite nature would not be productive of the results desired. While, at the present time, so much is being written on the high cost of medical care, including physicians' fees, which are receiving a great deal of criticism, this in the minds of the committee is erroneous since it has been estimated that only about twenty per cent of such costs goes into the pockets of the medical man. We feel that the problem is an individual one, to be settled by each member of the profession, either by a reduction of fees, extension of credit, or whatever contribution he may choose to make to relieve the situation.

Article X, Section 83, of the Public Welfare Law, reads: "The Public Welfare District shall be responsible for providing necessary medical care for all persons under its care, and for such persons otherwise able to maintain themselves, who are unable to secure necessary medical care. . . . Such care may be given in dispensaries, hospitals, the person's home, or other suitable place."

From the beginning of time almost, down to the present, physicians have been giving of their services to deserving cases with no thought of recompense, and they have given such services gladly, with the only thought of reward being perhaps an extra star in that crown for those to whom it may be said "well done," etc. Now the great State of New York has seen the light of day, and enacted a law which makes it mandatory for the doctor to receive compensation for the work he does among the wards of the various welfare districts. So far as can be learned, this has been taken care of in those cases cared for in their own homes, but when it comes to hospital care, nothing has been done and the rules of most hospitals prevent a doctor charging for cases he cares for in a general ward. There is no reason in the world why a physician who gives his services to those who need them, should not be paid, and it is now the time for us to get together in some concerted action, to the end that the *tradition,* so long prevalent that doctors do not need to charge for their services in needy cases, be broken down and the welfare district be reminded of their duty.

Just how this should be done, is not at present pertinent to this report. Whether the matter is one of hospital management of the ward cases, or otherwise, your committee does not feel competent to pass on at the present time.

It is recommended that this be given careful study by this society, either through a special committee or this committee, if you so desire, with the idea of bringing about some concrete plan whereby physicians may receive a fair compensation for their services. "A laborer is worthy of his hire," and the time has arrived for the physicians to come into their own.

William Gerry Morgan, President of the American Medical Association, said in a recent address: "The popular misconception has arisen that the doctor's services are included in the hospital's service and that one bill covers both. On the contrary, the hospital in no sense provides the services of the physician

who treats the patient there. The services are not the hospital's to provide. The physician is no more obligated to provide for the care of the indigent sick than his fellow citizen."

This briefly covers the activities of the committee during the past year. We feel that our efforts have not been entirely in vain, our relations have been pleasant and each member of the committee has done whatever he could to promote good feeling between the profession and other agencies. The final sentence in the report of the Dutchess County Health Association, to this committee, is timely at this time. "Along any of the lines of the Association's work, we would welcome suggestions from you. We are very anxious to cooperate with you in furthering the health work of Dutchess County in any way we can"

Your committee feels the profession has reached a point in its existence, that requires constant watching and has shown by its attitude that they are the leaders in matters concerning public health.

Dr. Ochsner of Chicago, has said, "The longevity, health, efficiency and happiness of the people, depend more upon the integrity, ability and industry of its medical profession than upon anything else."

This report would not be complete without extending to the members of this society the sincere thanks of the committee for their loyal support. It would have been impossible for this committee to have accomplished anything without the backing the society has given it, and to our successors we offer the same efforts that have been afforded us.

In the words of Disraeli, "The public health is the foundation upon which rests the happiness of the people and the welfare of the nation."

JOHN A. CARD, *Chairman.*
C. KNIGHT DEYO,
WILLIAM A. KRIEGER,

LEGISLATIVE BULLETIN NO. 1

January 20, 1931.

The legislature has begun its regular sessions. There have been quite a few changes in the personnel of the two Houses. Our Public Health Committee has a new chairman in each House. The personnel of the Senate Committee is:

A. H. Wicks (Chm.), J. Griswold Webb, Warren T. Thayer, Perley A. Pitcher, Leon F. Wheatley, Wm. Lathrop Love, John A. Hastings, John T. McCall.

The personnel of the Assembly Committee is:

W. Ray Austin (Chm), Burton D. Esmond, Frank X. Bernhardt, Charles J. Gimbrone, Victor C. Lewis, James R. Stevenson, J. Devillo Pollard, F. Lewis Palmer, George E. Dennen, John A. Devany, Edward P. Doyle, Alexander A. Falk, Christopher C. McGrath.

Both committee rooms are on the fourth floor of the Capitol this year. In previous years they were on the third floor, as many of you will recall. Since the occupacy of the new state office building more space has been made available in the Capitol for the legislative committees.

Senator Pitcher, who was chairman of the Senate Public Health Committee last year, has been promoted to chairman of the Committee on Codes. Dr. Lattin, who was for so many years chairman of the Health Committee in the Assembly, did not return. Mr. Austin, the new chairman, was a member of the committee for a number of years.

Only seven bills thus far have been introduced in which we have a particular interest. Three of these are reintroductions. Mr. Cuvillier has introduced again his health insurance bill—Assembly Int. No. 5; Mr. Vaughan has reintroduced the dog bill—Assembly Int. No. 143; Mr. Horn has reintroduced the compensation bill which he carried last year—Assembly Int. No. 52. Dr. Love has introduced a bill, Senate Int. No. 86, making it a misdemeanor for any person causing one baby in a hospital to be exchanged for another, each newly born baby to be finger printed and tagged and kept in separate receptacle; and and another prohibiting a drug store or pharmacy from selling food to be consumed on the premises, Int. No. 47.

Senator Buckley has introduced a bill authorizing certain child welfare boards to establish vacation camps for children, Senate Int. No. 42.

Mr. Berg, who as Assemblyman has helped us several years in our opposition to the chiropractors, was promoted to the Senate at the last election. He has introduced a bill in the Senate—Int. No. 64—making compensation for any disability not to exceed $25.00 a week.

The attention of the chairmen is again called to the conference which will be held in Albany on Tuesday, February 10th. Already quite a number of chairmen have written us that they will be present. It will help considerably in arranging the luncheon if we know in advance about how many reservations to make.

PUBLIC RELATIONS COMMITTEE

The regular monthly meeting of the Committee on Public Relations was held on the morning of Thursday, January 8, 1931, in the building of the New York Academy of Medicine, at 2 East 103rd Street, New York City, with the following members present:—

Dr. James E. Sadlier, Poughkeepsie, Chairman.
Dr. A. J. Hambrook, Troy
Dr. W. D. Johnson, Batavia
Dr. O. W. H. Mitchell, Syracuse, N. Y.
Dr. George M. Fisher, Utica

The following representatives of the Medical Society of the State of New York were in attendance:

Dr. W. H. Ross, President
Dr. D. S. Dougherty, Secretary
Dr. Charles Gordon Heyd, Treasurer
Dr. J. A. Card, Speaker of the House of Delegates
Dr. J. S. Lawrence, Executive Officer
Dr. Frank Overton, Executive Editor
Dr. T. P. Farmer, Chairman of the Committee on Public Health and Medical Education
Lorenz J. Brosnan, Esq., Counsel

The County Medical Societies of Greater New York were represented as follows:

New-York County:
Dr. DeWitt Stetten
Dr. Frederic E. Sondern

Kings County:
Dr. Walter D. Ludlum, President
Dr. Alfred E. Shipley
Dr. Alec N. Thomson

Bronx County:
Dr. J. H. Gettinger, President
Dr. Irving Smiley
Dr. E. C. Podvin

Queens County:
Dr. A. L. Voltz, President
Dr. Carl Boettiger

The special subject of discussion was the part which the medical profession of Greater New York could take in the work of the general committee on Public Relations. The discussions took the form of diagnosis rather than treatment, as might be expected since this was the first meeting held in cooperation with the Metropolitan societies.

Dr. Shipley of Kings County spoke of some difficulties encountered in the anti-diphtheria campaign. While all the counties were confronted with the same general problems, their details varied in the several counties. The greatest need in the City was that the county societies should realize the elements of the public relations which are common to all. He felt the great difficulty at present is that each county sees a problem as affecting it in a way different from that in which it affects the other counties. He thought that if the five County Societies could be closely organized through proper representatives, such organization might accomplish a great deal under the direction of the State Public Relations Committee.

Dr. Alec N. Thomson, speaking for Kings County called attention to the complexity of medical organization in the large city. In addition to the five county official organizations, there are many unofficial medical groups organized primarily for scientific study; and in addition to these, there are others which have active committees and conferences continually at work and make practically no effort at unification of activity or program. He proposed, for example that the Public Relations Committee can be of great service in supporting local organizations by directing a proper opposition to the extension of free clinics as advocated by the local Committees on Tuberculosis.

Dr. Walter D. Ludlum, President of the Kings County Society, having arrived in the meantime, stated that he thought the greatest handicap the County Societies suffer is in the lack of continuity of elected officers. A man might have a very good program and actively advance it, but at the end of the year he is gone and his successor cannot be expected in every instance to carry forward his program and then a change of administration means not only a change of one man, but of a number. On the other hand, the official and voluntary health agencies have definite and more or less permanent organizations. The Academy of Medicine, likewise, has a more continuous organization and, for that reason, is many times called upon to represent organized medicine.

The representatives from Bronx County spoke as follows:

Dr. J. H. Gettinger, President, endorsed the idea of a closely knit organization representing the five Societies, and pointed out the need and the opportunity of work for such organization.

Dr. E. C. Podvin stated that in his opinion the greatest difficulty in securing the maximum benefit from such an organization is to keep busy men interested. He believes that unless somebody makes it his special business to see that the members to a five county organization are kept intimately informed with things that are happening and with the work that they are expected to do, they will lose interest and not attend conferences. He cited from his own experience how difficult it is to keep interest in such live subjects as tuberculosis. He, however, endorsed most heartily the idea of a five-county organization.

Dr. Irving Smiley, Vice-President, offered the opinion that the public has been getting a wrong impression of physicians' interest in public health. It believes that the average physician is only interested in therapy and not in prevention, and he

felt that to advance our influence we ought to make an effort to correct this impression

The representatives of New York County expressed the following opinions

Dr DeWitt Stetten, Past-president of the New York County Society, agreed that we should make an effort to reestablish confidence in medicine with the public He felt we must not be too dignified and aloof, but must be more willing and ready to cooperate with those who are seeking to advance public health and to do it to an extent in their way He felt that the voluntary agencies may be found very useful and helpful if the proper contact is made with them, and the physicians take pains to inform themselves intelligently on the cooperation they develop with the agency

Dr Sondern stated that the time to do something is when that something is demanded and that the voluntary agencies are successful in their public health activity at the present largely because they are doing what the public feels it needs and that the physicians are making a mistake by not making similar use of the demand He said we cannot expect to accomplish much by theorizing, but we must take an active advantage of the demand when it exists He attributed our apparent apathy to a defect in our education That there should be so much discussion with regard to the inability of a large portion of the public to provide adequate medical care is largely due to lack of proper provision on the part of the medical men themselves He thought the County Societies might do more toward educating their members on the general problem of public relations and modern duty

Dr Carl Boettiger, Chairman of the Queens County Committee on Public Relations, reviewed the work that his committee accomplished in the last year It established a contact with all of the voluntary agencies and found such procedure very fruitful By experience he learned that the voluntary agencies are very grateful for the aid they received from his committee, and without hesitation returned, seeking twice as much assistance His committee has arranged to have a physician included in the membership of every voluntary agency working in his city In the near future there will be a general meeting of all voluntary agencies and the Public Relations Committee of Queens County, to devise a program of activities for the coming year

Dr George M Fisher, of Utica stated that he believed the task of organizing the five counties was so great that it could not be accomplished except by the full time services of a physician who could represent the five counties and would have time to make a careful study of local problems Physicians are too busy to volunteer the amount of time that will be required for a task as great as this

Dr O W H Mitchell, of Syracuse stated that his point of view was likely to differ from what had already been expressed, because he is a school teacher and engaged in training medical students He feels that more attention must be given to the proper training of medical students if we expect to have the young men coming out, take an advanced position in the promotion of public health activities

Dr John A Card spoke of some of the difficulties which the Dutchess County Medical Society was having in carrying out its plan for establishing a county health department

Dr W H Ross, President of the Medical Society of the State of New York spoke of the construction work being done by the State Health Commission appointed by Governor Roosevelt, and said that many health bills would probably be introduced in the Legislature this winter as the result of the investigations of the Commission (See this Journal of January 15, page 106)

The following resolution, proposed by Dr Ludlum, was unanimously adopted

"It is recommended to the State Committee on Public Relations that it appoint a committee which in operation may act in an advisory capacity with the local Five County Committee

REGULATIONS ON PHYSIOTHERAPY

At the meeting of the Board of Regents held November 21, 1930, a Regulation of the Commissioner of Education was approved by the Board of Regents to govern that part of section 1262 of the Education Law, reading

"A license to practice physiotherapy shall not permit the holder thereof to administer drugs or to practice medicine as defined in section 1250 of this article except to treat diseases under the supervision of a duly licensed physician"

The Regulation is as follows

"Registered Physiotherapists shall keep a written prescription signed by a licensed physician for each patient given physiotherapeutic treatment The prescription shall state diagnosis and the type of treatment ordered Such records shall be open to the inspection of the Department of Education at all times"

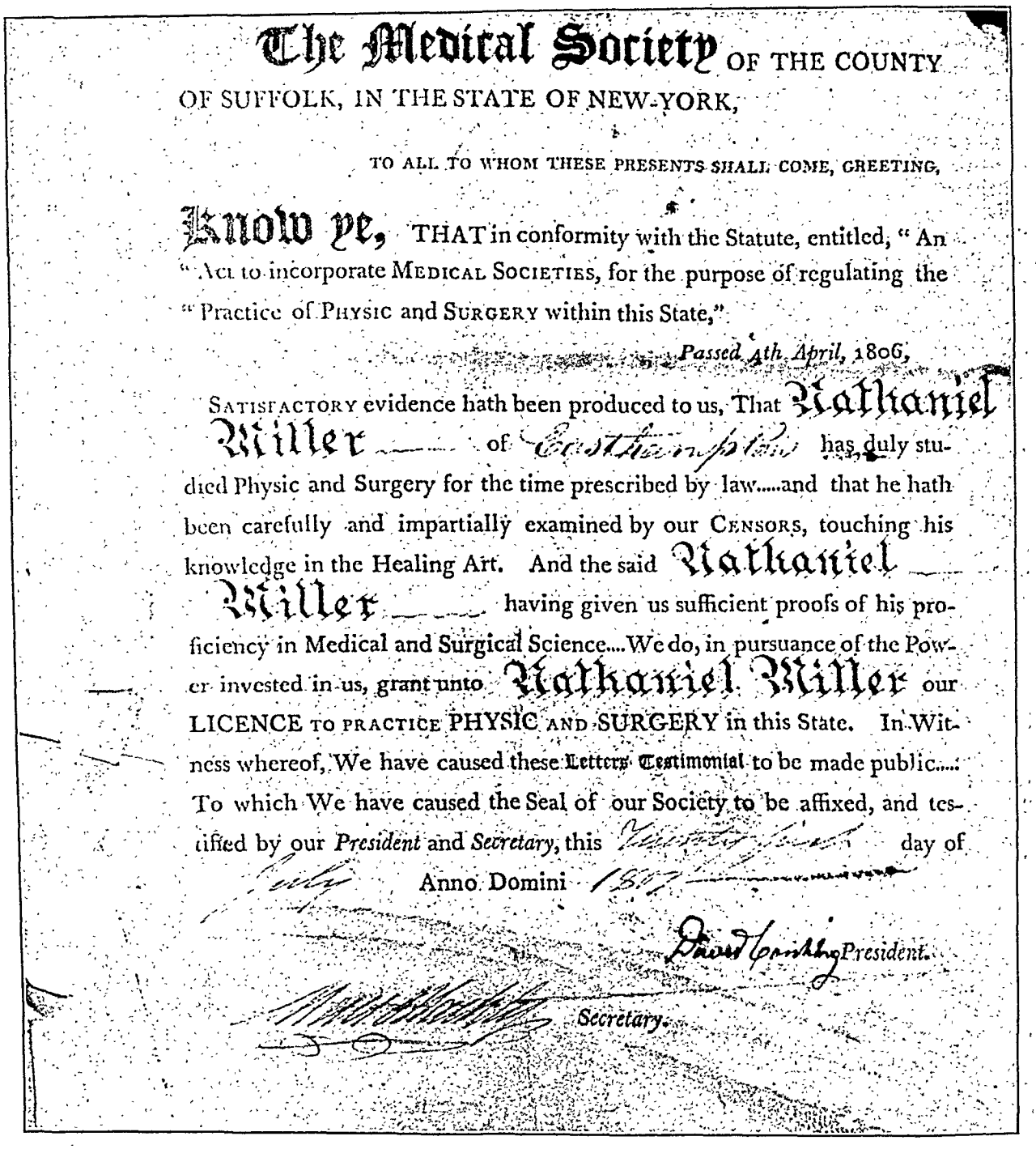
The practice of registered physiotherapists is governed by this Regulation

Practicing physicians are requested to cooperate in the enforcement of this regulation by giving such written prescriptions in all cases referred to Registered Physiotherapists for treatment

HAROLD RYPINS M D *Secretary*
New York State Board of Medical Examiners
January 8, 1931

LICENSE FROM THE SUFFOLK COUNTY MEDICAL SOCIETY IN 1807

The Suffolk County Medical Society was organized on July 22, 1806; and just one year later it examined Dr. Nathaniel Miller, and give him the license which is here reproduced. The license was signed by the President, Dr. David Conkling



The Medical Society OF THE COUNTY OF SUFFOLK, IN THE STATE OF NEW-YORK,

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETING,

Know ye, THAT in conformity with the Statute, entitled, "An "Act to incorporate MEDICAL SOCIETIES, for the purpose of regulating the "Practice of PHYSIC and SURGERY within this State,"

Passed 4th April, 1806,

SATISFACTORY evidence hath been produced to us, That Nathaniel Miller of Easthampton has duly studied Physic and Surgery for the time prescribed by law.....and that he hath been carefully and impartially examined by our CENSORS, touching his knowledge in the Healing Art. And the said Nathaniel Miller having given us sufficient proofs of his proficiency in Medical and Surgical Science....We do, in pursuance of the Power invested in us, grant unto Nathaniel Miller our LICENCE TO PRACTICE PHYSIC AND SURGERY in this State. In Witness whereof, We have caused these Letters Testimonial to be made public.... To which We have caused the Seal of our Society to be affixed, and testified by our *President* and *Secretary*, this [illegible] day of July Anno Domini 1807

David Conkling *President.*

[illegible] *Secretary.*

of Riverhead, and the Secretary, Dr. Moses Blatchley, of Huntington.

Dr. Miller was born in Easthampton in 1784 but practiced medicine in Brookhaven until his death in 1863. He was President of the Suffolk County Medical Society in 1832, when it licensed Dr. George L. Huntington of Easthampton, one of the original observers of Huntington's chorea. He was a corpulent gentleman of the old school, and was slow moving as befitted the dignity of the community doctor. Yet he was prosperous in business, and was active in civic affairs. His mahogany medicine case, as large as a dress suit case, is deposited with the Suffolk County Historical Society in Riverhead.

PHYSIOTHERAPY IN ULSTER COUNTY

The Ulster County Medical Society appointed a committee on Physiotherapy, consisting of Dr A. S. Keefe, Chairman, Dr. O. DuB. Ingalls, and L. Hugel, all of Kingston. This committee made a report on October 8, 1930, setting forth the activities of the physicians of Ulster County along the lines of physiotherapy and allied methods of treatment. The committee secured data from two groups,—those living outside of Kingston, and those living within the city.

Group Outside of Kingston—Reports were obtained from 15 out of the 30 physicians to whom blanks were sent. The number of those using each form of physical therapy was as follows:

Thermal. Conductive heat; poultices, hot water bags, douches, hot and cold packs each 14; baths 11; sprays 9. Convective heat, radiant super heat, electric coils 3; daylight lamps 5; ovens 5

Chemical. Ultra violet light 9; x-ray 5; radium 2; infra red light 5.

Mechanical. Massage 10; manipulation 7; mechanotherapy 3; mechanical vibration 1.

Electric. Galvanic 4; sinusoidal 2; faradic 3; diathermy 7; static 1.

We feel, though the above group is small, that it shows a keen appreciation of the value of physiotherapy, for there is not a single form of physical means in the above classification but what one or more doctors are employing it in their practices. That is, indeed, a very fine showing.

Group in the City of Kingston—Information was obtained from 26 of the group as follows:

Thermal. Conductive heat—poultices, hot water bags, baths, sprays, hot and cold packs. All members of the group use all or nearly all of this form of physiotherapy, no particular equipment being required, except for baths and sprays.

Convective Heat—Radiant super heat, daylight lamps, 3 or 4 doctors; ovens 10 or more.

Chemical. Ultra violet lights are used by 4 or 5 physicians; x-ray 1 or 2; infra red lights 5 or 6, carbon arc lights 3 or 4. There is but one of the water cooled type of ultra violet light, in the city. Three doctors are using radium.

Mechanical. Massage and manipulation, practically all of the group use one or both forms, no special equipment being required. These two items are really a part of mechanotherapy. However, in this latter item it was intended to include such special equipment as would be called for in mechanical massage, kneading, and exercises; and various other apparatus, practically all of which get back to the same idea we started with, massage and exercise. No individual in this group is so equipped.

Electric. Galvanic, 5 or 6 doctors; sinusoidal, 2 or 3; Faradic, 2 or 3; diathermy, 10 or more; static, 1 or 2.

X-ray. Under the head of X-ray, we wish to call attention to the fact that it lists therapy only. There are four or five opportunities to secure service for fluoroscopic, and one for fluoroscopic and radiographic work combined, but only one or two that use the X-ray for therapy. We will note that there is some controversy as to the specific indications and contraindications for the so-called superficial X-ray therapy, nevertheless, there still remains a rather wide variety of cases than can receive benefit from this form of treatment. We hope to hear from one of this committee as to the excellent results obtained from X-ray therapy, with citations of cases to show results obtained.

Hospitals. The physical equipments of the hospitals of Ulster County are as follows:

The Kingston City Hospital: X-ray, ultra violet light, oven. The Benedictine Hospital; X-ray, ultra violet light, oven. Of course we expect to find items under the heading, thermal, as part of the routine practice of both institutions, as well as massage and manipulation.

Sahler Sanitarium: All items under thermal heading; daylight lamp, ultra violet light, infra red light, massage, manipulation, mechanotherapy, mechanical vibration. Electric: galvanic, sinusoidal, faradic, diathermy. Baths, other than ordinary types used in general practice,—shower, douche, cabinet, and a swimming pool. Occupational therapy.

County Tuberculosis Hospital: Occupational therapy.

There are three opportunities in Kingston, to secure properly given colonic irrigations under the supervision of a physician.

Practice by Physiotherapists—If information does not serve us falsely, and we have no reason to believe that it does, the physiotherapist is actually accepting patients who have not come through the regular and lawful channels of reference, the qualified physician, and is administering treatments to such patients. Also it happens that some cases, at least, that are referred by the physicians, get garbled discussions of their diagnoses, and, in some instances, the physiotherapist discovers new ailments that the doctors never dreamed of as existing. For example, a woman patient, on the verge of a nervous breakdown, was informed, when she appeared at the physiotherapist's for a colonic irrigation, that she had a tumor. One can imagine the state of mind, of this already nervous person, upon the receipt of such a new and startling diagnosis. It required

considerable talking on the part of the referring physician to convince the patient no tumor existed. It seems to be a fairly common practice on the part of the physiotherapist to inform the patients that they should come back for more treatments, this on their own initiative, and not by order of the referring physician,—at least the patients were not informed by the doctor that it was necessary to do so.

One chiropodist still continues to keep his sign, in evidence to the public, with the title Dr. before his name.

ULSTER COUNTY

Supplementary Report on Public Relations

A Public Relations survey of Ulster County was published in this Journal of January 15, 1930, page 105. A supplementary report was made by the Committee on October 8, 1930.

The Committee first gave an excellent report of the Conference of Chairmen of County Committees on Public Relations which was held in Albany, on September 28, 1930, and then reported on local affairs as follows:

Hospitals—The hospitals of Ulster County are not sufficiently recompensed for the services that they render the indigents of the county. It is suggested that there be further agitation in this regard and publicity, if necessary, and, if the County Society so desires, this matter can be taken up through the Committee on Public Relations. It is generally conceded that the "flat-rate" recompense to hospitals is unfair and unsatisfactory, and it is suggested that a "per diem" rate, which would more nearly recompense the hospitals for their services, be worked out. The Assistant Commissioner of Public Welfare pointed out that the doctors were not so definitely provided for. A Public Welfare official is charged with employment of a physician either in the hospital or in the home; but in order to hold it, there must be a written contract, and there apparently is no appeal over the decision of the Welfare official as to whether or not the doctor be employed. There is a provision whereby one emergency treatment may be given and then the Welfare official must be notified, but thereafter a written authorization for further treatments must be obtained. This whole subject of the new welfare law is a vast one and is being variously interpreted in different communities. It is suggested that the Ulster County Medical Society make an organized effort to apply this law in this community to the satisfaction of everybody concerned; and this will probably call for a conference of the Society or its representatives with the local Public Welfare Commissioners.

Medical Inspection of School Children—The chairman would like to touch briefly upon a public health activity that relates to the public and to the profession, and that is the working of the medical inspection of the public schools. The chairman was intimately connected with this work for the last two years as Medical Supervisor of the Schools in Kingston, and he found the work very unsatisfactory, not due to any opposition, but to the apathy and lack of interest and understanding on the parts of the profession, the school authorities and the public. The health department seems to be a stepchild's school system. The schools are charged by the State to carry out certain provisions of the law, but the school authorities seem to be content to carry out the bare requirements without inquiring or understanding fully the purpose of the law. This is reflected in the decision of the Board of Education of Kingston to dispense with the reading of the annual report of the Medical Department containing the results of the work of the year, and constructive recommendations for a future program, because it was "too long to read." The profession does not fully comprehend the medical inspection and yet the workings of this necessarily touch them individually and as a group. The attention of the doctors is so taken up with curative work that they are somewhat negligent of this aspect of preventive work,—that is the trend of modern medicine. Few physicians seriously undertook to make the physical examinations required every year of every school child, although the conducting of these examinations by the family physician is favored by the educational and medical authorities of the schools. If the family physician would do these examinations, it would mean a large revenue in his pocket, and it would mean that he would be lining himself up with the latest tendencies in medicine. Only a very small percentage of the school children were examined last year by the family physician. Eighty per cent of those in the public school were examined by the school doctor, and about twenty per cent were not examined at all, due to lack of time. Of the eighty per cent examined eighty-five per cent showed one or more correctible physical defects. The correction of these defects is the work of the family physician, and if he would take his work more seriously and cooperate better with the school doctor, he would be better off. Twenty per cent of the children examined showed defective nutrition. Probably in the majority of these instances the defect is called to the attention of the parent; in the minority of instances the parent probably consulted the family physician. It would be interesting to know how many of the family physicians were interested.

Over one thousand diseased tonsils were tabulated, and in the majority of the cases the parents were notified. No statistics are available but in a goodly number of cases this notification led to the removal of the tonsils. In three and one-tenth per cent of the children examined, defective or border-line defective hearing was discovered by the audiometer test.

Eighty cases of functional or organic disturbances of the heart were noted; and in this particular especially there should be greater cooperation between the school doctor and the family physician. The school doctor tried to be cautious in the handling of these cases and merely asked that a check-up should be made by the family physician. This check-up should be seriously done with the conservation of the sensibilities of all concerned.

Three hundred and eighty-one cases of orthopedic defects such as spinal curvatures, flat feet, etc., were tabulated. Probably the correction of very few, if any, of these cases will be undertaken by the local medical profession.

In over sixty per cent of the children examined defects of the teeth were found, and defective gums were noted. This work has been an example of what organized effort can accomplish. There was established through the efforts of the Kiwanis Club of Kingston a dental clinic for the treatment of indigent cases. This work has been accomplished to the satisfaction of all concerned. It is suggested that this organized work be extended to other defects, especially of the eye, ear, nose and throat. There is no doubt that economy and efficiency can be promoted by the organized treatment of indigents in clinics. There is a growing opinion that physicians should be recompensed for their work in behalf of the wards of the community.

Communicable Diseases—In the matter of the control of communicable diseases there are numerous misunderstandings between the family physician and the school doctor, and the health department, due to ignorance all around as to the duty and authority of each one concerned. These misunderstandings can be eradicated only by education.

There is arising a monument to the concerted action of the Ulster County Medical Society in the new Tuberculosis Hospital, the cornerstone of which is to be laid in October, 1931. A new Tuberculosis Hospital will not be sufficient, but we shall have to formulate a tuberculosis program. This ought to be easier with the benefits which will come with a new hospital. It will involve the education of the public as to tuberculosis, and as to the proper use of the Tuberculosis Hospital. It will involve the education of the physicians in these matters, especially in the making of early diagnosis.

TRI-STATE CONFERENCE

The sixteenth session of the Tri-State Conference was held in the Chelsea Hotel, Atlantic City, on Saturday, December 6, 1930. There were present from New York Drs. W. H. Ross, J. N. Vander Veer, and J. S. Lawrence; from New Jersey, Drs. George N. J. Sommer and H. O. Reik; and from Pennsylvania, Drs. W. T. Sharpless, R. V. Patterson, W. F. Donaldson, F. C. Hammond, and A. C. Morgan.

The program was as follows:

1. A formal paper by Dr. Henry O. Reik, Editor of the *Journal of the Medical Society of New Jersey*, on the subject: "Automobiles more deadly than war. Can we control their death rate?" Dr. Reik developed the suggestion that a medical examination of all automobile drivers could be the contribution of physicians toward the prevention of accidents. The Conference adopted a resolution proposed by Dr. Reik recommending that the Medical Societies of New York, New Jersey and Pennsylvania devise a standard form of such an examination.

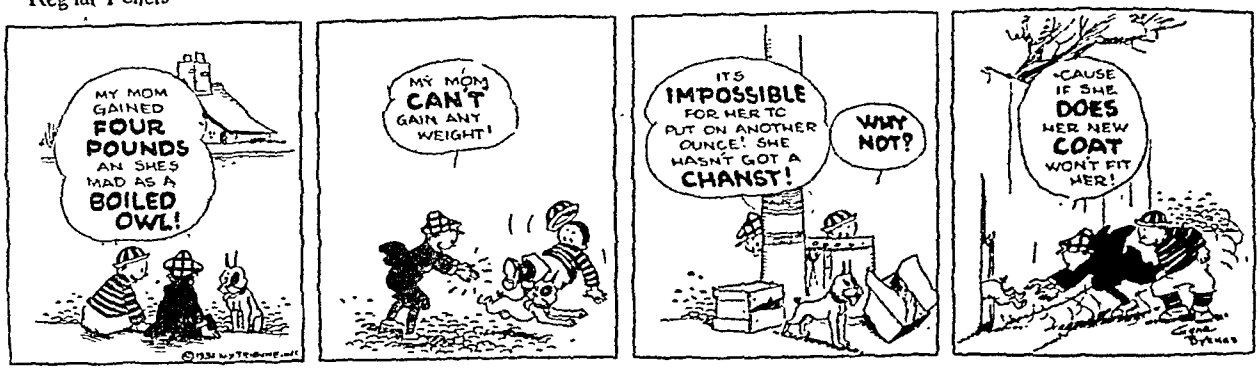
2. A paper, "Obligations of Professional Medical Service," by Dr. William H. Ross, President of the Medical Society of the State of New York. Dr. Ross suggested that organized medicine should develop plans by which practicing physicians could provide medical service to every individual of every social class at a reasonable cost to the patient or at public expense.

3. Informal after-luncheon discussion of the subject, "Should licensing of nurses be brought under control of State Boards of Medical Examiners?" The consensus of opinion of the speakers agreed with that frequently expressed by the special Committee on Nursing of the Medical Society of the State of New York.

The Conference voted to hold its next session in New York City.

THE DAILY PRESS

Reg'lar Fellers — Ounce of Prevention — By Gene Byrnes



From the New York Herald Tribune of January 12, 1931.

AGE OF POPULATION

Dr. Louis I. Dublin has an article in the Sunday Edition of the New York *Times* of January 4, in which he discusses the effects of the decline in the birth rate of the United States and other civilized countries. Commenting on the article, the *Times* of January 5 says:

"As the number of children to the family grows fewer, it is obvious that the percentage of young persons in the community will decline. In the United States in 1850 there were fifty-three persons under 20 years in every 100 of the population. In 1920 there were forty-one such persons, and in 1950 there will be only thirty-three. In England forty years ago the number of persons under the age of 15 was thirty-six out of every 100. In 1911 the number was thirty-two, and in 1921 it was twenty-nine. It may now be very near twenty-five. Forty years ago one English person out of three was a child. Now it is one out of four.

"Speculation finds a rich field in this prospect of an ageing world. Social students, for instance, are particularly concerned with the question of old-age dependency in a world with more old people beyond the working age and fewer children to support them. It is a fear which can be countered by the argument that, with fewer children to feed and educate, people may be able to save up more against their own old age. But more absorbing are questions on the mental and spiritual side. Will a world with fewer young people in it be less adventurous, more peaceful, more conservative, more interested in bread and butter and less in the fine arts? Largely it is guesswork. But one point of reference may be had. There is a nation which has been so far ahead of the others in losing its youth, so to speak, that it should be a fair indication of what is in store for the rest of us. That nation is France. Twenty years ago when in England and the United States the persons under 15 years of age were thirty-two in every 100, and in Germany thirty-four, in France they were only twenty-six. France is an 'elderly nation'; but affection between parents and children in France stands very high. That is one cheerful prognosis."

MOVIE OF A BRITON'S WILL

The medical application of the following news item from the New York *Times* of January 7 is that the audience assembled to hear the will read should include a physician to treat the emotional actions of those whose idiosyncrasies are exposed:

"The reading of the will of an elderly retired Birmingham manufacturer will be a novel and probably embarrassing experience for the beneficiaries and others whom he invited to attend it.

"The testator, according to *The Daily Express,* has had a talking motion picture made of himself reading the document. The order of the seats before the screen have been arranged so he can address each one individually.

"Not all the invited guests are beneficiaries. In an address from the screen he points out the faults and virtues of each. These criticisms will be delivered and the movie shown immediately after his cremation."

EMOTIONAL ADJUSTMENTS

The New York *Herald Tribune* has a brief daily feature called "More Truth Than Poetry," in which the author, James J. Montague, often illustrates a deep scientific truth in a few short verses. That of December 10 is on the subject of emotional adjustments, and reads as follows:

Young Tommy delighted in kicking his nurse
When he couldn't have pie for his lunch,
At the age of eleven his temper grew worse,
And he packed, for a child, a mean punch.
The village physician at last was called in,
But his verdict the family mistrusted,
For he said it was only original sin—
Not that Tommy was badly adjusted.

As the urchin grew up he would get into fights
With the much smaller children next door,
And stay out until 10 or 11 of nights,
While his parents were walking the floor,
When his mother was out for an afternoon call
He would put kerosene in the filter,
Which wasn't the fault of poor Tommy at all—
His adjustment was quite out of kilter.

At college he wore an expensive coon coat
And developed a liking for beer,
But never a theme or a thesis he wrote
And was flunked in his sophomore year.
He was sent the next term to a tutoring school,
But again he found out what a bust meant—
Which wasn't because the poor boy was a fool,
But because he was out of adjustment.

Now Tommy drives round in the family car,
Twenty jobs he has lately turned down,
But he knows the location of every bar
Within forty-five miles of the town.
His mother is plunged in the depths of despair
And his hard-working father is busted
And broken in spirit, but Tommy don't care,
For at last he is nicely adjusted.

DIET OF ANCIENT AMERICANS

An editorial in the New York *Herald Tribune* of October 7 calls attention to the fundamental differences in the native animals and plants of the New World as compared with those of the Old. It says:

"It is a curious fact that until Columbus's successor began carting back Indian foods to Europe, the two hemispheres lived on totally different diets. Tomato, potato, sweet potato, Indian corn, beans, pepper, Jerusalem artichoke, squash, pumpkin, peanut, even the tropical cassava, tapioca, avocado, pineapple and cacao, were unknown in the Old World; and the men of the New World had no knowledge of the rice, wheat, rye, cabbage, parsnips, carrots, peas, pears, plums, cherries, apples and other fruits which had for centuries made the Europeans fat. They did not even have the same domesticated animals, except for the Arctic dog. The turkey, the llama and the alpaca were unknown in Europe; the cow, horse, sheep and pig were strangers in America.

"As E. D. Merrill, the director of the New York Botanical Garden, remarks in pointing out the facts in the current issue of the Garden's 'Journal,' these are facts ruinous to the theory that the ancient civilizations of Peru, Central America and Mexico came, half mature, by ship from Europe, Egypt or from a sunken continent of Atlantis. 'What could have been the agriculture of the hypothetical Atlantis,' he asks, 'that transmitted to its supposed descendants in the two hemispheres not a single food plant and not a single domesticated food-producing animal in common?' A question which is a staggerer, indeed."

SIZE OF THE UNIVERSE

Man seems to stand about midway between the extremes of the very largest and the very smallest objects in the known Universe. Several calculations indicate this fact. The New York *Herald Tribune* of December 28 expresses this fact in a popular form in the following article:

"A scale in which each object in mass is about 1,000,000 times smaller than the object just above it is given by Professor John Q. Stuart, Princeton University astronomer. In the order of bigness these masses are:

1. The known material universe
2. A spiral nebula
3. A very large star
4. A good-sized planet
5. An ocean
6. A mountain peak
7. A forest
8. A man
9. A butterfly
10. A paramecium (single cell animal)
11. A bacterium
12. The largest organic molecules
13. A few score electrons
14. A quantum of ultra-violet light."

BOOK REVIEWS

NURSING IN EMERGENCIES. By JACOB K. BERMAN, A.B., M.D., F.A.C.S. 12mo of 160 pages, illustrated. St. Louis, The C. V. Mosby Company, 1929. Cloth, $2.25.

Dr. Berman's book gives a very complete description of the Emergencies, their symptoms and treatment. Possibly more stress should have been laid on the fact that all emergency treatment is merely a stopgap until the Doctor arrives. The text in places is too technical for laypeople and even the nurse might hesitate about administering Morphin and Strychnin without medical advice. The chapters are well arranged and on the whole the book ulfills its purpose. STANLEY B. THOMAS.

MINOR SURGERY. By ARTHUR E. HERTZLER, M.D., and VICTOR E. CHESKY, M.D. Second Edition. Octavo of 602 pages, illustrated. St. Louis, The C. V. Mosby Company, 1930. Cloth, $10.00.

This book includes a quite complete list of the pathological conditions that come under the heading of Minor Surgery.

As stated in the preface the methods of treatment are those of the Clinic in which the author works and can be accepted on that basis.

The chapters are arranged to cover the anatomical divisions of the body and the text is well illustrated.

For the worker in the dispensary this volume should have a distinct value. STANLEY B. THOMAS.

VENEREAL DISEASE: Its Prevention, Symptoms and Treatment. By HUGH WANSEY BAYLY, M.C. Fourth (American) Edition. Octavo of 242 pages, illustrated. Philadelphia, F. A. Davis Company, 1930. Cloth, $3.50.

The author has written a concise review of the important and far reaching subject of venereal diseases and has placed the essentials for the prevention, diagnosis and treatment of venereal diseases in a simple manner before the student and general practitioner. This is the fourth edition of this book and the author has brought it up to date in essential knowledge. He has added a few paragraphs dealing with the treatment of Paresis and Tabes by malarial inoculation as this treatment has now become an accepted method of therapeutics. It should be read by everyone who treats venereal diseases in his practice. PHILIP GOLDFADER.

THE MECHANISM OF THE HEART AND ITS ANOMALIES: Anatomical and Electrocardiographic Studies. By EMILE GÉRAUDEL. Translated, with an introduction by LOUIS FAUGÈRES BISHOP, M.A., M.D., and LOUIS FAUGÈRES BISHOP, JR., Ph.B., M.D. Octavo of 266 pages, illustrated. Baltimore, The Williams and Wilkins Company, 1930. Cloth, $10.00.

The author has developed a new theory of the mechanism of the heart and of the method by which abnormal rhythms are produced. It differs radically from the prevailing conception and this volume is devoted to a presentation of his views. It is necessary to read the book in order to understand fully his thesis. Briefly, however, he believes that the heart is dominated by two independent rhythms, one for the auricle and one for the ventricle. He considers that there is an independent conduction system for the auricle—the atrionector and also one for the ventricle—the ventriculonector. He states that the changes in the mechanism of the heart which take place both in normal and pathological states are due to variations in the blood supply of these two systems. He has done much laborious work in order to try to prove his contention. He gives evidence of the various views both for and against his theory but it appears as if there is much against it that has not been fully expounded. The book is well produced and the illustrations are excellent. It ought to be studied only by those well versed in electrocardiography.

J. HAMILTON CRAWFORD.

MEDICAL GYMNASTICS AND MASSAGE IN GENERAL PRACTICE. By DOCTOR J. ARVEDSON. Translated and Edited by MINA L. DOBBIE, M.D., B.Ch. Third Edition. 12mo of 298 pages. Philadelphia, P. Blakiston's Son and Company, 1930. Cloth, $2.50.

The Orthopedist as well as the General Practitioner will find this translated edition, written by the leading authority of Swedish gymnastics and massage a great aid to their suggestions for treatment.

In a brief way he describes conditions affecting the skin, fractures, diseases of muscles and joints, deformities, diseases of the nervous system, circulation, respiratory, digestive and genitourinary organs.

His description is very elementary for the physician but should be a great guide for one engaged in instruction of the deformed. JOSEPH I. NEVINS.

THE PRE-SCHOOL CHILD AND HIS POSTURE: A Program of Corrective Exercises Through Games. By FRANK HOWARD RICHARDSON, A.B., M.D., and WINIFRED JOHNSON HEARN, B.S. Octavo of 220 pages, illustrated. New York and London, G. P. Putnam's Sons, 1930. Cloth, $2.50.

This little book sets forth clearly and in detail the underlying causes of the more common postural defects. Poliomyelitis, faulty furniture as well as the radical change in the social economic system of our civilization, all of these are accounted for as the cause of postural defects.

Corrective exercises as recommended in this treatise are in the form of games. A far more desirable method to the method of old, namely that of command. Photographic illustrations add color as well as simplicity to the subject matter.

The authors have shown their thorough knowledge of child psychology as well as their thorough familiarity with the management of postural defects in children.

This booklet should prove an aid to the teacher of the kindergarten class especially. HARRY APFEL.

HYGIENE FOR NURSES. By JOHN GUY, M.D., and G. J. I. LINKLATER, O.B.E., M.D. 12 mo of 212 pages. New York, William Wood and Company, 1930. Cloth, $1.75.

The data presented in this book should be of value not only to nurses but to others interested in topics of health. In fact, a good deal of the information has no bearing on the bedside or hospital duties of a nurse.

For example, in the chapter on diet, two uncommon articles are strongly recommended on account of their rich vitamin content—oysters and dandelion leaves. The virtues of different types of clothing are interpreted in terms of their physical properties. And if the reader be interested in matters of prophylaxis he may find in this splendid handbook a discussion of the different types of water supplies in relation to organic pollution; the importance of standard humidity in conjunction with an optimum room temperature; types of heating devices, and other topics which we often overlook in aiming to seek the causes of respiratory disorders.

EMANUEL KRIMSKY.

A System of Bacteriology in Relation to Medicine. [By Various Authors] (Prepared under the direction of the Medical Research Council) Volume I Octavo of 374 pages illustrated London His Majesty's Stationery Office, 1930 Cloth (Set of 9 volumes, £8 8 0)

Vol I of the System of Bacteriology published by the Medical Research Council is devoted to the history of bacteriology and to consideration of the general characteristics of bacteria

The historical section is most interesting The author has not only studied the original writings of all contributors to the literature of bacteriology from Leeuwenhoek down but has delved into the early Greek and Roman writers for their ideas on disease In the space of 70 pages he gives an admirable account of the theories and methods of dozens of men with reproductions of illustrations in the original papers This story of the development of bacteriology should interest all physicians and many laymen

The remaining chapters deal with bacterial morphology physics, growth disinfection, metabolism and respiration classification and variation The specialist will find here a wealth of detail summarizing all that is known on these subjects

E B Smith

Physical Diagnosis By Richard C Cabot M D Tenth Edition (Revised and Enlarged) Octavo of 529 pages, illustrated New York, William Wood & Company, 1930 Cloth, $5 00

This standard work needs no introduction so long has it been the practitioner's handbook This the tenth edition presents laboratory advances of special value and discusses thoroughly the diagnosis of coronary disease, pulmonary carcinoma, cardiac asthma toxic hepatitis and encephalitis lethargica, in addition to the more familiar topics which this work has, in the past presented so clearly and concisely Electrocardiography of course receives full consideration The student the practitioner and those engaged in diagnostic services in many fields will find this book, as always, wholly dependable

A C J

Applied Bacteriology for Nurses By Charles F Bolduan M D Sixth Edition revised and enlarged Octavo of 251 pages illustrated Philadelphia and London W B Saunders Company 1930 Cloth $2 00

This book has won recognition among training schools for nurses It is an excellent text book because it presents the subject in a manner applicable for nurses In this new (sixth) edition sections and discussions have been added on the following subjects Undulant Fever, Tularemia Active Immunization against Diphtheria by means of Toxoid the Semple Method of Immunization against Rabies and the Immunization of Infants against Tuberculosis by the Calmette Bacillary Vaccine The book is highly recommended for nurses

Silik H Polayes

Slit Lamp Microscopy of the Living Eye. By Dr F E. Koby Translated by Charles Goulden, O B E and Clara Lomas Harris M B Second Edition Octavo of 360 pages illustrated Philadelphia P Blakiston's Son & Company, 1930 Cloth $4 50

The second edition of this 'Summary' is as refreshing as was the original Though the first edition was the first text on the subject in English, the second adds so many new sections as to reawaken one's ambition to master slit-lamp microscopy

To this book belongs much of the credit of establishing biomicroscopy as a necessary and useful clinical study

The first parts of the book discuss the instruments which have become popular in Germany France England and the United States Normal studies and characteristics are then taken up the final two-thirds of the book being taken up by study of pathological entities One would think the work a little heavy for the beginner and likely to discourage him It is however the only text to which one can turn for a detailed description or explanation of almost any aspect of the subject It suffers less than the original edition from those defects which are common to all translated works It is altogether a very worthwhile contribution J N Evans

Physiological Principles in Treatment By W Langdon Brown, M A M D with the collaboration of R Hilton M A M B Sixth Edition 12mo of 464 pages New York William Wood & Company, 1930 Cloth, $3 75

This edition appears twenty one years after the first and many sections are considerably changed The chapter on Nephritis presents the modern conception of many features of this disease and is especially good in its consideration of diet This section may be read with benefit, especially by those physicians who still prescribe markedly undernutrition diets for patients suffering from nephritis without nitrogen retention

The different types of glycosuria are discussed at some length and many important facts are concisely presented here The scanty ladder diet' of Graham is still given in detail but since the advent of insulin, this, with other diets of its type does not seem to be needed

This is an interesting small book which presents much information in a convenient form

W E McCollom

Allergic Diseases, Their Diagnosis and Treatment By Ray M Balyeat M A M D, F A C P Octavo of 395 pages illustrated Philadelphia, F A Davis Company, 1930 Cloth $5 00

The title of Dr Balyeat's book is a little misleading to medical readers as one might expect a treatise on the Diagnosis and Treatment of Allergic Diseases However, the book in reality is a manual for the laity upon the subject of Allergy It is very well done from that standpoint and should be interesting to patients suffering from Hay fever, Asthma etc.

It is apparently designed to help these patients cooperate with their physicians in the cure of their troubles It ought to serve to fulfill this purpose admirably but should not be considered a reference book upon the subject of Allergy

E P Maynard, Jr

Some Aspects of the Cancer Problem By W Blair Bell B S M D Lond F R C S Eng, Hon F A C S Quarto of 543 pages illustrated New York William Wood & Company 1930 Cloth, $20 00

Dr Bell and his associates have prepared a volume of over 500 pages well illustrated that deals essentially with the effect of Lead on cancer In a scientific publication of this kind there is naturally a mass of 'incidental spade work, chemical mathematical and clinical, through it all the reader will appreciate the effort at coordination and sequence

The editor creates a working hypothesis by the utilization of scientific data that neoplastic deviation from normal differentiated somatic growth might be a reversionary process of somatic differentiated cells back to their embryonic state (chorionic epithelium) due to metabolic disturbances (starvation) To substantiate this theory there is offered histological physicochemical and physiological evidence of similarity between the chorionic epithelium and neoplastic tissue The similarity of specific action of Lead on cancer cells and chorionic villae is portrayed

The general principles of chemotherapy in malignant disease are then set forth with a complete review of the various preparations of Lead The toxic symptoms of Lead and how to avoid them, the technique of Lead therapy alone and in conjunction with surgery x ray and radium are fully discussed

Harry Mandelbaum

OUR NEIGHBORS

POST-GRADUATE COURSES IN IOWA

The Journal of the Iowa State Medical Society for December describes the following plan for post-graduate work in Iowa:

"When this issue of the Journal reaches you, the first real project of the Speakers' Bureau will be in full swing. During the first week in December, extension courses were opened in five places, making it possible for physicians in neighboring vicinities to do post-graduate work. The cooperation of the State University of Iowa with the State Medical Society gives this unusual opportunity to Iowa physicians. The University outlined a number of courses which faculty members of the College of Medicine were willing to give, if a sufficient enrollment would be provided. The five towns which evidenced the most interest at this time were Waverly, Fort Dodge, Carroll, Des Moines and Oskaloosa. The courses chosen this year were the lectures on Obstetrics by Dr. E. D. Plass, head of the Department of Obstetrics, and a course on Cardio-vascular diseases under Dr. Fred Smith, head of the Department of Internal Medicine.

"The enthusiasm with which the physicians have registered for these courses is merely another indication of the progressive spirit of the medical profession in Iowa; Doctors are driving many miles to take advantage of this opportunity to advance themselves professionally. The members of the Bremer County Medical Society enrolled one hundred per cent to support this enterprise. In order to reach the greatest number at least expense, a route was planned to include a circuit of five centers. These courses began on December 1 at Waverly and the other towns followed on successive days. The same schedule is followed for a period of ten weeks. Two hours each week are devoted to each course, making a total of forty hours of intensive study. Upon the completion of the courses, examinations may be taken and certificates issued by the University to those qualifying.

"In order to get these courses started at once, the Bureau made arrangements for only one circuit. The committee realizes, however, that many other Iowa physicians are eager to have this privilege of keeping abreast of the times, and they will therefore be glad to schedule a circuit of extension work for other sections of the state that ask for such service."

WELFARE COMMITTEE OF NEW JERSEY

The January number of the Journal of the Medical Society of New Jersey contains the minutes of the meetings of the Welfare Committee held on November 9 and December 14, 1930. This committee has thirty-five members, and performs several functions, among them being legislation and public relations.

The first business noted was a discussion of a plan proposed by a collection agency for the collections of doctors' bills. The experiences reported by members of the Committee were not favorable to the general plan of collecting bills, and the proposition was rejected.

The question of the employment of unlicensed medical practitioners by State institutions was discussed, but the decision was that further light would be required.

"The Executive Secretary presented a document prepared by Dr. Morrison in explanation of the State Society work and the manner in which the Society's funds are expended, and recommended that this be printed in the form of booklet previously used with reference to auxiliary matters and in explanation of cultism, and that these booklets be distributed for the edification of members of the State Society and for the use of officers of county societies in collecting dues and in procuring new members.

"A motion was duly passed approving the publication and distribution as recommended."

The committee held a lengthy discussion on the proposal that the several examining and licensing boards—a dozen or so in number—shall be placed under the control of either the State Commissioner of Education, or, as in New York State, the State Regents. Dr. Reik, the Executive Secretary, reported:

"We are in grave danger of being swept into a false position through the influence of mob psychology. The appearance of these legislative bills, indeed the preceding newspaper stories about what the Abell report *would* contain, planted in our minds *a fear* that something ter-

(Continued on page 174—adv. xii)

DETOXIFICATION IN THE BOWEL

THE principles of detoxification with Soricin (purified sodium ricinoleate), first enunciated by Larson, has been amply confirmed in dental practice.

The action of Soricin as a detoxifying agent is based upon its ability to render most pathogenic organisms non-pathogenic, and to detoxify their toxins. This prevents the absorption of toxins from such foci of infection as can be reached and the consequent development of secondary infections.

Following the confirmation of Larson's work by Cesari, Cotoni and others at the Pasteur Institute, and the extension of that work to the field of immunology, Morris, Dorst and others have turned to the investigation of the possible value of Soricin as a detoxifying agent in the intestinal tract.

During the past two years clinical studies show that Soricin Capsules, given by mouth, usually afford prompt relief in mucous colitis and other diseases of the intestinal tract associated with bacterial hypersensitivity.

Quoting from a recent article by these investigators, which appeared in the *American Journal of Medical Sciences*, November, 1930, No. 5, Vol. clxxx, page 650, the authors state in their conclusions: "Sodium ricinoleate detoxifies many organisms in the enteric flora in vitro, as demonstrated by the disappearance of skin reactions upon the injections of strains which, before detoxification, have given marked reactions. There is worthy evidence to suggest that sodium ricinoleate, administered by mouth, exerts a detoxifying action on the enteric flora in vivo."

If you are interested in this work, we will be glad to send you the available data, together with a supply of Soricin Capsules for test in your practice. THE WM. S. MERRELL COMPANY, CINCINNATI, OHIO.

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1 syringe containing 20,000 units each of Types I and II.

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(*Continued from page 172*)

rible was going to happen. That fear has grown to the point where we are in danger of acting unreasonably. I have heard much talk about these bills but most of it has been irrelevant, based upon fear rather than study of the bills, and some of it has *entirely misrepresented* the apparent intent and the *actual wording* of the bill. I have heard it argued that these bills propose abolition of the Boards of Examiners, substitution of examinations by persons incapable of conducting appropriate examinations, the employment of an immense force of adjunct employees to carry on the work, and the application of funds properly received by the Boards to State work other than that heretofore carried on by the Boards. There is not a word in either of the laws to justify any of those criticisms."

The committee finally voted to oppose the bill.

The committee also considered the form of blanks for reporting on the defects of crippled children and quoted the executive secretary as follows:

"The present proposition is to utilize the customary Health Department blanks for births and still-births, adding to such books of blanks, in the front portion, several blank forms to be used when necessary. On the regular blanks would be printed a line directing attention to the necessity for filling the special blanks whenever there exist deformities that should be reported. The special bank provides for recording the name, address, date of birth, type of deformity, whether under treatment or referred to other physicians or surgeons, and the signature of the attending physician. The Commission and the Health Department would like to have immediate consideration of this matter so that if approved the certificates can be prepared for new blanks about to be ordered by the Department."

The preparation of the forms was approved.

The committee voted to investigate rumors that certain hospitals were making contracts with industrial companies for the care of injured workmen.

The committee also considered the advisability of making agreements between doctors and the carriers of workmen's compensation insurance similar to those in New York State. A sub-committee was appointed to investigate the subject.

WHITE HOUSE CHILD CONFERENCE, A MASSACHUSETTS OPINION

The best summary of the White House Child Conference held in the latter part of the year 1930, is the following description in the *New England Journal of Medicine* of December 18, 1930:

(*Continued on page 176—adv. xiv*)

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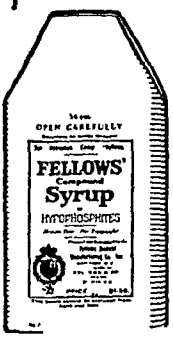
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is such that under its influence one observes a rapid increase of appetite and a marked elevation of tone.



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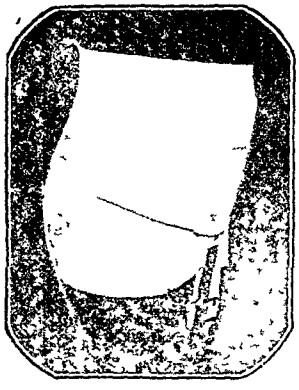
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(*Continued from page 174—xii*)

"President Roosevelt in 1909 ordered a White House Conference on the Care of Dependent Children. From this resulted the Children's Bureau, organized in President Taft's administration and made part of the Department of Labor when that was created in 1913. In 1919 President Wilson called a White House Conference on Minimum Standards of Child Welfare. The study and insurance of the health and happiness of United States children being traditionally, according to *Time,* a presidential concern, President Hoover therefore called last year a Conference on Child Health and Protection. Dr. Ray Lyman Wilbur is chairman of this committee and Harry Everett Barnard, of Indianapolis, its Director.

"Last month the Conference—over 3,000 individuals—met in Washington to report the result of its investigations and to make recommendations. Of 45,000,000 children in the United States, more than 10,000,000 were found to be handicapped, as follows:

Improperly nourished	6,000,000
Defective speech	1,000,000
Weak or damaged hearts	1,000,000
Behavior problems	675,000
Mentally retarded	450,000
Tuberculous	382,000
Impaired hearing	342,000
Totally deaf	18,000
Crippled	300,000
Partially blind	50,000
Wholly blind	14,000
Delinquent	200,000
Dependent	500,000

"And yet, as President Hoover said in his address, 'That we be not discouraged let us bear in mind that there are 35,000,000 reasonably normal, cheerful human electrons radiating joy and mischief and hope and faith. From what we know of foreign countries, I am convinced that we have a larger proportion of happy, normal children than any other country in the world And also, on the bright side, we have 1,500,000 specially gifted children. There lies the future leadership of the nation if we devote ourselves to their guidance.

"Nineteen recommendations were made by the conference, eighteen constituting a bill of rights, the nineteenth recommending the organization of districts, counties and communities for child health, education and welfare, with: (1) trained full-time public health officials with public health nurses, sanitary inspectors and laboratory workers; (2) available hospital beds; (3) full-time public welfare services for the relief and aid of children in special need from poverty or misfortune, for the protection of children from abuse.

(*Continued on page 179—xvii*)

Before the Operation and After

In preparation for the operation  one tablespoonful of Agarol on retiring  in place of the usual castor oil, will insure against gastric upset.  Again, a few days later  when the patient begins to take nourishment  Agarol in half doses  is the logical eliminant because it stimulates peristalsis  gently without griping or pain.

AGAROL is the original mineral oil and agar-agar emulsion with phenolphthalein. It softens the intestinal contents and gently stimulates peristalsis.

Agarol is palatable without artificial flavoring and easy to take. The usual dose in chronic constipation is a tablespoonful, reduced as improvement takes place.

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REDUCE CONGESTION

CONTROL HEMORRHAGE

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(*Continued from page 176—adv. xiv*)

neglect, exploitation and moral hazard; (4) voluntary organization of children for instruction, health and recreation.

"Chairman Wilbur made plain that the states should coordinate and amplify local efforts, the Federal government limiting itself to the collection and publication of general information, statistics and scientific research."

NURSES' EXAMINATIONS IN PENNSYLVANIA

The Pennsylvania Medical Journal of January has an editorial comment on the severity of the examinations given to nurses, and says:

"We reproduce here an article that appeared in the Clearfield County (Pa.) Medical Society *Bulletin* for December, 1930.

"Why our Daughter did not complete her Nursing Course

"There has been a great deal of discussion in current medical journals as to what branches of the medical science and how much of it should be taught in the training schools for nurses. It is generally believed that too much time is spent in classrooms and not enough in the hospital wards. Below is a copy of an anatomy examination given to a first year class of nurses to determine whether they were qualified to continue their training course. It is not known how many of them passed the examination, but if they did, and the other subjects taught them were as difficult, they should have been given a license to practice medicine.

"1. Name the systems of the body. Classify tissues and give an example of each class.

"2. Describe the spinal column.

"3. Classify muscles; give one example of each class. Name two principal muscles of the arm and state their function.

"4. Describe the lungs. What takes place as a result of pulmonary circulation?

"5. List the functions of the blood. Compare the structures of an artery, vein, capillary; what blood does the portal vein carry to the liver?

"6 Discuss in detail the thoracic duct.

"7. Name the enzymes of the pancreatic juice and give the function of each one.

"8. Name the principal nerve center of the body and the parts that compose it.

"9. Name the excretory organs of the body and give the principal waste products excreted by each.

"10. Describe one serous cavity of the body.

"11. Define the following: Metabolism, lymph, omentum, foramen, fossa, process, condyloid, sagittal.

(*Continued on page 180—adv. xviii*)

A Cod Liver Oil Concentrate of the Whole Oil

MORRHUOL (Chapoteaut)

Plain and Créosoté prepared by the Chapoteaut Process presents in palatable capsule form—(really little pearls, easy to swallow)—a concentrate of *all* the therapeutic principles present in the oil, as well as Vitamins A and D. Nothing removed but the fat.

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COMMITTEE ON PUBLICATION

(*Continued from page 179—adv. xvii*)

"12. Describe and locate the temporal bone.

"13. List the ductless glands and state the supposed function of each.

"14. Name the organs contained in the female pelvis and state the function of each. Describe fully one of these.

"As stated, these constitute questions given in one subject only, anatomy, but will afford an idea of the type given in the remaining subjects. How many of our medical readers can satisfactorily answer all the questions herewith given, which, please remember, were for first year pupil nurses?

"Who is to blame for the condition of affairs herewith set forth? The medical profession should admit its guilt. It is responsible for not having controlled the affairs of nurses' training schools, in all respects, and should have been on guard in the legislative halls. How long is this condition of affairs to continue before organized medicine will lend its cooperation to aid in its correction?"

The same condition of affairs prevails in New York State. A similar set of questions given from 1922 to 1925 was published in the NEW YORK STATE JOURNAL OF MEDICINE of February 15, page 168.

FULL TIME HEALTH OFFICERS IN ILLINOIS

The Illinois Legislature is considering a bill permitting counties to establish health departments on petition, and providing that the full time health officer shall receive "an adequate living salary, but in no case to exceed $5,000 per annum."

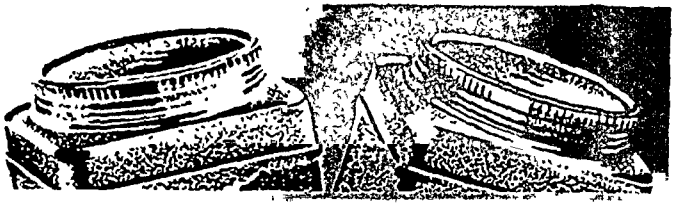
The Journal of the Indiana State Medical Association for January devotes several pages to the bill, both for and against it, and says that the House of Delegates voted in opposition to it. A two-page editorial gives the following arguments:

"At the present time it is impossible to secure enough medical men who have been educated and trained in public health work to fill positions as all-time health officers. An all-time health officer not only should be qualified and trained for the position but he should be paid an adequate salary. Inasmuch as the people at this particular time are crying for economy, it is doubtful if such an increase in public expense as required to pay decent salaries to all-time health officers would be considered. At present the positions made possible by the bill no doubt would be filled by derelicts and incompetents who have made more or less of a failure of the practice of medicine.

"The expense will be burdensome on some communities, and already there is a cry for more economy in expenditure of public money.

"It is admitted that the larger cities of the

(*Continued on page 182—adv. xx*)



Alkalinization in Common Colds



BiSoDoL
An unusually palatable form of alkaline medication

Gastric Hyperacidity
"Sour" Stomach
Acid Eructations
"Heartburn"
Acid Dyspepsia
Nervous Dyspepsia
Gastric Pain
Acid Urine
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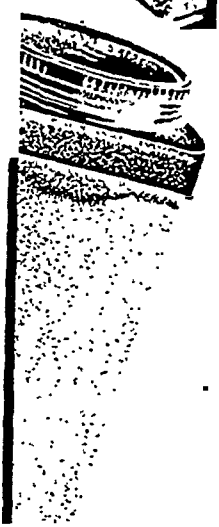
So many authorities stress the value of alkalinizing the patient in the prophylaxis and treatment of colds that this procedure is becoming almost routine. Alkalis are stated to favor recovery and prevent complications by combating acidosis.

BiSoDoL affords a safe, effective and palatable antacid for this purpose. At the beginning of a cold, one teaspoonful in water may be taken every two hours until the symptoms are relieved.

BiSoDoL affords "Quick Relief" in gastric hyperacidity and the common dyspeptic symptoms. Also indicated for its systemic value in helping to control cyclic vomiting, vomiting of pregnancy, post-anesthetic nausea, after alcoholic indulgence, etc.

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Question:

Calcium Assimilation?

Answer:

Cases in Point—

Mr. C. C. S——, Railroad express messenger. Came here, was on the verge of T. B., underweight, cough, night sweat and very anemic; loss of appetite and highly nervous. Put him on Olajen for thirty days. He has gained fourteen pounds and never felt better in his life. I know that Olajen did the work. Patient's weight, November 2, 120 pounds; December 9, 134 pounds.

December, 1930. ————, M.D.

Miss Ruth R——, Age 11, Weight 68 pounds. Examined by me October 12th and found to be highly Neurasthenic, Anemic, Enlarged Thyroid and Gastro Intestinal Catarrh. Was put on a plain diet and the daily use of Olajen three times a day after eating. Examined again on November 30th and patient showed marked change and improvement in every way. Was 78 pounds, fine color and vigorous. The parents were highly amazed and pleased at the change and rightly gave Olajen credit for results. I obtain similar results in all my cases where Olajen is used.

December, 1930. ————, M.D.

Miss M. C. C——, Age 27, Weight 104, Height 5:1. First office call on November 4th, 1930. Patient was Neurotic, Anemic and underweight, Jaundiced, Gastro Intestinal Catarrh and Bowels sluggish; felt tired and worn out. Was placed on Olajen November 4th, four times a day after eating and placed on diet of simple nature. She has improved steadily and is highly pleased. Bowels are O. K. Neurotic condition absent, sleeps and eats well and now weighs 115 pounds. This is another history of the several satisfactory cases I have treated with Olajen.

December, 1930. ————, M.D.



Composition—Olajen contains per 8 oz.—calcium lactate, 12 gr.; iron phosphate, 12 gr.; sodium phosphate, 12 gr.; potassium bi-tartrate, 12 gr.; lecithin, 4½ gr.; in a colloidal nutritive base with an agreeable chocolate mint flavor.

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(*Continued from page* 180—*adv. xviii*)

state can afford and should have all-time health officers. However, even they will have great difficulty in securing medical men adequately equipped for the position, no matter what salary is paid. The difficulties increase when you get away from the city. The all-time health officer bill makes it possible for the development of a machine that may be ruthless in its work of perpetuating itself and establishing an intolerable domination. There also is a possibility of autocratic domination by the secretary of the State Board of Health, who, according to the terms of the bill, in a sense is a dictator.

"In the majority of the counties of the state the health officers have been fairly representative men, and, as was stated before the House of Delegates at the Fort Wayne session, we are better off to have the part-time services of a good man than the all-time services of a poor man.

"The full-time health officer project, no matter how much you camouflage it, is a stepping stone to state medicine, and there is ample proof ta indicate that some of the most ardent advocates of the full-time health officer enterprise are openly or secretly in favor of and even working for the adoption of state medicine. It is a very natural thing for them to feel that way, for, if state medicine does come, the full-time health officer will be on the top wave and he will be the first one to profit.

"It is impossible at the present time to secure well-educated medical men who have had adequate special training in public health work to fill all-time positions, even in our cities; and that fact alone is one of the principal reasons for objection to the project under discussion, for we do not believe in creating positions without having educated and trained men to fill them."

NEW MEDICAL CENTER IN LOUISIANA

The *New Orleans Medical and Surgical Journal* for January has the following outline of a new method of clinical teaching of medical students and new headquarters for the Louisiana State Medical Society:

"The exercises on the night of December tenth, when the New Hutchinson Memorial Building was formally opened, marked an epochal event in the Medical School of Tulane University, and one which should be of importance to the medical profession of New Orleans and Louisiana. The new building, made possible by a contribution of $1,250,000 from the General Educational Board of the Rockefeller Foundation, will be utilized for the carrying out in every way the purposes of the bequest of the late Mr. Joseph Hutchin-

(*Continued on page* 183—*adv. xxi*)

(Continued from page 182—adv. xx)

son. It will be devoted to the care of the ambulatory sick and the injured, and at the same time will be utilized for the purpose of instruction of medical students in a manner which is both unusual and without precedent. Each student will be given his own office, wherein the working arrangements will resemble closely those of private practice. Here he will examine and treat patients assigned to him under the supervision of an instructor. There are 105 such offices in the new building under the different divisions of the medical school. Each of the offices is equipped with small dressing room, examining table, desk, laboratory table with equipment, a centrifuge, and a wash-stand. In addition to this novel pedagogic arrangement there are other laboratories where diagnostic and therapeutic procedures more complicated than routine office procedures may be carried out. There are also laboratories for the staff, teaching rooms, conference rooms, an auditorium and other facilities which will go to make a most complete medical school.

"On the first floor of the building, quarters have been assigned to the Louisiana State Medical Society. A large, bright, sunny and cheerful secretaries' room is part of the suite which contains as well the office of the Secretary-Treasurer and the Editor of the *New Orleans Medical and Surgical Journal*. The Secretary of the Orleans Parish Medical Society also has an office in this same suite, and adjoining it is a large board room furnished magnificently by the Orleans Parish Medical Society. The Library of the Orleans Parish Medical Society is just above the offices of the State and Parish Societies which are connected with it by a private stairway and small private elevator. The library of the Orleans Parish Medical Society and the Tulane Medical School Library, while housed in the same stack room, are filed separately. They are under the care of the same library force so that duplications are avoided in both the book files and current medical journals. In this way there is splendid opportunity for enlarging the Library, which already is the largest in the South and which has possibilities of being made one of the largest in the United States.

"The close relationship of this new Hutchinson Memorial Building to the Charity Hospital, the propinquity of the Hotel Dieu and the Eye, Ear, Nose and Throat Hospital make for a potential hospital center in which many of the members of the Society already carry on the bulk of their medico-charitable activities as well as some of their practice in those hospitals accepting private patients."

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Pulvoids Natrico effects a reduction of blood pressure that is not a matter of minutes or hours, but of days.

Experiments have proved that lowering of tension produced by the drugs classified as vasodilators is of short duration. Effect of amyl nitrite lasts 7 minutes, nitroglycerin 30 minutes, sodium nitrite 2 hours.

But Pulvoids Natrico, a synergistic combination of approved vasodilators (sodium nitrite, potassium nitrate and nitroglycerin) in combination with Crataegus Oxyacantha, not only lowers blood pressure but keeps it down safely and surely, pending determination and treatment of the cause.

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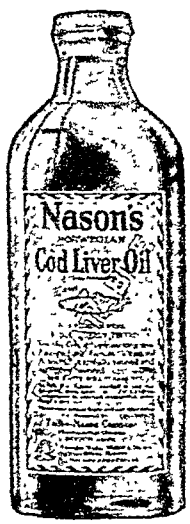
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Don't allow him to drift uncertainly about the Cod Liver Oil market where he may receive inferior, untested or commercial oils. Prescribe or recommend Nason's Palatable Cod Liver Oil by name, then your patient will be sure to get a pleasant tasting oil of the highest recognized vitamin potency.

This biologically tested Cod Liver Oil is made in Nason's own plants in the Lofoten Islands of Norway, romantic "Land of the Midnight Sun."



Accepted by Council on Pharmacy and Chemistry, A. M. A.

Nason's
Palatable -Norwegian
Cod Liver Oil
The Better Tasting Kind

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Gentlemen: You may send me (without charge) sample bottle of Nason's Palatable Cod Liver Oil.

Name .....

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My Druggist's Name.....(N.Y.J. 2-31)

(*Continued from page 184—adv. xxii*)

"We condemn those who commit and almost equally those who defend and uphold these old-time practices. These things we know are perpetuated by a certain type of persons, of very different order to the generally beloved and welcome doctor in ordinary medical practice—and it is to this body of doctors that we are submitting this letter, and from whom we are certain we will receive a courteous response."

The questions submitted to the doctors are as follows:

"1. In the interests of the great commercial serum-producting companies, to provide material for scientific curiosity, and as demonstrations before students, living and conscious animals are put to much suffering, mutilation and death, in research laboratories. In your opinion, is this both justifiable and ethical?

"2. Do you approve of methods born out of vivisection?

"3. Do you believe in and make use of sera?

"4. Do you approve of the Schick test?

"5. Would you administer serum to your own children?

"6. Do all sera contain the virulent germs of the very disease they are intended to prevent and cure?

"7. Do you think past results justify the continued use of the so-called preventive sera?

"8. Do you believe in the efficacy of antitoxin?

"9. Will you guarantee that the use of serum antitoxin, or any other similar preventive method, or cure, will have no harmful effects?

"10. Is it not a fact that there is a wide difference of opinion among medical men as to the benefits of serum therapy?

"11. Do you believe in the efficacy of vaccination as a preventive of smallpox?

"12. Will you guarantee that vaccination will have no harmful after effects?

"13. Will you guarantee that vaccination will prevent smallpox?

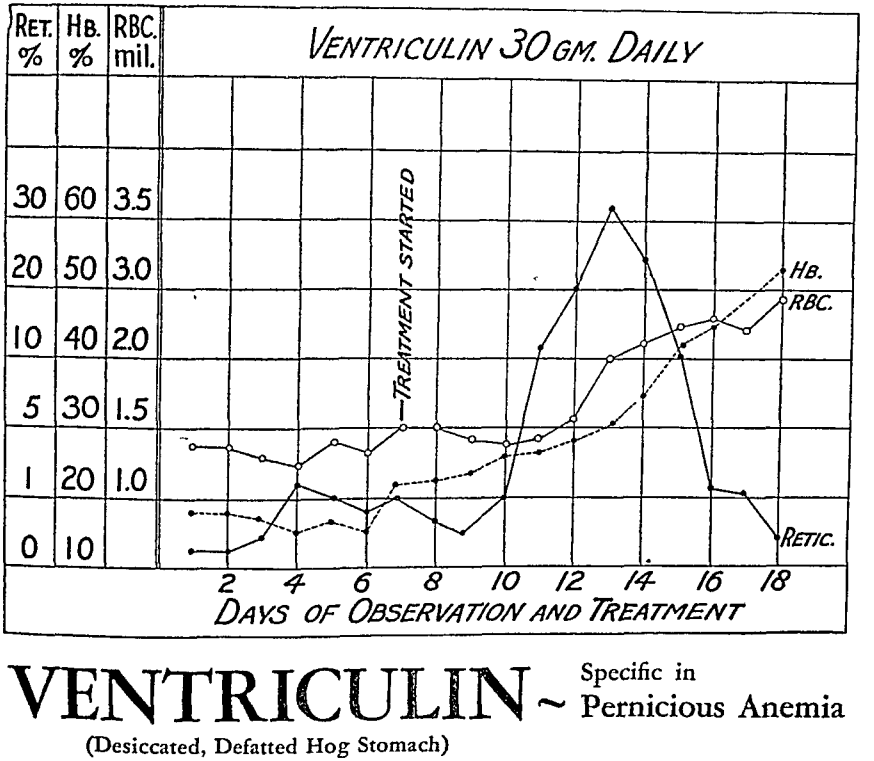
"14. In your opinion what has been the chief factor in the decline of smallpox—vaccination or improved sanitation?"

SOCIAL TRENDS IN MEDICINE IN WISCONSIN

Dr. C. A. Harper, writing the "President's Page" of the *Wisconsin Medical Journal* for January, discusses social trends in medicine as follows:

"The flocking of physicians to the larger cities, specialization and the building of hospitals in the larger communities, are no small factors in bringing about existing conditions, indicating that some form of social medicine must be developed in order to meet the wants of the general populace.

(*Continued on page 188—adv. xxvi*)



VENTRICULIN ~ Specific in Pernicious Anemia

(Desiccated, Defatted Hog Stomach)

Accepted for N. N. R. by the Council on Pharmacy and Chemistry of the American Medical Association.

Summary of findings in typical case of pernicious anemia treated with Ventriculin and illustrated in above chart.

DIAGNOSIS. Pernicious anemia.

INITIAL BLOOD COUNT: Red blood cells 1.5 million per cu. mm.; Hemoglobin (Newcomer) 21 per cent; Reticulocytes 1.0 per cent.

TREATMENT. Ventriculin 30 Gm. daily.

PHASE OF REMISSION. *On sixth day of treatment:* RBC 2.0 million; Hemoglobin (Newcomer) 30 per cent; Reticulocytes 32.0 per cent (calculated rise for 1.5 million red blood cells at beginning of treatment = 22.3 per cent, exceeding expected rise by 9.7 per cent).

PROGRESS REPORT. On the twelfth day after Ventriculin was begun the following blood count was recorded: RBC 2.9 million; Hemoglobin 52 per cent; Reticulocytes 0.4 per cent. (Expected weekly increase = 500,000 red blood cells per cu. mm. Actual increase in this patient = 700,000 red blood cells per cu. mm.).

A Booklet on Pernicious Anemia will be sent you promptly on request.

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(*Continued from page 186—adv. xxiv*)

"Industries, life insurance companies, and many communities are seriously discussing this phase of medicine. Sixty-two per cent of the hospital beds are now directly or indirectly under federal, state, county, or municipal control. It is estimated in Allon Peebles 'Survey of Statistical Data and Medical Facilities in the United States,' published in November, 1929, 'that there are about 1,500,000 persons whose services are utilized by the inhabitants of the country in connection with the curing of illness, including physicians, dentists, osteopaths, chiropractors, christian scientists, etc.' It is estimated that there are at least 200 foundations, none of which have less than $10,000,000 at their command, that are engaging in the field of health and general welfare. It is readily seen that there are tremendous forces outside of the ethical pale of the practice of medicine that are working in the field of general welfare.

"These facts strongly emphasize a popular demand for certain changes that will comply, more or less, with the wishes of the general public. Is it wise for the medical profession to remain indifferent to the problem while these agencies are developing certain lines of activity; or would it not be far better for the medical profession to appreciate the evolution that is now taking place, and become a prominent factor in guiding these various lines of procedure.

"At the least, it presents a problem of much study and serious thought, and the object of this article is not to champion state medicine or social medicine, but to champion scientific medicine in all its branches. It is to emphasize its importance to the welfare of the people and bring to them an appreciation of the fact that only a well-trained, properly qualified medical man can give that service which is essential for the welfare of the public as a whole."

PUBLIC RELATIONS IN INDIANA

The December issue of the Journal of the Indiana State Medical Association has an account of the meeting of the Allen County Medical Society, which seems to bear the technical name of Fort Wayne Medical Society of October 7, when the relation of the Society to the Community Chest was discussed, as follows:

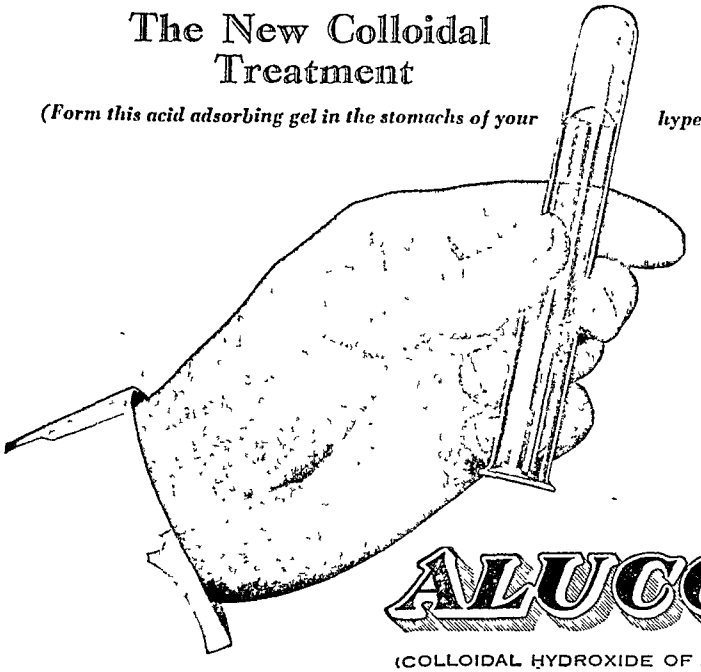
"Dr. Schafer made a brief report to the effect that the Medical Society as a group was giving to the Community Chest clients no less than $20,000 in actual service a year. He asked to be instructed concerning what the society wished to be done in the way of es-

(*Continued on page 190—adv. xxviii*)

ACID STOMACH

The New Colloidal Treatment

(Form this acid adsorbing gel in the stomachs of your hyperacid cases)



ALUCOL

(COLLOIDAL HYDROXIDE OF ALUMINUM)

Doctor, have you tried the newer and better colloidal way of treating acid stomach? Physicians who have found certain decided objections to the use of alkaline antacids are showing a preference for this new method. It involves the use of a non-toxic colloidal type of aluminum hydroxide, known as Alucol.

In the Sixteenth Session of the French Congress of Medicine, Professor Roch of Geneva, in a special paper on the subject referred to Alucol as follows: "Colloidal Hydrate of Aluminum adsorbs hydrochloric acid. It has proven in our hands the antacid medicament par excellence, far superior to bicarbonate of soda, magnesia, subnitrate of bismuth, etc."

Alucol acts by forming a colloidal gel in the stomach by combination with any *excess of hydrochloric acid.* The stomach acid is not completely neutralized. Thus a continuance of proteolytic digestion is permitted. Further, Alucol cannot produce a systemic alkalosis as it is not an alkali and is not absorbed.

Alucol is indicated in cases of gastric secretory disturbances characterized by hyperacidity. Reports testify to its undoubted value in the treatment of gastric and duodenal ulcer.

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Chicago, Ill.

Dept. N.Y. 2

Please send me, without obligation, a container of ALUCOL for clinical test, and brochure on "The New Colloidal Antacid"

Dr. ..... Address .....

City ..... State .....

(Continued from page 188—adv. xxvi)

tablishing a dispensary clinic in connection with the Community Chest Agencies.

"Dr. Cartwright made a motion which was seconded by Dr. Rawles that Dr. Schafer's Committee be instructed to collaborate with the Community Chest and be empowered to establish a clinic at some place mutually agreeable. After considerable discussion by various members, Dr. J. L. Wyatt moved that this motion be amended to read 'For a period of one year'; the amendment was seconded. After some more discussion Dr. Weaver moved that the motion be tabled. This motion was carried by a vote of 15 for and 5 against.

"Whereupon, Dr. Schafer who had already insisted that he and his committee wanted to take some action with the Community Chest on the following morning, presented his resignation which was not accepted. Then there was more discussion, lengthy motions which the secretary could not get down, and most everybody wanted to talk.

"Dr. Dancer moved that Dr. Schafer's committee be given full power to act as they see fit and report back to the society. Motion was seconded and passed.

"In due order a motion to adjourn was made, seconded and passed."

NEBRASKA STATE MEDICAL JOURNAL

The *Nebraska State Medical Journal* is just beginning the sixteenth year of its existence and the eleventh under the present efficient editor, Dr. F. A. Long, who writes editorially in the January issue:

"It has ever been the idea of the present editor that a state medical journal should be the exponent of a cross section of the organized profession it aims to represent; it should publish the articles offered by the profession as space permits, whether highly scientific or mediocre, since they represent the best efforts of the parties and encourage further effort in that direction, which means study; make a prominent feature of editorials by the editor and by members of the profession who wish to discuss medical economic and scientific matters in an authoritative way; that the editor should present to the profession monthly in a terse, graphic manner paragraphs of information, scientific, literary, historical; and that notes of interest about members of the profession of the state should be a prominent feature holding the interest of the reader in classmates, acquaintances and others.

"It is altogether likely that the state medical journal is the most cohesive thing in medical organization today."

Therapeutic Almanac



JANUARY



FEBRUARY

Months of winter-coughs and colds—infectious and febrile diseases. Acidosis predisposes to them—aggravates them. The right alkaline combination has a threefold function: to act as antacid, to liquefy the mucus; to produce diuresis, to reduce the fever.

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Fifteenth Annual Clinical Session

of the

AMERICAN COLLEGE OF PHYSICIANS

Baltimore, Maryland **March 23-27, 1931**

This meeting will be held in Baltimore through the cordial invitation of the Johns Hopkins University School of Medicine, the University of Maryland School of Medicine, the Medical and Chirurgical Faculty of the State of Maryland, the Baltimore City Medical Society, and the further cooperative interest manifested by the various Baltimore hospitals and civic societies.

OUTLINE OF SESSION

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
A.M.	March 23	March 24	March 25	March 26	March 27	March 28
9:00 A.M. to 12:30 P.M.	Morning free. Registration, Exhibits, etc.	3d *General Session*	5th *General Session*	6th *General Session* — General Business Meeting	7th *General Session*	*Entire Day* in Washington, D. C. Clinics, inspection tours, etc., under auspices of Medical Depts. of Army, Navy, U. S. Public Health Service, Georgetown University. — Full details *not yet* ready.
12:30 P.M. to 2:00 P.M.	Lunch	———	———	———	———	
2:00 P.M. to 5:00 P.M.	1st *General Session*	1st *Clinical Session*	2d *Clinical Session*	3d *Clinical Session*	4th *Clinical Session*	
5:00 P.M. to 8:00 P.M.	Dinner	———	———	Annual Banquet	———	
8:15 P.M. to 10:30 P.M.	2d *General Session*	4th *General Session*	Convocation and Reception to New Members		Free	

The Annual Clinical Session of the College constitutes one of the most valuable postgraduate weeks in Internal Medicine and affiliated specialties conducted on the North American Continent. Members will receive the Program promptly as published, but non-members interested in attending the Session may secure the Program on direct request to the Executive Secretary. Non-members of the College pay a moderate registration fee for admission to the meetings.

The headquarters hotel, the Lord Baltimore, is already engaged to capacity, but suitable accommodations can be secured at any of the following hotels, Altamont, Arundel, Belvedere, Emerson, Kernan, Mt. Royal, New Howard, Rennert, Southern and Stafford.

The Alcazar, Cathedral and Madison Sts., will be general headquarters for the registration of members, commercial exhibits, and all general sessions. Some guest rooms are available at The Alcazar.

SYDNEY R. MILLER, M.D., *President*
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GRADUATE EDUCATION IN RHODE ISLAND

The January issue of the *Rhode Island Medical Journal* has an editorial reference to the relation of Brown University in Providence to medical teaching. The University will not establish a medical school, but will help the medical profession in graduate education. The editorial says:

"The University might take it upon itself to become the coordinating agent in organizing a scheme of post-graduate education for practicing physicians. Providence and other adjacent cities possess notable hospital facilities. With the strongest of these hospitals the University is already intimately connected. The scientific services which it has rendered to these institutions and to the public health agencies of Rhode Island for more than a generation place it in a strategic position to bring all of these institutions together and to direct their efforts in an educational enterprise that might well make history. The strength of the University in the biological and chemical sciences which underlie medicine would enable it to make a contribution of its own to such an enterprise which few institutions could surpass.

"In the adoption and publication of the report of which this paragraph forms a part, Brown has definitely gone on record as in favor of the development, under University auspices, of a coordinated scheme of post-graduate instruction for Rhode Island physicians in which the leading hospitals in and near Providence would be involved. Inasmuch, then, as the eminent gentlemen who made the survey and the authorities at Brown agree that such medical teaching is needed and should be developed by the University, it would seem reasonable for the physicians of Rhode Island, who are the people most intimately concerned in this matter, through their representative body, the Rhode Island Medical Society, to express themselves on the subject and to appoint a committee from their number to study the situation."

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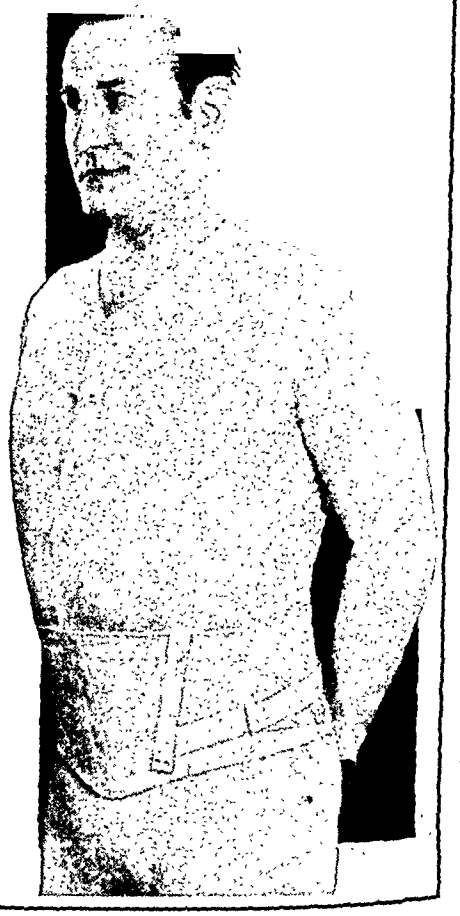
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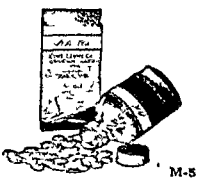
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UNTRUTHFUL MEDICAL PUBLICITY IN ILLINOIS

The *Illinois Medical Journal* for January has the following suggestion from the Woman's Auxiliary of the Chicago Medical Society:

"In the September number of *The Delineator*, Celia Caroline Cole presumes to give some sage medical advice; and as treatment 'for the puffy look around the eyes and lines and wrinkled lids,' among other things, she says, 'Eye exercises—spectacles if you have to have them, but better take the eye exercises and have a good osteopath adjust the nerves in the back of the neck and backbone and then dispense with spectacles.' Further on she says, 'use a nourishing cream on the lines and a mild astringent on the puffiness. Learn to rest your eyes by palming, or when you are out in public and can't palm, merely by thinking of lovely things you have seen—feel the eyes relax with pleasure—or by thinking of deep, deep, smoky, floating, velvety black.'

"As a suggestion to the members of the Woman's Auxiliary of the American Medical Association, we recommend that each and every one of them write a letter of protest to *The Delineator* and accompany it with the request that *The Delineator* make suitable amends or cancel the subscription of the writer. If even a few hundred members of the Woman's Auxiliary, with their influence in Women's Clubs, attack *The Delineator* for printing such untrustworthy information as herein quoted, there will be a right-about-face policy adopted by the publishers and owners of *The Delineator*. Intelligent people do not want their favorite periodicals to be dealing out false, unscientific and untrustworthy articles concerning the practices of medical pretenders."

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CULTISTS IN HOSPITALS OF ILLINOIS

The January issue of the *Illinois Medical Journal* prints the following ruling:

"Public hospitals in Illinois cannot exclude any doctors, licensed by the state, whether they are regular doctors of medicine or graduates of schools teaching drudgless healing, Attorney General Oscar E. Carlstrom has advised Dr. Andy Hall, director of the state department of public health.

"Exclusion of osteopaths and other drugless doctors from a hospital at Decatur started a controversy which was carried to Dr. Hall and the attorney general for settlement. Directors of the hospital excluded the drugless doctors by fixing a standard of qualifications which they were unable to meet, Attorney General Carlstrom was informed.

"All physicians who are recognized as legal practitioners by the state board of health shall have equal privileges in treating patients in public hospitals, the attorney general said, pointing to the state statutes.

"Legal practitioners, he added, included all persons who have been licensed to practice medicine, either in all its branches or to treat human ailments without the use of drugs or medicine and without operative surgery. The board of directors of a hospital would have no authority, under the statute, to pass any rules or regulations preventing all legal practitioners from having equal privileges and treating patients in such hospitals.

"The department of registration and education has the power and authority to determine and fix a standard of qualification for those practicing medicine and such power is not delegated to the public hospitals."

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A REVIEW OF THE PROGRESS OF THE CONTROL OF TUBERCULOSIS AND ADVANCES IN ITS PATHOLOGY AND BACTERIOLOGY

By EDWARD R. BALDWIN, M.D., SARANAC LAKE, N. Y.

Director, Trudeau Foundation

An address delivered on Oct. 29, 1930, in the Postgraduate Course arranged by the Committee on Public Health and Medical Education for the Counties of Monroe and Ontario.

PUBLIC Health and the Field of Sanitary Education: The relation of the medical profession and especially organized medicine to the control of certain widespread infectious diseases has occupied much attention in recent times. On the one hand is the tradition of the private relation of physician to patient, a precious and sacred function not to be cast away like an outworn virtue. On the other, there is the utter inadequacy of private practitioners acting as individuals to handle the problem of infection in its community aspects. The ideal family is rare where sanitation and intelligence combine to make the infection harmless. Often, when intelligence is sufficient, the means for carrying out preventive and treatment measures are lacking. No disease is more insidious than tuberculosis, or so prolonged and costly to treat. It is not strange, therefore, that gradually and inevitably Public Health has reached down from the state to the county, and from municipality into the school and home. The interesting fact is that so many high minded physicians have themselves promoted this movement as a public duty. Even those who most jealously guard the individuality of private practice have generally regarded tuberculosis in a class by itself for the public health authorities to deal with. This is not of course to disregard the various charlatans and shady brethren who treat tuberculosis as part of the grist to their mills. We all know that they still abound. It is difficult to estimate the number of concealed cases of tuberculosis, except when surveys have been made which usually bring them to light for the first time.

Now the actual effort to control the spread of tuberculosis has been in progress over thirty years in New York State. How much has been accomplished we all know. The antispitting ordinances have been increasingly observed, like our street traffic rules, and they are more and more becoming habits. Public places are less frequently infected, in my opinion, because of the cumulative educational effect of repeated antispitting signs. Again, we no longer observe the consumptive street loafers commonly seen in most communities in the early nineties. Probably they are mostly in institutions or resting at home. Certainly many are under some form of advice by nurses or treatment by their doctors, and use care with their sputum.

What has been the result on the prevalence of tuberculosis? The death rate is reduced by one-third at least. Have we a right to say that the disease has diminished chiefly if not wholly because of the present day isolation of patients and sanitary care of the sputum, or is the higher standard of living and good housing more to be considered?

I think most students of tuberculosis agree that the major part of the decreased mortality from tuberculosis is the effect of prophylactic measures, including the isolation of the open cases in hospitals or in the home. It is futile to try to dissociate the various factors and measure them. Both the automobile and the vacuum cleaner, for example, are involved in the problem; the first by relieving the fatigue of the worker from walking and the outdoor life promoted for shut-ins, the second by removing infected dust without stirring it up for the family to inhale.

Surely much of the hardship of life has been softened in this machine age, with all its faults, because of shorter hours and labor-saving machinery.

Unquestionably the education of the lay public is the outstanding accomplishment of our generation. The National Tuberculosis Association may be regarded as the agency of the greatest health propaganda ever launched, and it has served as a model for several other health organizations. It has accomplished another thing, however imperfectly, and that is the education of many medical men through its publications, lectures or

exhibits—a task practically impossible for medical schools.

Importance of X-ray Diagnosis and Sputum Examination: The busy private practitioner has little time to learn refined methods of diagnosis and little educational opportunity to study tuberculosis. He has, however, learned as well as the patient, that the physical examination of the chest is often insufficient in the practice of specialists, who now resort to the *x*-ray in nearly every case. Further, he knows it is quite as important to have a sputum examination as it would be to have a culture made in suspected diphtheria. Indeed, the time may not be far distant when both procedures will be required by law, with penalties or damage suits for neglect. We are rearing a structure of medical knowledge that is far over our present practice, and the public knows it, especially with reference to tuberculosis.

School Surveys: At the present time the public school is the focus of the efforts to find and control infectious cases. We have still far to go in this study but a good beginning has been made.

The great value of school examinations for tuberculosis lies in the fact that adolescence appears to be a critical age for the beginning of pulmonary tuberculosis. This statement will not come as a surprise to the older family physicians, who long ago watched solicitously over the developmental age of children among their clientèle. I think that no one could be in better position to do this than these older men, if modern diagnostic methods were universally accessible and employed. This objective can only be reached by systematic health examinations, the subject of so much agitation at the present time. The lay public is being made health conscious in many ways and it may be that the price to be paid for the recognition of latent tuberculosis will be a crop of hypochondriacs, which wisdom in prognosis will be needed to counteract. Here again is where a family physician should be indispensable.

Wholesale examinations by tuberculin tests and the *x*-ray are the logical steps to trace the unsuspected cases to the home, as has been done in Massachusetts and in several of our own communities. To quote a gifted Canadian colleague, Dr. David A. Stewart of Manitoba: "The search among contacts for early disease needs, as Burton Woods has it, even more than the imagination of a poet, the ear of a piano tuner, and the touch of an osteopath"! "Tuberculosis can be, like an iceberg, only one-tenth visible and nine-tenths invisible. . . . The best eyes and ears so far devised for the submerged nine-tenths of tuberculosis is the *x*-ray plate."

The work of Dr. Walter L. Rathbun in Chautauqua County is one of the most instructive in this connection, because he was able to trace so many bacillus carriers by examining the school children with the *x*-ray. The presence of a carrier at home is thus frequently uncovered.

Thus we must look ahead to the general use of the *x*-ray in diagnosis of chest conditions, and it must be placed at the disposal of those who cannot pay for it themselves. The vast improvement in the technique of *x*-ray photography should eventually make the mastery of this essential method within the reach of more physicians. Frankly, such an outlook is far from being realized very soon, except in favored communities.

It is at present known that the control of tuberculosis varies widely in different states and cities. If we succeeded in establishing an ideal control in one area, as is being done for cattle by the "accredited herd" system, we should then need to quarantine against imported tuberculosis among new settlers, or even among visitors, an obviously impossible task with a disease so readily overlooked. There is however an attempt to do this very thing in the Belgian Congo where the danger of a veritable scourge of tuberculosis exists among the black natives when the disease is carried to them. The prospect of abolishing tuberculosis in the mass does not appear favorable, yet every patient removed from the home during the infectious stage of open disease makes a definite break in the many contacts.

Unsolved Problem of Supervised Work for Arrested Cases: When the health departments of cities and counties are properly supported much will be gained for tuberculosis, for the majority of patients need more than temporary hospital or sanatorium care. I refer to the employment of arrested and chronic cases. The great need now unfulfilled in our tuberculosis program is, in my judgment, for some remunerative work for these cases, preferably in an institution and supervised by sanatorium or hospital staffs. Such earning capacity as patients possess is often not utilized, and this leads to despondency and loss of initiative, as in our prisons. It is a knotty problem and yet so long as chronic cases are discharged to their homes to shift for themselves, it is discouraging to the best results obtained by treatment.

Advances in the Knowledge of the Tubercle Bacillus: The rehearsal here made of the way in which tuberculosis is steadily being reduced obviously does not cover all the steps. There have been many advances in the knowledge of the disease itself. The bacillus has been subjected to intimate study, both in culture and in its chemical nature. Formerly it was held that the three principal varieties, human, bovine and avian, were distinct varieties: now there are known to be intermediate forms that are less sharply defined and yet cause disease. Still other acid-resisting bacilli have no power to infect animals, though they seem to be distant relatives of the pathogenic- or disease-producing forms. It is on the weakened or modified tubercle bacilli that various

methods of immunization have been based

Inadequacy of Vaccination against Tuberculosis The latest proposal for the wholesale vaccination of infants by Calmette utilizing a weak bovine inoculation, has had a wide use in Europe There are grave objections to depending on this or on any other method of vaccination against tuberculosis In the first place no evidence has been brought out that a complete protection can be conferred and after a few months the slight resistance which at first may be created, dies out again Thus a false sense of security is likely to be engendered The very protection itself is caused by tubercles and vanishes when they disappear or heal completely, whereas if they persist the vaccine cannot be non pathogenic There are also some experiments which show a revival of the virulence of the vaccine Advocates of vaccination as a solution of the problem of exterminating tuberculosis seem to overlook the fact that if mild infections could protect against severe ones, we should long ago have seen the disease disappear spontaneously from natural infection which is so nearly universal

The possibility of doing some good by vaccination is nevertheless to be admitted for during the first two years of life natural infection may be very serious where exposure is inevitable Even sterilized vaccines made from virulent bacilli, are slightly protective and safe Trials are being made of this method both at home and abroad On the other hand tuberculins do not serve this purpose In all the years that tuberculin has been used in diagnosis and treatment, none of the many kinds has been found to give any immunity Its continued use as a therapeutic agent is largely restricted to non-pulmonary tuberculosis such as that of the eye skin and old sinuses from suppurating joints, lymph glands, etc

Advances in Knowledge of the Course of Infection Pathology has also revealed new facts concerning tubercle The conception of a primary lung or gland infection through the intestine, followed by healing and secondary or superinfection, prevails today While childhood is frequently the period of successive infections which cause little disturbance of health, during early maturity they take on a serious form in the apex of the lung Here is where the clinical disease most often commences, whether from extension of the original primary focus or a newly acquired infection In most cases it is impossible to trace early apical disease to any single exposure, usually prolonged and intimate contact in the home is to be looked for Whatever the sequence of events, the patients begin to have the first symptoms at an age when life is full of interest and excitement, when youth is prone to make light of them

It is not surprising therefore that a first examination discloses a cavitation already present near the level of the clavicle The ear scarcely will detect these early cavities and they frequently go on to healing or extension before being recognized by the x-ray

Tuberculosis develops at all ages and frequently complicates old age, when for the most part it is a mild disease In middle life it is often a relapse from a former disease, unrecognized and never completely healed On the other hand the development may be due to heavy strain and exposure to infection for the first time Many occupations are predisposing, especially dusty ones and those causing mental strain and loss of sleep Climatic conditions have lost some of their meaning as predispositions, whereas environment and frequent exposure to infection have assumed prime importance

Causes of Lessened Prevalence of Tuberculosis It is now apparent that the great diminution of the disease since 1920 is closely related to the markedly better standard of living, shorter working hours and decreased alcoholic excess, with its associated evils Among the important predispositions, one that has become a serious industrial problem is the inhalation of silica dust in the trades like granite cutting carborundum and tool grinding It can be experimentally shown that animals develop a severe tuberculosis after exposure to stone dust containing quartz and any other form of silica Legislation affecting these dangerous occupations has already been enacted in some states and foreign countries

It would be interesting to refer in more detail to the pathological studies showing the relation of tuberculous lesions to relative immunity and its associated allergy The latter being largely the cause of the inflammatory effects of the invasion of healthy tissue in patients, is undoubtedly responsible for what is known as the exudative type of tuberculosis and also for the pleural, peritoneal and joint effusions It can act favorably in causing absorption of fresh tubercle, but often destructively as in caseous pneumonias

Thus nature is provided with a two edged sword, and in overaction we see harmful effects Enough has been mentioned, I think, to show that steady progress has been going on in the fundamental study of tuberculosis, its cause and effects

New interpretations are being made of older observations such as the pathological findings in chronic fibrous forms of the disease which offer a favorable outlook for long life often for a full and active life Clinicians will ask how they may distinguish between such and the more unstable forms of the disease Unfortunately, one may change into the other without apparent cause, and good judgment must always preach "safety first

In conclusion I can but urge the general practitioner to act on the earliest suspicion of symptoms and to educate his clients to the point of doing the right thing first, at whatever sacrifice

THE APPLICATION OF HIGH-FREQUENCY CURRENTS IN OTO-LARYNGOLOGY*

By LEE M. HURD, M.D., NEW YORK, N. Y.

HIGH frequency currents are also known as diathermic, endothermic, electro-surgical, and electro-thermic currents. The types of currents are: 1. Coagulation, bi-polar or d'Arsonval, which destroys the tissue in proportion to the strength of the current plus the length of time it is in contact with the tissue. 2. Knife current which is also bi-polar. This current divides the tissues by molecular dissolution, just slightly searing the cut surface. 3. Desiccating, mono-polar or Oudin. The coagulating and desiccating currents largely overlap each other in their actions.

To use these three currents, the operator does not need to know that the knife current is undamped and of much higher frequency than the other two, or that the Oudin has a higher voltage with a frequency between that of the knife and coagulating currents. His only concern is in regard to the character and effects of each current in their uses, and whether the machine he has or intends to acquire, will give the desired output in a satisfactory manner. Practically, all three currents, of a satisfactory quality, can be combined in one outfit at a reasonable price.

The coagulating current should destroy tissues quickly under complete control of strength, from the very lightest work to heavy destruction with perceptible faradic current, and also give diathermic heat. The knife should cut quickly and smoothly with only the slightest searing of the divided tissue. There should be no sticking or sparking, which would char the tissue. The Oudin, or mono-polar current, mainly used for surface desiccation, should be produced with a spark varying from the most delicate to very heavy.

There is no definite reading of the milliammeter or the dials, which will mean the same effect in every patient. You know what action you wish to produce and you learn by practicing on meat, what setting your particular apparatus requires. It is comparable to driving an automobile or playing a musical instrument. You learn by experience the limitations and capabilities of your apparatus.

I have received the impression that it is nearly painless, but on the contrary, if an amount of current is used, sufficient to get fairly quick results, it is painful, not only at the time of the treatment, but afterwards. It is not, however, as painful as the older methods of removing tissue about the throat.

It is also stated that endothermy is bloodless. This is true at the time of the operation, but when the slough comes away, there may be bleeding, and great care should be used not to coagulate near the vessels, as it is possible to destroy part of the vessel wall, and later have a very serious hemorrhage. Near bone or cartilage great care should be used, otherwise necrosis results. Circumstances may be such that you are prepared to have dead bone after endothermy of the soft tissue overlying the bone or cartilage.

One of the instruments that makes the application of endothermy possible in oto-laryngology is the snare with either the cutting or coagulating current. The indications for its use are the same as for the cold wire snare, except on bone, unless you are prepared for a protracted healing of the bony necrotic base. The action of the snare on the tissues depends on the strength of the current used, the size of the wire, the size of the loop, and the speed of closing the snare.

Surgical diathermy can also be applied by the means of variously shaped instruments which have been designed to reach the deeper parts of the nose and throat, and which are insulated up to the tip. The metal tips are either sharp pointed so that they will penetrate for deep coagulation, or dull for surface coagulation and desiccation. Ordinary sewing needles in a standard handle are used, for the application of the current in easily accessible locations.

The coagulation current works as well and usually better than the methods previously used, in the following conditions:
1. Dividing nasal synechias. By the old methods, there was a great tendency for the adhesions to reform, which required treatment by placing some material between the raw areas. With coagulation this tendency of the tissues to grow is overcome, because the coagulum remains in place between the two surfaces, until they are healed. 2. In reducing hypertrophied turbinates. 3. Destroying post-operative granulations in the nose and throat. 4. In epistaxis, the mono-polar current, Oudin, will close vessels much better and more quickly than galvano-cautery or chemical caustic. In fact hemorrhage anywhere in the nose or throat, from the soft tissues, if it can be reached, can be easily and quickly stopped with either the coagulating or the desiccating current. 5. Destruction of polyps.

The Removal or Treatment of Tonsils: Knife current dissection is claimed by Dr. Leroy Thompson[1], to have great advantages. I have tried this method, found it difficult, and doubt

* Read at the Annual Meeting of the Medical Society of the State of New York, at Rochester, N. Y., June 3, 1930.

whether it is superior to standard surgery The Sluder snare method, reported by my associate Dr. W. W. Morrison,[2] using the knife or coagulating currents is still in the experimental stage; it appears to have the advantage of being bloodless, and may destroy enough of the capsule in the fossa to destroy the lymphoid islands, that later develop and thus spoil an otherwise perfect result.

A question that is still unsettled is whether or not there is considerable coagulation in the fossæ, even when at the time of operation the fossæ show only slight searing.

Treatment with View to Destroying the Tonsils in Situ: 1. By coagulation multiple small punctures of the tonsil are made, each puncture destroying an area 3 to 4 m.m. in diameter. On the average tonsil it will take about 10 series of punctures to cover the surface. Each of these will result in slough 3 to 4 m.m deep, and annoying dysphagia for about a week. The procedure has to be repeated at intervals until the capsule is reached. By measuring the tonsillar depth and dividing by 4 m.m., the answer is the number of times the tonsil will have to be treated.

2. Mono-polar (Oudin). If the tonsil is punctured with the needle and sufficient current is used, the effect is the same as above when the coagulation current is used. If the surface of the tonsil is sparked, there will be only superficial desiccation, which is a still longer process, before the entire tonsil will be destroyed. It is stated that there is less liability of hemorrhage with the Oudin because the slough comes away gradually, whereas after coagulation the slough separates in toto. I have seen bleeding from both Oudin and coagulation currents, in tonsil work.

SUMMARY: 1. The theoretical advantage of less infection and bleeding. 2. Removal of tonsils with the endotherm snare may have a future because there may be less bleeding. A question which remains to be answered is how the tonsil fossæ will react to the action of the current. Furthermore there is a tendency toward exuberant granulations in the fossæ. 3. The destruction of the tonsil with coagulating and Oudin currents has a place where surgery is contra-indicated, otherwise it has no future. 4. Post-operative remnants of tonsil tissue, which sometimes appear after what seemed a perfect operation, and by remnants I do not mean cases where half a tonsil remains, but the so-called lymphoid islands, which are generally a half to one centimeter in diameter and about half a centimeter in depth, may be destroyed at one sitting. This is possible because the area and depth are definitely known, and the method has the great advantage over standard surgery, of being bloodless, with less after-pain, and can be quickly and easily done in an office treatment. This pertains to the stump of the lower tonsillar pole as well. 5. Adenoid remnants, especially at the side of the nasopharynx can be more accurately removed by coagulation. The hypertrophied lateral pharyngeal folds, and the post-pharyngeal lymphoid follicles are also more satisfactorily eradicated by coagulation.

There is, in the fossa of Rosenmüller, a condition, not generally recognized, which causes recurrent O. M. S. A., acute naso-pharyngitis and rhinitis. This is a chronic inflammation in the lymphoid tissue of the fossa. I have seen fossæ that were three-quarters of an inch deep. By the old method of biting this infected tissue out with forceps, or dividing the bands that so frequently run across the space, the results were unsatisfactory. Destruction of this infected tissue and these bands, can readily be done with the endotherm. There also may be an associated hypertrophy of the tubal tonsil, which appears as a series of follicles, each one of which can be pierced with the needle and destroyed.

The hypertrophied lingual tonsils and varicose lingual veins can be destroyed with less pain and no hemorrhage.

The endotherm knife may be used to advantage over older methods, in opening abscesses. It is especially advantageous in destroying cysts, first opening them either by a linear incision or removing a circular piece or button from the wall and then desiccating the cyst wall. This is much more certain of success than attempting to disect out the lining membrane of the cyst.

The field of operation should be anæsthetized with novocain or by topical application of alypin. If the area to be treated is extensive such as a so-called secondary tonsil and adenoid, a general anæsthetic is necessary.

We have worked out a practical and safe method to guard against explosions from ether. The patient is started as usual with gas-oxygen and ether, and when the time comes to use the endotherm, the ether and anæsthetizing apparatus are removed to a safe distance, the patient allowed to come out of the anæsthetic enough to establish the eye reflex, and then lightly held with chloroform, as long as the endothermy is in use. If there is any further surgical procedure, the anæsthetist reverts to ether.

In conclusion, the endotherm apparatus may also be used very successfully for the administration of diathermic heat. In cases of pain and tenderness from acute frontal and maxillary sinusitis, ear infections and otitis serosa, a small metal plate is fitted over the painful area of the forehead or cheek, with a large

electrode on the arm or back. The heat within the tissues, so produced, will regularly relieve the pain, and is the only method I have found that will do it so promptly.

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DISCUSSION

By John McCoy, M.D., New York, N. Y.

We have just listened to a very practical discourse on Diathermy. As Dr. Hurd has said, we have three types of current, namely, the cutting type, the coagulating type, and the desiccating type.

Previous to the introduction of high frequency currents we had nothing but Faradic and Galvanic currents which always affected the muscles. The introduction of the high-frequency current is such as to give a very high frequency which exceeds the limit to which the muscle tissues respond. I was very glad to hear Dr. Hurd say that in using this current it was neither painless nor bloodless, because I have found about the same thing, although the more I use the current the less painful and the less bleeding I get.

With regard to the use of a snare there have been several types advocated, but as none has proved a complete success I have not adopted any one of them.

I have found the current very useful to keep the Sphenoidal Sinus open after an Ethmoid and Sphenoid operation.

In the removal of Tonsils I have used the cutting current where the patient has had a long coagulating time. At present I am using the puncture with the coagulating current.

It is very useful in removing Adenoids from the Fossa of Rosenmüller and in Hypertrophied type Tonsils. It is also useful in opening Abscesses and destruction of Cysts.

Medical diathermy is very useful in relieving the pains of Sinusitis over a Frontal or Maxillary Sinus, or an acute ear.

Growths: I have introduced the coagulating current to remove very bloody Naso-Pharyngeal Fibromata. I have also used it in non-malignant growths in the Larynx. Also, in beginning of Cancer of the Larynx after Thyrotomy.

PHYSICAL THERAPY IN COMPENSATION WORK*

By HOMER J. KNICKERBOCKER, M.D., F.A.C.S., GENEVA, N. Y.

IT MIGHT be well to state at the beginning that the speaker is not a Physical Therapeutist. He has, however, had the opportunity of sitting on the sidelines and in the grandstand, even reserved seats, from which position observation was possible along certain lines which constitutes the basis of the paper to be presented.

In September, 1928, our chairman, Dr. Richard Kovacs of New York City, presented before the fifth International Medical Congress for Industrial Accidents and Occupational Diseases at Budapest a paper entitled Physical Therapy in Traumatic Conditions, which was printed in the *International Clinics*, Volume 4, Series 38. The opening paragraphs of this article are so apropos to the subject of this paper as to make their quotation desirable. Dr. Kovacs said:

"The use of physical measures in acute, subacute and chronic traumatic conditions forms an essential part of their modern treatment. Following the impressive object lesson furnished by the extended application of physical measures during and after the Great War, physical therapeutic departments have been established in the United States of America in connection with industrial plants, insurance companies, and in all progressive hospitals treating traumatic cases. Unfortunately, the equipment and the actual operation of these departments varies very considerably. At the low end of the scale are some industrial clinics organized on an entirely commercial basis where "baking and massage" is ordered as a routine in all cases of injury and applied by a masseur or nurse, often perfunctorily and without competent supervision. At the upper end of the scale are well organized departments equipped with all the modern measures of physical therapy, including electrotherapy, thermo- and hydrotherapy, phototherapy, massage and mechanotherapy, and operated under the direction of a skilled medical director and in organic cooperation with the surgical and the other departments of the hospital or industrial plant. Results differ according to these divergent standards, and it may be well to state that the overplaying of physical therapy as an added measure of revenue by a few commercially inclined organizations and physicians already threatens a setback in the employment of this important part of therapeutics. A recent report of the Com-

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mittee on Traumatic Surgery of the American College of Surgeons states that in the large majority of cases physical therapy as now rendered is of little value In reply, Granger emphasizes that an analysis of this report makes it evident (1) that in many cases the surgery was so poor that treatment by physical therapeutics or by anything else could not overcome this handicap, and (2) that in many cases the physical therapy to put it mildly, was unintelligently prescribed and applied

"The practical application of physical therapy to traumatic conditions demands

"1 A complete diagnosis in every instance The careful initial examination should always include definite findings as to (1) state of injury or repair contour of limbs and joints conditions of scars, measurement of circumference union of bones, (2) state of function range of motion in joints, strength of muscles (grip testing etc) (3) special examinations such as electrical and sensory tests in nerve injuries Roentgenograms are well nigh indispensible in most instances

'2 Consideration of the existing pathology or functional disability and the selection of the appropriate physical measures to meet the individual case It is not a question of a certain apparatus to be applied to a certain diagnosis, but rather of a certain physical agent or combination of agents to the existing condition Physical therapy should by no means be confused with apparatotherapy

'3 Periodic check up of the results by frequent examinations which should always be carefully recorded, together with such changes in treatment as the conditions warrant Physical therapy is only perfunctory when a patient continues to receive the same treatment for months without any attempt to ascertain progress

"4 Periodic consultation with the referring surgeon This will enable the surgeon to appreciate the possibilities and limitations of physical therapy

"5 A definite procedure for discharging patients and recording and results"

If it is necessary or advisable to have a complete history and physical examination of a patient before submitting him to a major surgical operation it would seem that at least a general familiarity with conditions presented in such history and examination should be in the possession of the physical therapeutist before any treatment is started Observation would indicate that such is not generally had The attending medical man too often treats or refers his case for physical therapy with only a meager knowledge or description of the injuries sustained and a request for reconstruction thereby reducing the physical therapeutist to the standard of a technician who has authority by the reference of the case to treat it in whatever manner he thinks best This is manifestly unfair to the physical therapeutist and frequently prevents him from getting results such as he would desire as well as handicapping him in the choice of modalities Any form of treatment which does not give results commensurate with the inconvenience, suffering and expense cannot be considered as being successful The haphazard reference of cases encourages perfunctory treatment, leads to abuses and discredit to all concerned That this has happened to the physical therapeutists is evident from the attitude of the carriers whenever such treatment is suggested

When we consider the number of high pressure apparatus salesmen there are on the road, the proverbial gullibility of practitioners of medicine when it comes to something new and the few places available where a doctor can get unbiased information and instruction relative to the application of physical therapy, it is no wonder that the carriers feel that in a large percentage of cases that they are not receiving the benefits for which they are paying when physical therapy is used At a meeting held December 6th, 1929, in New York City at which were present the various members of the State Committee on Physical Therapy and representatives of the insurance carriers operating in this state, a questionnaire was discussed The first question, "Is physical therapy as administered by the average doctor handling your cases giving results commensurate with the cost?" was uniformly answered no In the discussion it was brought out that while there were some real physical therapeutists there were so many medical men using physical therapeutic methods without definite knowledge as to their method of application, the selection of cases or what was to be expected that the insurance group felt that however honest the medical profession might be the end results as a whole amounted to defrauding the insurance carriers far beyond the benefits obtained Someone has said that "it requires an unusually honest doctor to refrain from overtreating a patient when he realizes that the pay is good and assured" There is also one other condition which might apply, that is an unusually busy doctor but if the excess of business consisted in keeping them coming of course that would not apply

To offset this condition many of the carriers as well as numerous large employers have established their own industrial clinics with part or full time medical supervision, technicians and nurses Unless we as a medical profession can deliver results measurable in dollars greater than the cost of production we will soon be faced with a situation whereby large employers and carriers will establish their own facilities for treating their injured workmen, all of which will make a decided inroad into the incomes of pri-

vate practitioners located within the area served by such clinics. We have diligently fought for many years against state medicine and unless we can see into the future and rectify our shortcomings I anticipate that sooner or later we will be faced with corporation medicine. In many of the large industrial centers such a condition already prevails, much to the detriment of the private practitioner. It is obvious that the remedy lies within ourselves and rests heavily on each individual to see that his particular work along these lines is the very best that he is capable of doing and fully worth the price he charges.

Numerous manufacturers of physical therapy apparatus conduct so-called courses of instruction which are in reality nothing more nor less than sales promotion. They do a lot of advertising, gather in as large an audience as possible, make extravagant claims and overload the customer with what in many instances is a questionable office ornament devoid of genuine therapeutic possibilities, all out of proportion to the cost. Itinerant lecturers cover the country from one end to the other giving courses in physical therapy and other things at so much per capita attendance. Examination of this class of instruction shows that as a whole it is very low grade, overoptimistic and in many instances actually dangerous. It is conducted entirely as a revenue getting proposition without regard to any extent of the character of the individuals instructed. A survey of the state was made with the result that it was found that no medical college was giving undergraduate courses in physical therapy which were considered adequate. New York University and Bellevue Hospital Medical College give no course in physical therapy to physicians, but do give a course to the School of Education, at Washington Square, in conjunction with the Hospital for Ruptured and Crippled, which course is open to technicians who are candidates for the physical therapy license. Columbia University gives an elective course during the third and fourth years of undergraduate work one hour each week during each quarter. It offers also an extension course for graduates of medicine at Mount Sinai Hospital and Montefiore Hospital. Cornell University gives only one morning a week for four weeks to groups of undergraduates at the Hospital for the Ruptured and Crippled. New York Homeopathic Medical College and Flower Hospital give a course of eleven hours of clinical and eleven hours of didactic work to the third-year students and also to the senior class. The Polyclinic Medical School and Hospital of New York offers a four weeks' course daily on the theory and practice of physical therapy in all departments of medicine with four weeks optional additional clinical work. This course is given regularly every two months. The New York Postgraduate Medical School and Hospital has no organized course in physical therapy. Some instruction is given in the orthopedic seminar. The Albany Medical College gives undergraduates some instruction in the courses on Therapeutics and Orthopedics. Syracuse University gives fourth-year students one hour a week of didactic work and two-hour clinics weekly through a four-week period. The University of Rochester School of Medicine and Strong Memorial Hospital give no definite course in physical therapy. The University of Buffalo gives a course to third-year students in which sixteen hours of instruction are equally divided between recitations and demonstrations. It is apparent that the establishment of at least two thorough courses in physical therapy available to the practitioners of the state should be had, at as early a date as is practicable. Your committee has already gone on record in a statement advocating that no physical therapy apparatus of any consequence be acquired by any practitioner until he has acquired through some competent source sufficient knowledge of the application of modalities, their indications, etc., as to warrant his presuming to do physical therapeutic work. If this instruction were had much less apparatus would be purchased and better work done and much of the dissatisfaction of the carriers would be eliminated.

Physical therapeutists are many times hampered by having referred to them for reconstruction cases which present palpable evidence of bad surgery. The surgeon too often hands the case over to the physical therapeutist and expects him to pull the surgeon out of the hole. Fortunately in many of these instances good physical therapy will minimize what would otherwise be a high percentage of award provided the proper method of treatment is carried out. For the information and protection of all parties concerned adequate records of the case as an individual, his particular condition when received for treatment with a complete description of the lesion and all that pertains to it should be made before treatment is begun. Any treatment which continues without a periodic survey for the purpose of estimating progress is open to question. What this period should be will of course depend upon the character of the trouble, but it is generally conceded that six weeks should be the maximum period of treatment before estimation of progress is made. In all probability two weeks would be the minimum. How often treatments should be administered or for how long is a matter of individual choice.

Adequate reports to carriers at relatively frequent intervals are appreciated by them. To these reports they are undoubtedly entitled that they may set up proper reserves against the disability of the individual case, be informed of its

progress and know what to expect so that they can put it on for hearings at the proper time It is a well known fact that compensation cases require on the average more treatment than similar cases in private practice A recent analysis of an equal number of unselected private and compensation cases, a total of 2,000 cases made by Dr K G Hansson and Dr F J Marjey of the Hospital for the Ruptured and Crippled in New York City shows that compensation cases require approximately twice as many treatments as private cases If this be true in a large clinic where constant supervision checking up and weeding out is practiced what would the ratio be if these cases had been treated by a poorly equipped enthusiastic private practitioner physical therapeutist possessed of an elastic conscience? There can be no denying that such people do exist and it is little wonder that the carriers are dissatisfied Many practitioners are in the habit of sending their physical therapy work to some qualified or unqualified physical therapeutist who may or may not be licensed and whose sole source of livelihood depends on how much work he can get and what he can get for it Too much indiscriminate handing over of patients is going on Whenever a practitioner hands over a patient to a technician he assumes a moral and legal responsibility for that technician's conduct so far as the medico legal aspects are concerned It therefore behooves us to select with the greatest of care those to whom we would send our patients and it also becomes our duty to check up at regular intervals for our own edification and satisfaction as well as for the purposes of reports to the carriers whenever indicated Treatment prolonged beyond the stage of advisability, improperly or inefficiently given, becomes a responsibility of the referring physician, a point which he seldom realizes as much as he should To whom, when and how long and for what he sends his patient should be clearly indicated that he may justify the results Nowhere in the practice of medicine do we come in contact with malingerers as much as we do in its relation to workmen's compensation Repeated appearances in compensation court often has the result of the development of a very clever malingerer whose detection is difficult

In the treatment of this class of individuals the physical therapeutist has an opportunity for real service Upon him as well as the physician in charge of the case must rest the responsibility of detection because their personal interests, as well as those of the carriers are involved Medical testimony in favor of claimants who are later found to be malingerers does not improve the standing of the physician so testifying in the eyes of his professional brethren or his potential employers, the carriers It therefore behooves us to guard our statements and make sure that they are based on facts whenever we are called as medical witnesses

In conclusion to make physical therapy successful we must have *first*, the very best possible surgical job that the case can receive *Second*, we must have a diagnosis of the lesion presented, sufficiently broad knowledge of the general condition of the patient and all that pertains thereto so that we may be in a position to see the case as a whole and not confine our efforts in the treatment of an individual part without knowing the limitations of the case *Third*, we must select that proper physical therapeutic modality which is best suited to the particular case, apply it with intelligence, diligence and skill *Fourth*, we must have adequate records from the beginning of the treatment through to the final check-up which will show some progress in order to make the treatment worth while Failure to make progress must indicate futility or improper treatment *Fifth*, we must make adequate reports to the carriers so that they may be in a position to know what is going on and govern themselves accordingly *Sixth*, we must be absolutely honest with our patients, the carriers and to ourselves, as by this method only can we merit confidence and the success which we hope to obtain

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ARTIFICIAL PNEUMOTHORAX AND PHRENICECTOMY IN THE TREATMENT OF PULMONARY TUBERCULOSIS

By HERBERT F GAMMONS, M D, AND ARTHUR N AITKEN, M D LOCKPORT, N Y

PHRENICECTOMY as a treatment for pulmonary tuberculosis is increasing in popularity while artificial pneumothorax is still a very important factor in the treatment of this disease

Therle[1] says phrenicectomy is valuable in unilateral and basal lesions in basal adhesions preventing full collapse with pneumothorax and preliminary to thoracoplasty

O'Brien[2] says in cases where either pneumothorax or phrenicectomy may be used, phrenicectomy is more desirable

Bridge and Bly[3] in a series of 60 cases obtained very good results Bridge feels that

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patients who get good results from phrenicectomy are not handicapped in doing their regular work.

Mayer and Leetch[4] obtained good results in decreasing the size of cavities of long standing that had resisted other forms of treatment.

Wells[5] obtained beneficial results in approximately two-thirds of a series of 271 cases and found that it gave good results more often in apical than in basal lesions.

We wish to report on a small number of cases treated by phrenicectomy and to express our opinion of the value of this form of treatment compared to artificial pneumothorax and also, of the combined treatments in certain cases.

In a county tuberculosis sanatorium we are naturally unable to pick our cases and are confronted with the problem of many advanced cases who are not ideal for any form of compression treatment but who will die if something is not done. Then, too, if we can relieve many of these advanced cases of troublesome symptoms not expecting an arrest of the disease, we feel that we have accomplished some good.

We are mindful of a number of patients who have taken artificial pneumothorax and who have developed serious and oftentimes fatal complications such as empyema or spontaneous pneumothorax. We also find many patients who have adhesions which prevent a satisfactory collapse of the lung. Also we find a few where the location of the lesion is at the base of the lung and the rest of the lung is normal. In this latter type it seems poor policy to compress the whole lung when phrenicectomy will often collapse the infected area only and leave the good lung tissue to functionate.

Many cases treated by artificial pneumothorax get so much contraction of the lung by the time the treatment is to be stopped that the lung will not fill the pleural cavity without marked displacement of the other organs unless the nerve operation is performed. Also there are many patients taking pneumothorax who have a flexible mediastinum or depressed diaphragm that interferes with a satisfactory compression of the lung in the diseased area.

There are some cases with multiple cavities and not any toxic symptoms where the mechanical effect rather than the effect of overcoming toxæmia are desired and in such cases the nerve operation we feel should be done first. On the other hand when there is a large amount of disease with marked toxæmia or profuse bleeding with the contralateral lung in good condition artificial pneumothorax will produce the quickest relief of symptoms. When the contralateral lung is much involved, but not apparently active, the nerve operation is to be desired as there will not be as much work put on the contralateral lung with this treatment as there will as a result of artificial pneumothorax.

In cases of long standing with cavitation apparently near the surface, especially at the apex, adhesions often prevent a collapse with artificial pneumothorax, and there is the possible danger of a spontaneous pneumothorax if much pressure is applied. These cases should, in our opinion, be treated by phrenicectomy.

During the past year 31 patients at the Niagara Sanatorium have been treated by phrenicectomy, 28 of these were far advanced and 3 moderately advanced; 10 were right side and 21 left, the youngest was 19 years and the oldest 55 years. The operations were performed by Dr. Edgar Phillips to whom credit is due for the good results we have obtained. In this series 11 phrenicectomies were done as a preliminary treatment to thoracoplasty. Seven of these 11 were failures with pneumothorax on account of unsatisfactory collapse. One was unable to take pneumothorax on account of adhesions and 3 were not given pneumothorax but apparently had adhesions. Six of the 11 have had thoracoplastic operations, 2 have improved so much they may not need it and 3 are being observed on account of the condition of the contralateral lung although the operated side is improved. In 5 of the 31 cases, phrenicectomy was done to relieve adhesions after pneumothorax had been given and there was an improvement in 4 cases, with rapid disappearance of pleural effusion in 2, with no improvement in one who had a basic cavity that was not improved by artificial pneumothorax. This patient had a spread of the trouble to the contralateral lung and we feel that if she had had the phrenicectomy in preference to the pneumothorax she would have been benefited. This is the only patient of the 31 that has died and her death was not caused or hastened by phrenicectomy.

In one case the object of the phrenicectomy was to relieve a bronchial-fistula resulting from a post-pneumothorax empyema and preliminary to thoracoplasty. This bronchial-fistula was relieved but has reopened. In 3 cases the treatment was given to relieve symptoms such as severe pleurisy, persistent hemorrhage and excessive cough. All of these 3 showed improvement of their symptoms. Two of them could not take artificial pneumothorax on account of adhesion and the other 1 was not tried on account of the disease in the contralateral lung. In 3 instances the operation was performed to obliterate or decrease size of cavities with improvement in all. In 9 of the 31 cases phrenicectomy was performed

with the hope of arresting the disease All of these 9 have shown very good improvement except 1 who had so many adhesions that the diaphragm did not arise and 1 who has an increase of trouble in the contralateral lung One, a basic lesion that was spreading is apparently arrested

White it is impossible to determine beforehand, whether or not adhesions are present that will prevent a satisfactory collapse with artificial pneumothorax we feel that phrenicectomy is indicated in the following

(1) *In the chronic practically unilateral case* without acute symptoms
(2) In a chronic case where there is a moderate amount of involvement in the contralateral lung, which is improving or not spreading.
(3) In all basal lesions that are unilateral and *not improving*
(4) In cases with apical cavities near the surface where there are probably adhesions
(5) As a symptomatic treatment for hemorrhage, persistent pleurisy and severe cough, where artificial pneumothorax cannot be given *either* on account of adhesions or too much involvement of the good lung
(6) Preliminary to thoracoplasty
(7) To stabilize a flexible mediastinum during pneumothorax treatment
(8) To decrease the size of a pleural cavity to allow for contraction of a lung when stopping pneumothorax
(9) In cases where pneumothorax may be indicated but where it is impossible to find a pleural space

We feel that artificial pneumothorax will often give better results in the acute unilateral cases where there is severe toxæmia and progressive disease and in severe hemorrhages when the bleeding point can be located

On account of its simplicity and having practically *no complication, phrenicectomy* as a teratment for pulmonary tuberculosis is, in our estimation, to be seriously considered in any case needing mechanical rest

Case Reports

Blum—Admitted May 7, 1929 Moderately Advanced, improved symptomatically on rest September 9th hemorrhaged and x-ray and physical showed cavitation Phrenicectomy September 21st At present quiescent with negative sputum and cavity fairly well healed Reason for phrenicectomy apical cavity that probably couldn't be collapsed with pneumo-

Jackson—Admitted September 5, 1929 Temperature 101, hemorrhaging *X*-ray showed cavity increasing in size and increased infiltration at base over picture of Feb 1929 *Pneumothorax was decided as* cavity was central and symptoms acute Results *good*, patient has no active symptoms

Osborn—Admitted Sept 26, 1928 Far Advanced B *X*-ray showed basal lesion right, improved on rest began to hemorrhage March 1929 continued Started pneumothorax April 15th *impossible to collapse cavity, hemorrhage* only partially controlled Died from spread of trouble She had phrenicectomy performed Sept 7, 1929, which controlled hemorrhage We felt that she should have had a phrenicectomy instead of pneumothorax but it was not possible to have it done at that time

Callahan—Admitted Nov 5, 1929 Moderately Advanced, with lesion at right base Disease extended under rest and no symptomatic improvement Phrenicectomy done Jan 8th, with good results

Hershey—Admitted Jan 12, 1928 Advanced Hemorrhaged at intervals Pneumothorax could not be given Phrenicectomy performed March 26 1930 Diaphragm reached its maximum height in 5 days No hemorrhage since operation and 50% decrease in sputum and cough and temperature normal since operation Object of operation was preliminary to thoracoplasty but has improved so much he may not need the thoracoplasty

Dorwalski—Admitted July 8, 1929 5 weeks before entrance hemorrhaged Temperature from 101 to 102 with rales throughout left and infiltration scattered *through left* On account of severe toxæmia pneumothorax was started Aug 17, 1929 with practically no fever or active symptom since Sept 1929

Humphrey—Admitted Feb 6, 1930, had a hemorrhage Jan 17th and 3 since In Dec diagnosed early minimal On entrance post-tussive rales in left upper ⅔ and no improvement in condition on rest for 2 months *X*-ray beginning to show excavation at apex Patient desired phrenicectomy in preference to pneumothorax Operation March 26th, has *improved symptomatically but still runs slight* temperature She may need pneumothorax later

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RADIUM IN DERMATOLOGY*

By WILLIAM H. CAMERON, M.D., NEW YORK, N. Y.

From the Department of Dermatology and Syphilology, University and Bellevue Hospital Medical College.

A PROMINENT professor of surgery recently advised his students,—"Forget all you hear about radium." Such an opinion, expressed some twenty-five years after its introduction as a therapeutic agent, makes one wonder if information regarding the use of radium is being properly disseminated.

In attempting to answer this question, I reviewed considerable literature on the subject and was impressed with the following facts: First, it is radium, and not the technic of its application, that is adversely criticized. Second, it is apparent that the most important problem—the question as to whether, from a physiological standpoint, radium should, or should not, have been used—is seldom considered. Third, a technical uncertainty as to whether, in a given case, the beta or gamma rays from radium, or the gamma rays from *x*-ray, were indicated.

As to the first point, the criticism, in a great majority of cases, should be reversed. The fundamental principles of radiation can be taught, but radiological judgment can only come through experience. The second and third points present so many ramifications that it is impossible in the time allotted to discuss other than a few of the general principles involved.

During my early experience, I was fortunate in having the advice and help of that splendid physicist—Charles H. Viol, Ph.D.—and, also, in being able to command amounts of radium ranging from 10 to 1,000 milligrams.

We were finally able to predict, with reasonable assurance, how certain kinds of normal and abnormal tissue should react to various ray doses. We also became aware of the caustic properties of the rays, but we were never able to fathom just how the rays acted on certain tumor cells to bring about a disintegration of the tumor without an apparent destruction of tissue. This latter effect is now described as an autolytic degeneration, but as the mechanism of its production still remains unsolved, part of the subject matter herein discussed is based on empirical evidence.

Bactericidal Property of the Rays: After many tests, we concluded that while the beta rays had some slight effect, the bactericidal action is, for all practical purposes, nil. I have never doubted the correctness of this conclusion, consequently have never used radium with the object of destroying bacteria.

In small fungoid lesions of long standing, the beta rays did seem to have some value. I believe, however, that we must attribute most of this effect to some change produced in the soil, rather than a direct effect on the fungi.

Even when we used large amounts of radium it took so many hours to sterilize tubercular cultures, that efforts in the direction were discontinued. We did, however, try radiation in five advanced cases of pulmonary tuberculosis. These patients received radiation from 500 milligrams (radium was divided into small units and arranged over the chest wall at an equal distance from each other and at a skin distance of 3 cm.) for 72 hours. We noted no change in the clinical aspect or in the number or shape of the bacilli expectorated. As a result of this work, I have not, as a rule, used radium in tuberculous lesions of the skin or mucous membrane.

On the other hand, the clinical results in tubercular adenitis are very good,—that is, of course, when we exclude glands containing caseous material. Here, again, I believe the soil is influenced, and not the infection.

As the rays did not seem to have any effect on the spirochetes, efforts along this line were discontinued. In this connection it must not be forgotten that many mouth cancers, for instance, also give a four plus Wassermann test; therefore, all mouth ulcers of a syphilitic nature that do not show definite improvement under approved antisyphilitic treatment, must be further investigated.

Effect of Radium on General Metabolism: During the experimental work referred to, many observations were made as to the possible systemic effect of the rays. In addition to applying radium locally, we administered, intravenously, doses of the element ranging from 10 to 1,000 micrograms, and, by mouth, gave radon solution in doses up to 5,000,000 mache units.

Many promising clinical trails were followed, often to find at the end of the trail a "why" cloud we could not penetrate. There can be no question, however, that the blood picture is temporarily altered when radium is introduced directly into the blood stream, and, what is more important, the same effect may be produced when the blood stream merely passes through a part of the body being subjected to hard radiation. Later we were to learn that repeated exposure to enormous doses of the rays profoundly and permanently altered the blood picture. From this we learned that patients presenting idiopathis anemias, for instance, must be rayed with the utmost care and that radium operators must, at all times, guard against undo exposure.

That the body chemistry is permanently deranged by radium rays is improbable. The only thing we found in this direction, was a tempo-

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rary increase in the ethereal sulphur content of the urine. We could not see that radium would prove of value in cutaneous lesions that might be caused by some defect in metabolism.

Effect of the Rays on Abnormal Tissue: When reports are mustered, one finds several separate and distinct reactions listed by so many investigators that they should, I believe, be accepted as established facts.

Retardation of Growth: This effect is accomplished in certain new growths, because some of the tissue elements composing the growth are radio-sensitive. In this class of cases, the radiumtherapist, knowing that palliation is all that can be accomplished, will direct his efforts toward this end. If he does not recognize limitations and persists in radiation, considerable harm may be done.

Caustic Effect of the Rays: This effect is too well known to doubt. What many physicians do not seem to realize, however, is the fact that it is possible to deliver a caustic dose to diseased cells without actual destruction of the surrounding healthy tissue.

Cold surgery has no control over diseased cells that might be beyond the line of incision. Hot surgery, while somewhat better in this respect, is also limited in this direction. Other caustic agents have little, if any, effect beyond the point of application, but radium rays, while producing a caustic effect in a given area, will check cell division in a still larger area, and, even beyond this point, they may cause the cells to be encapsulated.

Autolytic Degeneration: As previously stated, this effect, noted in certain neoplastic diseases, has not been explained. Perhaps the rays induce some chemical change in the cell, or possibly there is some control exercised over the nerve supply; the fact remains, however, that we frequently see large lesions disappear with hardly a trace of their having existed.

Tissue Conversion: It is possible, with a well regulated dose, to change slightly the character of tissue, and by so doing, clear up a superimposed pathologic change. Such a procedure is to be recommended only in non-malignant lesions of small area and of long standing.

Radiation Limitations: A reasonable understanding of the ray resistance of normal tissue and the ray response of pathologic tissue, is necessary before one should attempt the extensive use of radium. While our knowledge of this subject is not, by any stretch of the imagination, complete, there is enough to keep one from attempting the impossible.

Using the susceptibility, or the non-susceptibility of the lesion as a basis for a radiation schedule, the following abbreviated list will illustrate the point I wish to make:

Benign Lesions

Keloids. If this condition is of recent development, it should be very sensitive to the rays, and may be controlled with a rather light but homogeneous dose. Cases of long standing should, first, have a trial ray dose and if there is no response in a reasonable time, additional radiation should not be given.

Flat surface Angiomas: Because the rays will produce an endarteritis in the superficial vessels, beta rays, when carefully applied, are of considerable value.

Planter Warts: These lesions are responsive, and if small in size, they are rayed. When large, I prefer to remove the wart and ray its site.

Pre-Cancerous Lesion

Elevated Pigmented Moles: A pigmented mole that is, or may become, subjected to more or less constant friction, should be removed. They are not, strictly speaking, radio-sensitive. The elevated portion will dry up and drop off with a rather light dose, but it requires a full caustic dose to remove pigment deposited in the skin. Because of the severe reaction that will follow this practice, radiation is not justifiable, especially when the entire lesion may easily be removed by fulguration.

If malignancy is suspected, the cells should be devitalized by a full caustic dose. Five or six days later, the radiated area should be removed by fulguration and the tissue carefully examined. If melanotic invasion is positive, a wide circle of tissue surrounding the seat of the mole should be rayed with deep radiation to the draining lymphatic areas.

When the clinical evidence of malignancy is beyond question, these lesions should be widely and fully rayed. I do not mean to imply that this procedure will control the situation. As a matter of fact nothing that I have ever used will control a case in which the blood stream is the carrier. On the other hand, it is just as liable to be a case wherein the extension is a lymphatic problem, and, here, considerable palliation can be had by rational radiation.

Leucoplakia: These lesions are not very radio-sensitive, and, as the base of the lesion must be brought under control, gamma rays are indicated. The dose should be hard enough to almost equal that intended for complete caustic destruction. For this reason, small patches should be removed by fulguration. Cases presenting the slightest malignant invasion are treated as squamous-cell epitheliomas.

Benign Tumors

Fibromas, Chondromas, Osteomas, Lipomas: Because their predominating tissue is not radio-sensitive, these connective tissue tumors are not rayed.

Myxomas, Angiomas, Lymphomas: This group

of connective tissue tumors are very sensitive and may be controlled with an autolytic dose.

Simple Benign Tumors of Epithelium, Muscle and Nerve Tissue: With a few exceptions, these tumors are not responsive and, unless they become vascular or cellular, they are not treated by radiation.

Endotheliomas: Unchanged solid tumors of this type are not rayed.

Tumors of Complex Tissue

Embryomas, Teratomas: Simple mixed tumors of complex tissue are, as a rule, very sensitive to the rays. They are treated with an autolytic dose.

Rational Treatment of Benign Tumors: The rational treatment of myxomas, angiomas, lymphomas, embryomas and teratomas would seem to be by radiation. All other simple benign tumors should be removed but, when on section they are found to contain small round or spindle-cells, the site of the tumor should, I believe, be rayed. When giant-cells are found, radiation is not necessary.

Basal-Cell Epitheliomas: When these embryonic lesions invade the skin, they can usually be cured by any method that will destroy the entire growth. They are very sensitive to the rays, and, because radium will destroy these growths with the least amount of destruction to the surrounding tissue, it is the agent of choice. If the periosteum or cartilage is involved, one should consider fulguration after the radiation.

General Consideration of Carcinoma: When glandular tissue in atypical arrangement is encountered, no matter what line of treatment is followed, one's judgment is, at present, apt to be questioned. Personally I feel that "up-to-date" radiation has a distinct place in the treatment of all such cases. Having had three years' experience with a two-gram radium element pack,** I am more determined than ever on this point and do not hesitate to recommend radiation before and after operation, even when operation seems to be clearly indicated. I am also of the opinion that adequate radiation of the draining lymphatics is of distinct value.

The question of what cases to ray and what cases to operate, can only be decided after careful consideration of the individual case. Likewise the radiation technic is an individual proposition. In general, lesions growing rapidly, having young blood-vessels and containing many cells, should be rayed.

** The radium pack mentioned consists of twenty-one hundred milligram radium element tubes. These tubes are arranged in a circular disk the diameter of which is 8 cm. The silver tubes are permanently locked in position. Surrounding the radium (three surfaces) there is a lead shield 14.8 cm. On the treatment surface the shield is 6 cm. The center of this surface is drilled (diameter 9 cm.) to give free passage to the gamma rays. With this instrument we frequently give from 14,000 to 50,000 mgm. hrs. through a skin area. The distance is from 6 to 15 cm. To the pelvic and abdominal regions the total radiation (three, four or five skin areas) may run up to 200,000 mgm. hrs.

Epidermoid Carcinoma: After raying a number of lesions of this character, I noticed that cases, apparently presenting the same clinical picture and what was thought to be the same cell arrangement, did not respond in like manner, to the same ray dose. All cases were given a caustic dose but to what extent this effect should be carried was, and still is, a difficult question.

Broder's work would seem to explain many of our difficulties in this direction and, also, explain the wide variation in reported results.

Using Broder's classification of cell types as a treatment guide: In types one and two, good surgery or thorough radiation, used early enough, should give good results. Cases falling under types one and two must be thoroughly rayed with a full caustic dose. In many of these cases the patient should have a voice in the matter.

In types three and four, radiation has a distinct advantage even in early cases, for it is the most malignant types that are the most responsive to the rays.

The Doubtful Tumor: Frequently tumors cannot be diagnosed, and, if not advisable to perform a biopsy, a trial ray dose is suggested. If the tumor responds, one is justified in giving additional radiation as being, perhaps, the best form of treatment to use. If there is no response, it is folly to push radiation. If the tumor cannot be removed, some palliation is had by such a procedure. If, on the other hand, the tumor can be removed, radiation has helped rather than hindered the operator;—that is, of course, if the dose has been rational and the operation not too long delayed.

Where to Use Primary Beta Rays: Being rapidly absorbed by soft tissue (1.0 mm. absorbs 50%; 2.0 mm., 75%, etc., etc.) primary beta rays have very little therapeutic value in lesions where the base is more than five millimeters from the point-source of radiation. By partial screening (using metallic screens of varying thicknesses to absorb a portion of the soft beta rays) and by increasing the time of application, this area may be somewhat increased.

It must be remembered, in this connection, that the ratio of soft rays to the total beta ray output, is an unknown factor; that the soft beta output differs widely in applicators of the same strength; that skin reactions are fluctuating, and, by any devise, that it is impossible to force the beta rays beyond a certain point.

It is obvious that a universal beta ray technic is unsound. In my opinion their use should be restricted to the treatment of very superficial non-malignant skin lesions, and sound judgment in their use cannot be exercised unless the operator knows the miximum time it takes his particular applicator to produce a reaction, with the full beta ray output, that is well within an excoriating erythema.

When to Use Gamma Rays: Although it has not been demonstrated, microscopically, I have always felt that the gamma rays spontaneously produced by radium had a different effect on tissue from that produced by the gamma rays from *x*-ray. Watching the reactions produced by a two-gram radium element pack, has served to increase this impression, but, be this as it may, *when a radio-sensitive lesion requires a concentrated and penetrating ray dose, or, when a caustic effect must be secured, use radium.*

Conclusion

In reviewing the literature and in verbal discussions, one is confronted with many conflicting statements regarding the therapeutic value of radium. This is, to say the least, confusing, especially for one seeking specific information, and, under the circumstances, much of the adverse criticism is justifiable.

Most physicians think of radium as being a single agent, when, as a matter of fact, it is only a means of generating rays,—rays that are capable of being manipulated in such manner *that it makes radium, not one, but at least four,* separate and distinct agents. It is only when one considers the subject from this standpoint that the true value of radium may be appraised, and, finally, while the art of ray manipulation consists in a knowledge of their physical properties, the true art, in radium work, consists in a knowledge of pathologic conditions and their ray response.

DIAGNOSIS OF BILIARY TRACT DISEASES IN THE EARLY STAGES*

By JOHN A. LICHTY, M.D., F.A.C.P., and SARAH BOWEN, M. D., CLIFTON SPRINGS, N. Y.

THREE years ago at the meeting of this Society at Niagara Falls, a paper was presented by Dr. Chas. W. Webb and myself, (J. A. L.), entitled "The Cooperation Between the Internist and the Surgeon in Handling Biliary Tract Diseases." That paper dealt almost entirely with the surgical aspects of the diseases occurring in the biliary tract. It was recognized that there is a time when biliary tract diseases become definitely surgical, and it was agreed that at such a time it is highly desirable that the surgeon and the internist cooperate in so far as the course to be pursued is concerned. Such cooperation should cover the possible operative risk, as well as the pre-operative and post-operative care. The paper did not especially cover the early manifestations of the various diseases of the biliary tract, neither was it suggested that a certain early medical treatment might be indicated and carried out to the advantage of the patient. It was conceded, however, that —"Certain disturbances of the gall bladder and ducts may be of such a nature that the mechanical interference which surgery implies, may not be necessary." This position was taken with the full knowledge that there are those clinicians who contend that biliary tract disease is always surgical, or will sooner or later become so.

It is the purpose of this paper to present an analysis of the same group of patients from which the data of the former paper were obtained, with the idea of determining whether an earlier diagnosis, at least tentative, might be made which would lead to a persistent rational medical and dietetic treatment. This investigation is thought desirable, because of the fact that there is still a considerable surgical mortality, and also because there is an impression, especially on the part of certain surgeons, that there is a certain inexcusable delay on the part of the internist in recognizing the early symptoms of biliary tract disease, and in instituting desirable treatment and care. The patients are encouraged to delay until surgery is done at a considerable risk.

The classification, or grouping of biliary tract diseases in this study is not based so much upon the pathology likely to occur in the right upper quadrant, as it is upon certain signs and symptoms significant of biliary tract dysfunction.

This distinction is made because the early symptoms and signs of certain biliary tract diseases may be quite meager and apparently insignificant, and yet common to a number of possible conditions.

In reviewing the diagnoses made during the past ten years in the Clinic of the Clifton Springs Sanitarium, the following grouping of cases occurred:

TABLE 1

BILIARY TRACT PATIENTS—1920-1929, INCLUSIVE.

1. Diagnoses verified by operation or autopsy		218
1. Chronic Cholecystitis	117	
2. Gall Stones	59	
3. Pericystic Adhesions	28	
4. Carcinoma	11	
5. Empyema	3	
2. Diagnoses not verified		375
1. Acute Cholecystitis		
2. Chronic cholecystitis with acute exacerbations		
3. Chronic cholecystitis		
Total		593

* Read at the Annual Meeting of the Medical Society of the State of New York, at Rochester, N. Y., June 3, 1930.

It will be seen that 593 patients have been included in this study. It will also be seen that in 218, the diagnosis was verified by operation or autopsy. These no longer concern us in this discussion excepting in the lessons they teach.

It is the 375 patients in whom the diagnosis has not been absolutely verified that demand our attention. In many of these a more definite tentative diagnosis has been made, such as, catarrhal jaundice, angiocholitis, certain specific infections, cholelithiasis and certain other conditions obstructing the biliary tract, but in many more, a wholesome diagnostic reservation was necessarily maintained.

It seems to be generally accepted that repeated attacks of catarrhal jaundice are the result of a mild cholecystitis; that an acute cholecystitis may by recurrences develop into a chronic cholecystitis; and from this may develop gall stones, pancreatic disease, and later, malignancy. If such a sequence is possible, it would seem reasonable, the earlier it is recognized the more likely it could be interrupted by such therapeutic measures as are indicated. It is perhaps unfortunate that the narration of certain supposedly early symptoms, such as "fair, fat, forty, with excessive flatus" is almost invariably the occasion for levity among physicians, or for anything but serious thought, whereas these may be the very first signs of beginning biliary tract disease.

TABLE 2

1. *History:*		
1. Age (average)		52¼
2. Sex—Male 153—Female 440		593
3. Pregnancies		200
4. Previous Infections—(Typhoid, etc.)		62
5. Metabolic Disturbances		
(a) Obesity		
Ht. and wt. recorded		433
(a) Normal	133	
(b) Underwt.	161	
(c) Overwt.	139	
(b) Glycosuria		41
—2. *Symptoms:*		
1. Flatulency		238
2. Constipation		246
3. Jaundice		150
4. Localized Pain		293

In the analysis of our cases we were not impressed so much with the complexion—that is, the distinctive blonde—as we were by the tendency to obesity. The well-nourished, obese type, with gormandizing tendencies, is likely to reveal symptoms of biliary tract disturbance. The same individual not infrequently shows disturbance of carbohydrate metabolism as evidenced by an occasional glycosuria.

Flatulency was an outstanding symptom in 238 of our cases. When complained of, it should receive more than ordinary consideration. In the analysis of this symptom it should be determined whether the gas is due to digesive disturbances, or only to the swallowing of air. Swallowed air contains a large proportion of nitrogen which is not absorbed in the stomach as oxygen is, and therefore may produce greater discomfort than gas due to fermentative action.

Biliary tract disease in its early stages seems to be associated with a hyperchlorhydria, and in the later, or chronic stages, with a hypo-, or achlorhydria. Either or both of these conditions may be responsible for the persistent flatulency experienced by some of these patients.

Careful investigation of gastric secretion may reveal the earliest evidence of digestive disturbance, and may also help in establishing a rational treatment.

Constipation was noted in 246 of the cases. While it is not so distressing a symptom as flatulency, it causes considerable concern to the patient. It usually receives scant consideration from the doctor. Between the two a great deal of harm may be done by the unfortunate selection of cathartics. Continued neglect thus may aggravate a condition which, with proper care, might have been easily overcome.

Jaundice was reported, or seen 150 times, and bile was noted in the urine 37 times. There was an increased icteric index found in the blood a number of times. Frequently these disturbances were of only a slight degree, yet they pointed definitely to the fact that something had happened in the biliary mechanism which required interpretation.

Localized pain and tenderness were of the greatest concern to the patient. It was noted in 293 patients. The peculiar radiation of the pain followed the classic lines in some cases, that is, along the right costal margin and to the right scapulae. In other cases, however, the radiations were quite bizarre, such as to the precordia, to the neck and shoulders, and occasonally down the arms. It was very helpful to keep close watch of the temperature, blood and urine during the occurrence of the attack. It is our firm impression that if these four, rather minor symptoms, flatulency, constipation, jaundice and pain in the right upper quadrant, with increased temperature and a leucocytosis, even of the slightest degree, were considered more carefully, and if a line of symptomatic treatments were instituted, even

though the diagnosis is still in doubt, many of the serious complications in biliary tract disease might be avoided.

TABLE 3

Laboratory Aids:		
1. Bile in urine		37
2. Blood Serum (Icteric Index)		
(a) (4- 10 units)	32	74
(b) (11-200 ")	42	
3. Leucocyte Disturbances:		215
(a) Leucocytosis	162	
(b) Leucopenia	53	
4. Gastric Secretion Studies:		287
(a) Normal	115	
(b) Hyperchlorhydria (early)	119	
(c) Hypo-& achlorhydria (late)	53	
5. Duodenal Aspiration ("Lyons Test")		120
(a) Normal	51	
(b) Path.	69	
6. Roentgenological Examinations:		566
(a) Gastro-intestinal Series	307	
(b) Cholecystographic	259	

While such a tentative treatment is followed out, certain well-established laboratory procedures should be systematically followed which might lead to a more definite diagnosis. To some of these reference has already been made. These are, the examination of the urine, not only for bile, but also for sugar; the study of the blood, not only for leucocyte reactions, but also for pigment in the serum and for change of sugar content.

Duodenal Aspiration, or drainage, according to Lyons' method, was done, but not routinely. At times it gave definite diagnostic confirmation and again the results were disappointing. It is probably more helpful as a therapeutic measure than as a diagnostic one. It is scarcely necessary to call attention to the fact that laboratory tests in these studies, to be of any value, must be repeated many times.

The advantage of careful *x*-ray examination in suspected biliary tract disease depends largely upon the care taken in interpreting the films. A complete gastro-intestinal series may at once give positive evidence of pathology in or about the biliary tract. On the other hand, the findings may be only indirect, such as an abnormal fixation of the duodenum, or the hepatic flexure, or a gastro duodenal hyperperistalsis. Cholecystography in recent years introduced by Graham of St. Louis, is destined to become of great diagnostic value. At present its originator is hopeful that it may also prove of surgical prognostic value, in that it may reveal the functional disturbances of the liver and determine the degree of surgical risk, and surgical safety.

Gastro-intestinal studies were done in 307 patients of our series and cholecystography examinations 259 times. These latter were done only in the past five or six year. With our present experience we conclude that *x*-ray examinations in the study of biliary tract lesions give positive information only in the later stages of the disease. Its greatest value is probably in determining whether a given case has become surgical, and it appears, therefore, from our present experience, of little value in establishing an early positive diagnosis. It is helpful in differentiating from other more advanced lesions or conditions.

The application of the plan suggested in this study is easily illustrated by the following case report:

Mrs. M. G., age 53, housewife, entered the Clinic, June 9, 1929, complaining of obstinate constipation, of sudden, and unexpected attacks of dizziness, nervousness and weakness, These symptoms began in about the order named, five years ago, and seemed to be gradually getting worse. Associated with these symptoms were gas in the abdomen, manifested by distension and a peculiar churning sensation which came sometimes immediately after meals and at other times two hours or so after the meals. There was occasional pain in the upper abdomen but never to the degree of requiring hypodermics of morphine. The patient had a peculiarly keen appetite, described sometimes as a craving, gnawing sensation in the upper abdomen. She also had frequent headaches and seemed to have developed a state of chronic invalidism. There was no history of urinary disturbance. She had never been pregnant. No history of any acute infectious diseases. Twelve years ago had "low back pain" for which a laparotomy was done for a so-called prolapse of the uterus. From this she made a good recovery but the back pain remained the same.

At the time of admission patient was about 20 pounds below her usual weight and had a sallow complexion. Pulse rate was 64, regular, and blood pressure 112/60. No evidence of cardiac disease. The lungs were normal. There was no tenderness in the abdomen; no organs or masses palpable. Pelvic examination was negative. Laboratory examinations were as follows: Urine 1016, acid, no albumin, sugar, bile or casts.

Blood—Haemoglobin	65%	
R.B.C.	3,250,000	
W.B.C.	5,400	
Neutrophiles		42%
Large Lymphocytes		17%
Small Lymphocytes		35%
Eosinophiles		4%
Myelocytes		2%

slight poikilocytosis, a few macrocytes and microcytes.
Complement fixation for lues—negative.

Blood chemistry:

Icteric Index	16,
Vanden Bergh	(direct) Questionable at 30 mins.
Fouchet	Questionable
Sugar content	0.097

Gastric Analysis—fractional

Residue	19—35
30 mins.	24—38
45 mins.	28—54
60 mins.	48—78
1 hr 15 mins.	61—94
1 hr. 45 mins.	56—78
2 hrs. 15 mins.	42—58

Duodenal aspiration showed the so-called "A, B. & C." bile with mucus. It seemed to afford relief of symptoms.
Phthalein test 50% in two hours.
Gastro-intestinal series gave evidence of adhesions in the right lower quadrant and also of spasticity especially in the descending colon. Stomach was normal.
Barium Enema: The colon appeared to be freely movable. There were no areas of obstruction. Ileo caecal valve was incompetent. There was no pain during the examination.
Cholecystography: No evidence of gall stones. The shadow of the gall bladder appeared normal in size, shape and position in 15 hours. In 20 hours the shadow was about gone, suggesting a normally functioning gall bladder.
X-ray of the chest revealed the markings of an old healed lesion opposite the left hilum.
The test of the ears showed normally reacting auditory and vestibular function in both ears.

It was concluded after these examinations that there was present a spastic condition of the colon, a hyperchlorhydria, probably of long standing, and a certain biliary tract disturbance as evidenced by the changes in the blood serum, suggested by the increased icteric index.

A course of treatment suitable for such a condition was established and at the end of three months the patient felt much better, had gained 20 pounds in weight, and had more natural bowel movements.

The patient was advised to follow her regime as closely as possible at home.

Follow-up letters have shown that she continued to improve, and in her last letter of a month ago she states—"I am much better in every way."

It is not the purpose of this paper to discuss the treatment of such conditions as herein considered. The case reported is illustrative of the studies which may be made and results possible in a certain proportion of patients presenting the conditions described. The inference is that the earlier these conditions are recognized, the more likely the results will be satisfactory. Also the conclusion follows, in conjunction with Dr. Webb's paper, to which reference has been made, that the sooner the failure of medical treatment is demonstrated and the safety of operative treatment is established (other things being equal), the lower the surgical mortality will be.

Discussion by Dr. E. C. Reifenstein.—Internists will agree with Dr. Lichty that the problem of the diagnosis of Biliary Tract disease in its early stages is important and that an attempt should be made to establish the diagnosis, or at least make such a diagnosis tentatively. I agree with him as to the relative significance of these symptoms and signs and simply wish to emphasize the importance of the apparent mildness of the complaints. In fact these symptoms and signs are often so mild as to be entirely ignored. Often the laboratory evidence is disappointing. The most significant laboratory findings are: The transitory glycosuria and the occasional presence of bile and urobilin in the urine. The evidence from the Roentgen Ray frequently fails to give additional helpful information; however, there are times when the indirect signs, as has been mentioned, will be of considerable value, particularly the presence of a spastic colon. Whenever a spastic colon is reported by the Roentgen Ray examination it is important to consider dysfunction of the gall bladder as one of the possible associated conditions.

While pathology was not discussed it is important to direct attention to the fact that circulatory disease with stasis of the liver may be associated with the same symptomatology as Biliary Tract disease. It is clinical experience that Coronary artery disease associated with myocardial failure frequently presents symptoms and signs referable to the upper abdomen.

I agree with Dr. Lichty that if careful attention is given to diagnosis and treatment of Biliary Tract disease in the early stages, much may be accomplished by treatment and possibly serious damage to the liver and gall bladder prevented.

STERILITY SECONDARY TO INDUCED ABORTION WITH SPECIAL REFERENCE TO THE TUBAL FACTOR*

By I. C. RUBIN, M.D., F.A.C.S., NEW YORK, N. Y.

THE frequency of abortions has been the subject of discussion for a long time. Taussig[1] in 1910 estimated the incidence of abortions to be 25% of all pregnancies. Royston[2] in 1917 estimated it at 23.8% and De Lee[3] states that almost half of all child-bearing women have had an abortion before the thirty-fifth year. The majority of the abortions have been induced, according to some authors.

Opinions differ as to the pernicious effect of artificial abortions upon later pregnancies and labors. According to Jacob[4] 50:60% of all gynecological patients date the onset of their illness from an abortion. Klein[5] on the basis of 1,531 cases concludes that many pathologic pelvic lesions are referable to previously induced artificial abortions. Vogel[6] and Atzerodt[7] independently claim no such deleterious results. This difference in conclusions is perhaps due to the inequality of their control cases. For example Atzerodt compares 184 labors following abortion with a series of 3,964 labors without an antecedent abortion. Study of an equal number of labors subsequent to artificial abortion might show a greater percentage of complications.

The comparison made by Klein[5] in this respect is fairer because he compares 593 patients who had had induced abortions to 938 who had not been artificially aborted. Klein's conclusions are confirmed by De Lee,[3] Serdukoff,[8] Broninkowa,[9] and others.

The present study of sterility secondary to induced abortion comprises 219 cases. There are, however, in the same series from which these have been taken, 239 cases of spontaneous abortions preceding the relative sterility and 225 cases of one or two children sterility with which they may be compared. These groups are close enough in number to bear comparison.

In spite of the prevalence of voluntary sterility secured by contraception and artificial abortions it is not uncommon to be consulted by patients for relief from an acquired sterility. Of a personal series of 2,557 cases of sterility 9.3% gave a history of spontaneous miscarriages and 8.6% of one or more induced abortions.

It is not always possible to ascertain the exact number of cases in which an abortion has been induced and by what method, except in a class of patients who feel that it is probably best to tell the truth about the abortion in order to improve their chances for successful conception and pregnancy to term. Estimates of artificial abortion as a cause of sterility vary considerably. Royston[2] has felt that 60% of all induced abortions result in more or less permanent sterility. This may have been true for one particular series and will not hold for another. In this connection the Russian publications on the subject have special value.

The general impression of the deleterious results of an operation which has been notoriously fraught with dangers and complications has gradually become replaced by definite statements based upon fairly large series of cases as those to be quoted. Since studies in sterility have been taking more precise account of definite factors which make for permanent sterility, the earlier figures will naturally undergo further revision. The present study deals more especially with one factor, namely the condition of the fallopian tubes which is now amenable to precise diagnostic determination. By a comparative study of etiological factors it may be possible in this one respect at least to establish the site of the lesion.

The last decade has seen the astounding inauguration of legalized abortion in Soviet Russia. There is thus afforded an opportunity of seeing the effect upon women who have had one or more artificial abortions where the clandestine element plays no role in contributing towards pernicious effects. A well balanced report is available by Serdukoff.[8]

Serdukoff[8] discusses the effects of artificial abortion upon the female organism from various points of view based upon observations of seven years during which time artificial abortion for social reasons was legalized in Russia. The number of abortions in Moscow for example increased from 7,969 in 1922 to 31,986 in 1926. The births had increased in the same period from 35,320 to 57,537. Comparison of the labors and puerperia in 1,723 cases without abortion and 661 cases with two, three and four abortions in Serdukoff's[8] report showed the following:

1. Febrile puerperium was 3 times more frequent in patients who had had previous abortions than in those who had no such interference.
2. Duration of labor was 3 times as long.
3. Low placental implantations 3½ times as frequent.
4. Placental tears and pathological changes 2½ times as frequent.
5. Subinvolution 4 times as frequent.
6. Inflammatory sequelae more frequent. A considerable percentage of chronic gynecological affections owe their etiology to artificial abortion.
7. The foetus was more often dead and macerated.

Serdukoff[8] is convinced that the premature destruction of the corpus luteum and placenta entailed by the artificial abortion causes a deprivation of endocrine function which manifests itself frequently in uterine atrophy and shrinkage to

* Read at the Annual Meeting of the Medical Society of the State of New York, at Rochester, N. Y., June 3, 1930.

infantile proportions. In the cases of atrophic uteri following abortion tubal insufflation showed the tubes to be open. The trauma of artificial abortion manifested itself in permanent sterility following artificial abortion in young women during the early periods of gestation. In a large number the menstrual function was altered resulting in oligomenorrhoea and amenorrhoea. Serdukoff[8] speaks of determining the permeability of the tubes in the cases of secondary sterility due to artificial abortions as part of the diagnosis and treatment but does not give his results.

Incomplete abortions in Russia are becoming less and less frequent according to Serdukoff.[8] The effect of artificial abortion in young women of 17 to 18 years is especially noteworthy. He blames the abortion even where no inflammation has set in for "provoking an irremediable sterility."

From another Russian clinic Kallinekoff[10] reports 1,000 abortions performed in two years; in only 5% a medical indication for the termination of pregnancy was present. These 1,000 women had from 1 to 11 artificial abortions and the author believes that a properly performed abortion produces no subsequent disturbances. He adds however that some women have spontaneous miscarriages after a series of artificial abortions.

The incidence of fever is appreciable even where the operation of artificial abortion is done under favorable auspices. Thus Levit[11] reports that among 780 women who entered the hospital for legalized abortion and were without fever and were curetted, 13% had a single elevation of temperature; 6% had such an elevation twice; 5% three times and 20% four times. He states that these mild infections after curettement are frequently the cause of serious sequelae, such as extra-uterine pregnancy and sterility. Levit[11] states that in a series of 2,930 artificial abortions performed from 1913 to 1926, the curettement was followed by chronic affections of the genitalia in about 20%.

In any statistical investigation bearing on the question of abortions it will probably always be difficult to determine how many of the supposed spontaneous miscarriages were actually miscarriages. That applies equally to the so-called induced abortions because an interference may have taken place in the presence of a functional amenorrhoea, no gravidity actually being present. The performance of a curettage in such cases appears to have some etiological bearing on the subsequent inability to conceive. If the material escaping from the female genital tract after a delayed period and the curetted material could always be subjected to laboratory examination as advocated by Huntington[12] our statistics would obviously be of far greater value.

In this present study, women who have had several children and also artificial abortions are not included. I have also excluded those women who have never chosen to become mothers repeating the "abortion" as often as they believe themselves pregnant.

It will not be possible in the brief time allotted for this paper to go into a comparative analysis between these groups in all details. The study is therefore limited chiefly to the tubal factor. It is particularly chosen as being the more readily determined and with a degree of accuracy not shared by other lesions of the genitalia.

Gynecological lesions recorded in the 219 cases with a history of induced abortions as ascertained by palpation were:*

1. Diseased adnexa in 97 cases.
2. Fibroids in 9 cases.
3. Retroversion in 40 cases.
4. Endocervicitis in 88 cases.

The diagnosis of "diseased adnexa" was applied to those instances in which the adnexa were found to be enlarged (thickened), or tender or both, whether on one or both sides. The lesions listed above were as a rule combined, especially 1 and 4. The cases of endocervicitis were treated for varying lengths of time till the discharge cleared up. In no instance was insufflation of the uterus done till all signs of tenderness had disappeared.

The retroversion group enter here only in so far as the uterus may have been bent backward by adhesions which resulted as a sequel of the artificial abortion through pelvic peritonitis and perimetritis. It often forms a special etiological factor and shall not be further entered into here. The retroversions were naturally divided into those which did or did not yield to efforts at reposition. The cases with fibroids were possibly erroneously diagnosticated as such in two or more instances because adherent tubes which are closely attached to the uterine walls may simulate fibroid nodules. On the other hand the fibroids could have existed apart from chronically diseased tubes and ovaries, the latter being palpated separately.

Of the 219 cases of induced abortions:

155 patients stated they had had one induced abortion.
31 patients stated they had had two induced abortions.
16 patients stated they had had three induced abortions.
17 patients stated they had had four or more induced abortions.

In the group with one induced abortion economic and social conditions becoming more favorable, the patients later found to their chagrin that they were unable to conceive. The groups

* A comparison between the gross lesions recorded in the cases of secondary sterilities following spontaneous abortion and of the cases of one child sterility would be interesting but has not been undertaken in this present study.

with more than one induced abortion may be said to have included cases where an interference was suffered in the presence of some functional amenorrhoea not due to pregnancy. Some of these patients did not wait longer than a week beyond their regular menstrual period before undergoing an artificial abortion.

It was possible to ascertain the method employed in the induction of abortion in 178 cases, in 41 cases the patient did not remember or could not give definite information.

In 155 cases with the history of one abortion
Curettage was the method employed in 104 cases
Medication was the method employed in 6 cases
Catheter was the method employed in 5 cases
Not stated—40 cases.

In the 31 cases with the history of 2 abortions
Curettage was the method employed in 24 cases
Medication was the method employed in 4 cases
Catheter was the method employed in 2 cases.
Not stated—1 case.

In the 16 cases with the history of 3 abortions
Curettage was the method employed in 12 cases
Medication was the method employed in 2 cases
Catheter was the method employed in 2 cases

In the 17 cases with 4 or more abortions
Curettage was the method employed in 12 cases
Medication was the method employed in 3 cases
Catheter was the method employed in 2 cases

Summary of the 219 cases:
Curettage was the method employed in 152 cases
Medication was the method employed in 15 cases
Catheter was the method employed in 11 cases
Not stated—41 cases.

In 19 cases a definite history of fever and an enforced stay in bed for a week or several weeks was recorded.

In 6 cases the stay in bed with fever was 1 week's duration.
In 6 cases the stay in bed with fever was 2 weeks' duration.
In 2 cases the stay in bed with fever was 3 weeks' duration.
In 1 case the stay in bed with fever was 4 weeks' duration.
In 1 case the stay in bed with fever was 8 weeks' duration.
In 2 cases the stay in bed with fever was 12 weeks' duration.
In 1 case the stay in bed with fever was 6 months' duration.

The abortion was found to have been performed after marriage in 181 cases. In 20 cases no statement was recorded. Eighteen patients admitted having had interference before marriage and in 10 of the latter the abortion anteceded marriage, from 2 to 12 years:

4 cases 2 years before marriage.
3 cases 3 years before marriage.
2 cases 10 years before marriage.
1 case 12 years before marriage.

Inasmuch as we are here concerned with the tubal factor in the sterility following artificial induction of abortion (not done for therapeutic purposes) it is well first to have an idea of the incidence of tubal closure or stricture in the general statistics of sterile patients in whom the matter of tubal patency has been determined by uterotubal insufflation. Thus of 2,338 cases of sterility *not including cases with an induced abortion*, the tubes were tested for patency in 1,746 cases and not tested in 592 because of various contraindications.

The percentage of closed tubes in the primary group of sterilities was 40%. In a series of 650 cases studied with the aid of the kymograph[18] approximately 30% had shown non-patent tubes. Of 239 cases with a history of one child sterility, including a few who had borne two children the tubes were examined in 195 cases and not tested for patency in 30 cases. They were found open 150 times and closed 45 times, giving a percentage of closed tubes of approximately 23%. 201 cases with a history of one miscarriage were tested for tubal patency out of a total of 239 cases. The tubes were found to be open 164 times and closed 37 times, or a percentage of closed tubes of 18.5%.

Analyzing the 219 cases of artificially induced abortions there were 165 cases in which the tubes were tested for patency. Of these 165 cases the tubes were found open 65 times, closed 92 times and strictured 8 times; in other words the incidence of closed tubes in proportion to open tubes was 1.4 times greater. If we add the 8 strictured tubes the percentage may justly be estimated as higher.

Of 19 cases with a history of fever 10 cases proved to have closed tubes and 5 open tubes.

The open tube cases were given a single uterotubal insufflation. The cases in which the tubes were found to be obstructed at the first insufflation were examined again at least once or twice more, except in instances where the tubes had been tested by others and were found to be nonpatent. Fifty-eight of the 92 patients who had obstructed fallopian tubes were personally examined for patency two or more times.

Repeated Artificial Abortion in Relation to Closed and Open Tubes.—In general, repeated abortions tended to increase the probability of finding closed tubes. Thus of 138 cases in which one abortion was performed 55 showed open tubes and 63 closed tubes. On the other hand of 23 cases with a history of 2 abortions 8 showed open tubes and 15 had closed tubes. However in 2 parallel groups of 12 patients with a history of 3 and 4 or more abortions respectively the one

with 3 abortions showed 4 open tubes and 8 closed tubes while the other with 4 or more abortions showed 6 open and 6 closed tubes. To these bare figures must naturally be added other factors such as fever, method employed, etc., which must affect tubal function. The fact must not be omitted that some patients may be fortunate enough to escape infection in spite of the most unfavorable circumstances.

The Relation Between the Method Employed in the Abortion and the Finding of Closed or Open Tubes.—In my series of 103 cases in which curettage was stated as the method employed in the artificial abortion, 46 were found to have open tubes and 57 were found to have closed tubes. Of 10 cases in which some form of medication was used, the tubes were found open 3 times and closed 7 times. Of 11 cases where the catheter was used 4 were found with open tubes and 7 with closed tubes. In 41 cases the method of inducing the abortion was not recorded; of these 20 showed open tubes and 21 closed tubes.

It is obviously difficult to imagine how medication taken orally would cause blockade of the tubes except by its toxic effect upon the ovum and by inciting violent uterine contractions. These may be responsible for retrograde transportation of blood and mucous particles from uterus to tubes.

The anatomical site of tubal closure is of great interest from the point of view of possible therapy and prognosis. A comparison in the special incidence of this fact between the group of spontaneous abortions and artificial abortions including different methods employed in performing the abortion would be of great scientific interest. My records appear to suggest that the uterine end and the isthmus bear the brunt of the infection in those patients who were artificially aborted. This is in marked contrast to the site of the tubal closure, namely at the fimbria, following Neisserian infection.

It is realized that these findings may be modified somewhat by a larger number of cases. The matter of coincidence must apply particularly to the smaller groups herein presented. But the study so far points to the overwhelmingly greater preponderance of permanent sterility due to tubal occlusion following artificial abortion. The reasons for this are not far to seek. 1. Poor or imperfect surgical asepsis. 2. Lack of skill in performing the abortion in many cases. 3. The failure to stay in bed for a proper period and the ambulatory fashion in which the patient is expedited from office to house or business. Finally, 4, the element of concealment. All these conspire to induce pathological changes in the female genitalia.

The fallopian tubes are extremely susceptible of irreparable damage. The latter is favored by the frequency of retained products of conception which results from incomplete operations, the production of true post-abortive endometritis; direct ascending infection of the tubal mucosa; the sealing over of the tubes by peritubal adhesions resulting from lymphatic extension of the infection of the serosa of the pelvic organs.

The comparatively small incidence of closed tubes (the smallest incidence of all the groups) obtaining in the cases of secondary sterility with spontaneous miscarriage points to the importance of not resorting to curettage unless the exigency of excessive bleeding demands it. The present study strengthens the position of those who advocate non-interference in spontaneous miscarriages, certainly from the viewpoint of the future fertility of the patient.

Of the 219 cases of artificial abortion 18 became pregnant following utero-tubal insufflation. (These 18 patients gave a history of 26 induced abortions before coming for treatment.) Of the 239 cases of spontaneous abortions, 31 became pregnant following utero-tubal insufflation. (These 31 patients gave a history of 38 spontaneous miscarriages.) Insufflation was the only treatment given these patients. A therapeutic effect can best be considered in the cases with strictured tubes. Thus of 205 pregnancies following utero-tubal insufflation 42 yielded to repeated perflation of the tubes where strictures of varying degrees had existed.[14]

Operative intervention holds out some hope in a certain percentage of cases with sealed tubes. Kerwin's recent report[15] is encouraging. There is no doubt that with more painstaking efforts, with advances in our knowledge of tubal function and pathology, and improved operative technic some of the groups of otherwise hopelessly sterile women who are rendered sterile by sealed tubes may be restored to fertility. The operation of salpingolysis, of tubal implantation and of ovaro-uterine implantation will be resorted to more frequently in the future. Adjuvant measures such as rest, hydrotherapy, protein therapy, diathermy are agents which can be useful in the cases of less prolonged duration with evidences of recent inflammation. Utero-tubal insufflation has been demonstrated to exert a therapeutic effect on the cases with incomplete strictures of the tubes. The occasional pregnancy which appears to follow the injection of lipiodol suggests its therapeutic use as well as diagnostic value. These are measures that will have to be depended upon so long as no specific methods are yet available to cause the permanent disappearance of peritubal adhesions and of intratubal agglutinations.

Conclusions

Sterility which is anteceded by an artificial abortion is due to tubal occlusion 3½ times as often as in cases of primary sterility; 6.1 times as often as in one child sterility and 7.7 times as often as in cases preceded by spontaneous mis-

carriages Eighteen out of 219 patients who had had one or more induced abortions became pregnant after utero-tubal insufflation as against 31 out of 239 patients who had had spontaneous miscarriages The fallopian tubes appear particularly prone to damage by the operation of artificial abortion; the uterine end and the isthmus are frequently sealed Tubal sterility following artificial abortion is of such great frequency that it appears to be next in importance only to gonorrhoea Apart from the well-known immediate dangers of an induced abortion, patients may well be warned against this operation because of the danger of permanent sterility

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MEMORIAL TO DR CHARLES G STOCKTON

BY WILLIAM H ROSS, M D, BRENTWOOD, N Y

An address by the President of the Medical Society of the State of New York at the memorial service held under the auspices of the University of Buffalo on Sunday, January 25 1931 in honor of Dr Charles G Stockton President of the Medical Society of the State of New York 1909 1910 who died January 5 1931 aged 77 years

We have met here not alone to review Dr Stockton's career or to honor his life and his work, because that is already secure, but also to express to each other his influence on medicine and on the public medical service obligation of the profession We do this for the good that it will do to us His obvious accomplishments are so evident that they could be discussed as well by strangers as by those who knew him, but there are intangible influences in his life, not so easily seen by strangers and not easily put into words, that will run on and on in continued effect They are greater than anyone can tell because they are not measurable by words

Dr Stockton belonged to that class of medical men in whose lives there was more than medicine There is more than medicine in every doctor's life A doctor may awaken in an individual finer feelings than anyone else can Every great character in medicine, independently of whether he has exerted his influence in a wide field or in narrower lines, has exerted an influence beyond his own knowledge He has given an inspiration to those with whom he came in contact

If we can only realize that the profession of medicine is a social function, that it has done more for world betterment than any other profession, that it has influenced all civilization, we should begin to understand that there is something that we do not know, an intangible influence that we cannot measure because we cannot put it into words The real profession of medicine does not live unto itself There is no such thing as medical isolation Its human relationships are too important for that If medicine fails of full cooperation with other health influences and social needs and then if it should receive its precise share of fortune, good or bad, would we be proud of it?

I have been a student of the presidential addresses of all the presidents of the Medical Society of this State and of the social trends of the corresponding periods Among these addresses Dr Stockton's stands out Dr Stockton in his presidential address in January, 1910, published in the NEW YORK STATE JOURNAL OF MEDICINE of February, 1910 reflected an understanding of the social trends of twenty years ago and foreshadowed the greater social changes going on today When the history of the present decade is written, whether from the viewpoint of medicine only or to include the changes in industry and the recognition of social obligations, it will be different from that of any other decade in our history There will be no more outstanding page than the accomplishments of medicine in the prevention of disease and conservation of life

Let me quote from Dr Stockton's address at the close of his year's administration of the affairs of the State Medical Society

"The success of the physician has always depended upon his ability to convince people, and the doctor has a following in ratio to the extent of his command of public and private

confidence. In these days more than ever we are devoting ourselves to the education of the community, not alone individual members thereof, but society as a whole."

These words anticipated changes accepted today, that the greatest influence in the betterment of public health will come from health education; and when he said that, we have less difficulty in persuading people to adopt means to improve their health than we have in providing opportunity for it all, he foreshadowed problems that we are trying to solve nowadays by increasing the availability of scientific medical knowledge in the prevention of disease and conservation of health.

Let me quote Dr. Stockton's conception of a physician's burden:

"But we should remember that in proportion to the extent with which we command public confidence, we assume a burden of responsibility."

Nothing could foreshadow better the effort that is being made today to show the profession of medicine that times are changing; that social medical needs are increasing; and that the only difference and the reason for it is that the public character of medicine has increased and public opinion supports the effort to provide better for the health of the public.

Dr. Stockton realized the difficulties when he said: "Unquestionably there are difficulties for us to surmount, as there always have been and as there always will be. The road of the physician is likely to remain one fully beset with trials and unexpected obstructions, and for that reason we may predict for it a glorious future. The feeble and halting are not so likely to select medicine for a career, but the courageous and untiring worker will not hesitate to take the trail that shows the foot-prints of such splendid predecessors as have been ours."

The closing paragraph is an inspiration. He says, "Therefore, we have no right to complain of our times or our conditions, but rather we should rejoice that to us has come the opportunity of battling against obvious evils. There need be no fear that preventive medicine will ever remove the field of labor. It is evident that preventive medicine requires the best effort that we can put forth, so at most it only means transferring the activity from one side of the field to the other."

The wisest man is not the man who knows most of the present only, but he who can also see the farthest into the future. Dr. Stockton's vision of professional responsibility expressed twenty years ago has in it a remarkable lesson of the soundness of the present effort of organized medicine in this state to solve its great problems by adjusting medical relationships to all health influences and, also, that medicine owes a public duty to all health influences, to determine their soundness, to guide their advent, and to furnish leadership in medical matters. Unless we are aware of existing trends in health and sickness service and are able to develop a plan of medical action in advance of popular demand, we cannot expect to guide these movements toward better health by sound medical programs.

I cannot add to the effect of Dr. Stockton's words of twenty years ago and I would not detract by further effort. Therefore, may I close in the words of one who was his close, personal friend and at whose request Dr. Stockton wrote the introductory section on "Diseases of the Digestive Apparatus" in Osler's "Modern Medicine."

"Medicine is an art, not a trade; a calling, not a business; a calling in which there is exercise for the heart as well as for the head."

STRYCHNINE POISONING*

By JOHN AIKMAN, M.D., ROCHESTER, N. Y.

ALTHOUGH we have quite a full program, I am going to take a few minutes to call your attention to a cause of death in small children that seems to have received but little attention in New York State. This is done with the hope that the matter may be carried to the Legislative Committee of the State Society, which may, in turn, advise the passage of laws to better safeguard children against this danger.

Our attention was first called to strychnine poisoning in small children by having an opportunity to study two cases that died in Rochester. Briefly, the histories were as follows: On December 8, 1928, a strong healthy two-year old girl found and ate some cathartic tablets that had been given to her grandfather by the family physician. The parents had no idea that the tablets contained poison and did nothing until the child developed convulsions about 3 hours later. Only after careful questioning did the parents then remember about the tablets. In spite of any thing we could do the child died 2 hours after the onset of the convulsions. At autopsy, 3 tablets were found in the stomach. The tablets contained, Aloin ¾ gr., extract of nux vomica ½ gr., extract of belladonna ⅛ gr.

On May 4, 1929, a second case was seen with Dr. John Finigan. A boy 4 years of age who had previously been in excellent health ate 90 Hinckle's cascara tablets that had been purchased for adult use. The tablets contained, strychnine sulphate 1/60 gr., aloin ¼ gr., podophyllum ⅛ gr., extract belladonna ⅛ gr., cascarin ¼ gr., ginger 1/16 gr. He died about seven hours later with symptoms of both atropine and strychnine poisoning. In neither case were the parents aware that the tablets contained a poison and no marked precaution had been taken to keep them from the children.

We present here the results of our studies on this subject as concerns our own State; the review of the literature and facts concerning this matter in other States will be reported elsewhere. (Aikman, John: Strychnine Poisoning in Children. *J. A. M. A.*, 95:1661-1665, November 29, 1930).

We were able to secure from the State Board of Health an excellent tabulation of the deaths from strychnine poisoning in children in New York State exclusive of Greater New York. An average of 13 such deaths occur each year most of which are due to medicines taken by mistake. The type of medicine most often mentioned as a cause of death is the bright colored sugar coated tonic or cathartic tablet. One-half of the children were under two years of age.

The death rate in New York City cannot be shown because strychnine poisoning is not listed separately in the International list of causes of death. New York City records strychnine poisoning under No. 177 "Other Acute Accidental Poisonings (Gas Excepted)." The total number shown under 177 for 1926, 1927 and 1928 was 80 outside of New York City and 34 in Greater New York, showing that strychnine poisoning must be much less in the Metropolitan district. This is also indicated by the fact that but one case of strychnine poisoning in an infant was seen in 5 years on the Pediatric Service at Bellevue Hospital out of 13,500 admissions. (Hoppe, Louis D., *Arch. Pediat.*, 40:264, April, 1923.) New York families must for some reason be less likely to leave medicines about the house.

Study of this subject shows that strychnine poisoning is the most common fatal poisoning in small children. It is due to the careless habit of leaving attractive and pleasant tasting tablets about the home. Most of these tables are cathartics like A. B. & S., A. B. S. & C., and Hinckle's or tonic tablets containing strychnine or nux vomica. The amount of strychnine varies from 1/120 gr. to 1/60 gr. Several of these tablets produce toxic effects on a small child.

The laws in this State that control the sale of such tablets and even tablets containing strychnine alone are very lax. Hinckle's tablets containing 1/60 gr. of strychnine are on display in drug stores and can be purchased over the counter. The only warning required is the formula printed on the label. Laymen are quite unlikely to know the toxic dose of strychnine and have no knowledge that the tablets are dangerous to children. This is the condition that exists under our present pharmacy laws.

While the loss of life from this cause is not great, it far exceeds in this State the combined number of deaths from both tetanus and rabies for the same age groups.

The deaths occur in strong active children and are preventable. The following suggestions are made for the reduction of these deaths.

(1) Education of the public.

(2) Poison labels or special labels as to danger for children.

(3) Restriction of sale of strychnine except on prescription.

(4) Elimination of the colored sugar coating on the tablets. If tablets containing strychnine or nux vomica were never so coated, fewer cases of poisoning would result. The bitter taste would prevent the ingestion of a dangerous amount of the drug.

*Chairman's address at the Pediatric Section of the Annual Meeting of the Medical Society of the State of New York, at Rochester, N. Y. June 3 1930

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Next Annual Meeting, Hotel Syracuse, Syracuse, N. Y., June 1, 2, 3, 1931.

THE HEALTH COMMISSION

The preliminary report of the Governor's Health Commission, abstracted on page 230 indicates the probable lines along which public health legislation will be promoted. In general the suggestions refer to the actions to be taken by municipalities in order to bring the benefits of medical service within reach of all classes of people.

The trouble with scientific medical service is not in its production by research, or its storage in available physicians. The defect lies principally in its final distribution from family doctors to needy individuals. The suggestions consist mainly of providing the means by which practicing physicians of a community may deliver medical service to the needy on a sound economic basis. Physicians will do their own peculiar work well, if the municipalities will provide them with workshops in the form of hospitals, sanatoriums, and clinics, and administrative facilities, typified by county health departments.

PRESIDENTIAL COMMENTS ON CURRENT EVENTS—NO. 16

The studies of organized medicine in New York State bring to the surface a steady stream of details of medical problems which the existing organization seems not to be able to meet promptly.

Medicine has not gone far enough in understanding that there are social problems for which it is imperatively necessary to find rather prompt solutions. Medicine is still guided too largely by principles that were stated in the address of the President of the New York State Medical Society at the annual meeting in 1879; President Roosa said, "Our functions as a society are chiefly performed by our scientific work. Our legislative duties are fortunately few. We have no alliance with the State that is more than honorary."

This was the viewpoint of organized medicine fifty-two years ago. Contrast it with the present when we are trying to increase the availability of scientific medical knowledge for the prevention of disease; to solve the problem of adequate medical care for major illness for those whose incomes do not lift them far enough above providing for the necessities of life and for whom there must be provided sooner or later some form of sickness insurance; and to arouse the interest of the mass of the profession in better organization for the solutions of the great social problems. The steadily increasing public interest, unless actively supported, guided, and led by organized medicine, will stimulate the State to exercise its parental function.

We need to realize that there is more than science in medicine today. Just look over the list of legislative bills already introduced—a chiropractic bill—one to remove the limitations on physiotherapists—a variety of bills increasing the number of occupational diseases to be made compensable to the point where all conditions that may be said to arise out of injury affecting health or ability to work are to be considered compensable—one on health insurance.

The proper functioning of the Public Welfare Law is dependent upon the activity of organized medicine. It is now going ahead well in Suffolk County since the Economic and Public Relations Committees of the County Medical Society arranged a conference with the Public Welfare Commissioner and the superintendents of the hospitals in the county. The meeting was called at one of the hospitals, (a lunch was served at noon). It was announced at the beginning that the conference was called in a friendly spirit to work out the mutual problems of the county government, the hospitals, and the medical profession. The results were satisfactory in every sense. Doctors will be paid their usual fees, hospitals their ward rates, regulations formulated to cover unusual features. At the close of the conference, the Public Welfare Commissioner expressed his appreciation of the conference and said that he was sorry not to have had the benefit of conference before. In this county conferences will be held from time to time until a plan is perfected that will make this law a blessing to the indigent and a satisfaction to the medical profession.

In one county of New York State the hospitals are charging different rates for public welfare cases. The Commissioner is sending the cases to the one charging the lowest price, though it is located in one end of the county. This county needs the spirit of public relations. Who can do it but the organized profession? Here is an example of a weakness in medical organization or such an impasse would hardly have occurred. How can medicine learn that its problems must be approached by the power of unanimous opinion?

Almost weekly I find somewhere in the State an example of weakness in medical organization—a committee of a county society responsible for some definite duty that hardly knows that it is alive. This is not lack of ability. It is lack of interest. How can medical relationships ever become what they should be until the profession of medicine, as a whole, takes an interest in present day trends in relationships to health and sickness service?

The present year of great effort by all the committees of the State Society will bear fruit. The intangible influences of this effort will flow on. Slowly tradition, conservatism, and prejudice will break down. When we awaken to our responsibility that there is more in medicine than the cure of disease after it starts, we will get out of the rut and begin to act.

Great as the change has been in organized medicine, it is not sufficient to meet the rapidly developing problems. We must provide for better functioning of our existing organization. We must realize that we are slowly coming nearer to the conditions that have confronted medicine in the older countries. If we are to avoid the dangers to professional independence, it will not be by shutting our eyes to the present day social trends or by destructive criticism of the effort of social organizations and the government to meet problems of health and sickness service.

WILLIAM H. ROSS.

STOLEN OUTFITS

The traffic in stolen medical outfits is larger and more widespread than is generally realized. The following letter has just been received from the Cameron Surgical Specialty Company, 1674 Broadway, New York City. (Telephone, Columbus 5-6672.):

"A complete Cameron diagnostic outfit worth $500 was stolen from a Cameron salesman's car on January 30th. If anyone attempts to sell you a Cameron outfit, make sure the person is a Cameron representative. A reward is being offered for the recovery of the outfit and arrest of the thief.

"A purchaser of stolen goods becomes liable."

This outfit will probably be offered for sale at half price or less. Let no doctor be deluded into the belief that he can purchase such an outfit with impunity. He will ultimately need to send for a new part, such as a lamp or a valve; and when he does, the Company will look him up in the list of owners of Cameron outfits, for this Company keeps an accurate list of all purchasers of its important wares, as do most other manufacturers. If the purchaser is not recorded, he will be investigated, and possibly subjected to a lawsuit, if the outfit is identified. The fact that he was innocent as a purchaser will not protect him from due process of law in the recovery of stolen goods.

A racket is also worked in connection with the disposal of instruments and office equipment of a deceased physician. A solicitor calls upon the executors of the estate and offers to take the goods and undertake to sell them. Possibly he may pay a small deposit in order to disarm suspicion; but he takes the more valuable and portable part and that is the last the executors see or hear of him. Medical societies and journals are frequently asked for advice in cases of this sort, but seldom is publicity made, for the identification of the goods is difficult or impossible.

The members of the medical societies appreciate the efforts of the instrument makers to design and supply them with reliable outfits, and are ready to subscribe to the following principles of mutual protection:

1. Have no dealings whatever with an unknown salesman who offers you a bargain in a standard instrument of expensive make.
2. If knowledge of such a salesman comes to you, report him to a reputable firm dealing in the line of goods which he offers.

LOOKING BACKWARD

This Journal Twenty-Five Years Ago

Public Health Work—The first committee on Public Health of the reorganized State Medical Society made its report to the House of Delegates on January 29, 1906, which was printed in this Journal of February, 1906, as follows:

"The annual conference of the State health officers at Albany is an admirable summer school of three days' duration in which every man can receive valuable information if he attends. But, however valuable the papers and how eminent soever are the instructors, and though every one of the State medical officers attend, the educative period is so brief that men of the highest general attainment in medicine could not become masters of the technical knowledge absolutely necessary to him who would realize in himself the highest possibilities of modern sanitary science. Attention has been called in at least two reports of this committee to the system inaugurated in England in 1866, and which has worked to the great advantage of the British Empire, by which only those who have pursued especial courses in Sanitary Science, and who have received the additional degree of "Doctor of Public Health," could be selected as physicians to local boards of health. In this day of specializing in medical and surgical practice it should excite universal comment that there is little evidence of a tendency among younger practitioners to make State medicine a specialty. No other field is so rich in possibilities of doing valuable service. If this field is not attractive because it does not offer a sufficient pecuniary reward to amply sustain an ambitious young man, we have ourselves to blame. The value of the services rendered by an intelligent physician of the first class to the public is capable of recognition by the public, and it will be so recognized in the near future. We urge once more that the Regents of the University of the State of New York investigate this subject and make such provisions as are necessary for the inauguration of supplementary courses in public health, at the completion of which the physician shall receive the degree of D.P.H., and that the laws of the State be so amended that the attainment of that degree shall be a necessary qualification for every physician who would qualify for the position of physician to a board of health or as health officer to any city or village in our State."

MEDICAL PROGRESS

Creosote Enemata to Prevent Postoperative Pulmonary Complications.—After a 3 year test of the so-called Weiler creosote enemata as a prophylactic against pulmonary complications, H. Gaudier reports that he has found this method better than auto- or stock vaccines or any other form of treatment thus far employed. To a glass of lukewarm milk are added 40 drops of tincture of creosote. After a preliminary cleansing enema the creosoted milk is introduced slowly into the rectum, where it is to be retained one hour. Children are given only 5 to 15 drops in a correspondingly smaller amount of milk. The injection is in no way irritating, but in exceptional cases 5-10 drops of laudanum may be added. The patient receives 2 such enemata daily for 3 days previous to operation, and a final enema early on the morning of operation, sufficient time being allowed for its expulsion before the patient is taken to the operating room. In cases of emergency operation the injections may be administered for 3 days following operation, at the same rate of two a day. The taste of the creosote is quickly perceived by the patient, and its odor can be detected in the expired air, saliva, perspiration, and urine. Where the operation is performed on the rectum itself, creosote may be administered subcutaneously twice a day for 4 days, in doses of 20 drops in camphorated oil. The treatment is especially recommended before operations on the stomach, liver, or kidney, and in patients who because of their age and general condition are predisposed to pulmonary complications. Gaudier has used it systematically and has never had any untoward pulmonary symptoms such as he used to observe in the past. Where general anesthesia has been employed, he gives in addition an oxygen inhalation for 10 minutes at the close of anesthesia.—*Progrès médical,* October 30, 1930.

A New Method of Treating Status Asthenicus.—A. Barbé says that he has had great success in 33 cases of asthenia, or, if one prefers the term, psychasthenia, depression, or simple melancholia, in which the picture presented is one of lassitude and weakness, absence of will power and of courage, especially upon getting up in the morning. This morning predominance is in fact the main symptom that these cases have in common. The patients indulge in self-pity and discouragement during a large part of the day, but become brighter and approximately normal toward evening. Examination reveals no organic lesion of the nervous system or any other apparatus. Whether the condition begins in intellectual fatigue or physical lassitude, it soon presents the picture of both. It occurred to Barbé that the fact of the regular morning recurrence of this state of inanition might be overcome by the simple device of giving a glass of lukewarm milk regularly once an hour until noon, from the time of waking in the morning. In order to make the patients take the treatment seriously, he gave orders for them to add 3 drops of tincture of cratægus to each glass of milk. It is very evident that this small amount had no physiological effect upon the patient, but exerted a purely psychical influence. In the great majority of the cases excellent results were observed in a very short time. At the end of 2 weeks or a month they had not only got back their good spirits but had also recovered a good appetite and could resume their usual occupations. Strange to say, this taking of 1-1/2 to 2 liters of milk every forenoon did not at all decrease the desire for food in the middle of the day, but on the contrary produced ravenous appetite, many patients stating that they had never been so hungry before. Naturally if the mental troubles are of a serious order the treatment has no effect, which is a proof that states of asthenia and of true melancholia are two distinct conditions, only apparently related.—*Progrès Médical,* November 29, 1930.

A New Digitalis (Digitalis lanata Ehrh.).—A comparative study of *Digitalis purpurea* and of *Digitalis lanata* of Central Europe by Em. Perrot, P. Bourcet, and Raymond-Hamet has convinced these workers that while both have identical properties, the latter is appreciably more active in its effect. It has a content in active glucosides of 2.5 gm. per kilo, 1. to 1.5 gm. of which consists of a special crystallized glucoside with cardiotonic properties to which they have given the name *dilanin.* This substance appears to be different from both the digitoxin of Smith and the glucosides of Mannich. It is a white crystalline body which fuses at 182°C., and which, although not seeming to be absolutely homogeneous, cannot be mistaken for crystallized digitalin Nativelle nor for digitoxin. As occurs with *Digitalis purpurea,* the stabilized leaves are subject to rapid changes during desiccation. Experiments in dogs to prove that dilanin is not crystallized digitalin showed that the minimum lethal dose (using the method of Trévan) is 0.40 mg. per kilo body weight for dilanin, and 0.50 mg. for crystallized digitalin Nativelle. By the method of Rowe the average lethal dose was found to be 1.19 mg. for dilanin and 1.69 mg. for crystal-

lized digitalin. These figures prove that the two glucosides are different and that dilanin is the more toxic. In view not only of the extremely weak content of *D. purpurea* in the crystallized glucoside but also of the variability of this content according to the geographical source of the plant, it is possible that *D. lanata* will in time supplant it, since there seems to be no way to bring about a standard rational culture of the former. In fact, *D. lanata,* which is much richer in active principle, is already widely cultivated. Pharmacologic researches are now in progress with a view to determining whether, like crystallized digitalin, dilanin is fixed permanently on the cardiac muscle, and whether its toxicity is approximately as great by mouth as by intravenous injection.—*Bulletin de l' Académie de Médecine,* November 4, 1930.

The Effect of Epinephrine in Angina Pectoris, with Report of a Case.—James E. Cottrell and Francis Clark Wood review the recent report of Levine, Ernstene, and Jacobson, in which it is suggested that the effect of subcutaneously injected epinephrine may be used as a means of differentiating between true angina pectoris and other conditions attended by pain similar to that of angina. They found that in the great majority of instances an injection of 1 c.c. of 1:1000 epinephrine produces in a patient who suffers from angina pectoris a typical attack, accompanied by a sharper increase in the systolic blood pressure, pulse pressure, and pulse rate than is obtained in control subjects. There is also noted a uniform increase in the amplitude of the T wave in Lead II in patients with angina. In the only case in which the authors used this test, a Russian Jewess, aged 43 years, the problem presented was to distinguish between true angina pectoris and anginoid pain of neurotic origin. A subcutaneous injection of 1 c.c. of 1:1000 epinephrine resulted in a violent attack of substernal pain persisting for over eight hours; in collapse, unconsciousness, bradycardia, cessation of respiration, and a fall in blood pressure from 170/115 to 80/60. Electrocardiographic changes suggested added myocardial damage. In a review of the case to discover any differences in the patient or in the procedure as compared with the patients and the method used by Levine and his associates, it was found that the patient had sinoauricular block before the test. She also had chronic hypertension not present in the cases described by Levine, and the site of the injection was massaged. The case suggests that the therapeutic use of epinephrine in patients who may have angina pectoris requires great care. This caution probably applies likewise to ephedrine.—*American Journal of the Medical Sciences,* January, 1931, clxxxi, 1.

Insulin Shock and the Myocardium.—William S. Middleton and William H. Oatway, writing in the *American Journal of the Medical Sciences,* January, 1931, clxxxi, 1, state that, as in diabetes mellitus there exists an inability of the tissues to utilize glucose, a certain handicap falls on all the tissues including the heart. According to Cruickshank and Patterson, the normal heart utilizes 1.87 mg. of glucose per gram hour, whereas the diabetic heart burns only 0.9 mg. Furthermore, in clinical diabetes there is a notable tendency to atherosclerosis. A serious obstacle to proper function is thereby thrown on the myocardium through impaired coronary circulation. In view of such disadvantages insulin imposes a further theoretical chance of injury through the induction of hypoglycemia to which may be added other adverse effects. Experimental and clinical evidence indicates that this hazard is real. Accordingly, the authors investigated the cardiovascular reactions in 11 patients during the height of their clinical manifestation of insulin shock and during periods of complete freedom from symptoms. In none were there subjective or objective evidences of organic heart disease, though in several subjects varying degrees of sclerosis were demonstrable in peripheral arteries. The most notable finding was the regularity of a decrease in the height of the T wave in all three leads and also a decreased amplitude of this wave. There was in addition a tendency of the P waves to be decreased in height, but less markedly. There was an increase in the auriculoventricular conduction time in a smaller proportion of the cases. The blood pressure changes for the entire group showed a tendency for the systolic as well as the diastolic reading to be decreased. When the clinical picture of insulin shock was attended by hypoglycemia the electrical changes appeared to be more decisive. Patients below forty years of age showed a definitely increased tendency to have a delayed A-V conduction time. Because of the gravity of these changes in the presence of myocardial lesions, particular caution is enjoined in the use of insulin in such patients. Where any question as to the myocardial competency exists, the avoidance of hypoglycemia must be insured by adequate coverage of insulin through concomitant intravenous glucose injection. The practice of inducing insulin shock for whatever purpose is unphysiological, and in view of possible myocardial damage its occurrence cannot be condoned if avoidable.

Growth and Cardiac Defects.—In order to demonstrate that an inhibition of growth is due to severe cardiac defect, Werner Gottstein says that three conditions must be fulfilled: (1) The cardiac defect and the nutritional dis-

turbance it produces must be the *sole* cause of the dwarfed growth; endocrine disturbances constitutional defects, and familial dwarfism must be excluded. (2) Clinical findings must establish a severe and long-continued disturbance of circulation, which can be shown by an indisputable history to have preceded temporarily the stoppage of growth. (3) The somatic measurements must prove that the size does not fall within the normal limits of deviation. The most valid observations are naturally made in persons of adult age who in childhood had cardiac defects, since these give the necessary period for study. The question can in reality be answered only by a comparison of the growth development of uniovular twins, one of whom is healthy while the other has a serious valvular heart defect If the cardiac twin exhibits a retardation of growth, this speaks *in favor* of an adverse influence of the circulatory disturbance upon growing tissues Two 13-year-old twin brothers with identical faces and fingerprints furnished the author with a basis for such comparison. One was in perfect health, while the other had a cardiac defect following an infection five years previously. A recurring endocarditis had been under observation for over two years, and the roentgenogram showed a great hypertrophy of both ventricles. However, the growth curves and anthropometric measurements showed almost no differences between the boys, and they therefore speak *against* any restraining influence of a circulatory disturbance caused by valvular defect. To be sure, the objection may be raised that insufficient time has elapsed to justify a judgment. The real test will come after the onset of puberty. The case proves only the power of endogenous growth urge from the ninth to the fourteenth year of life. Gottstein has already shown in earlier studies that the functional capacity of cardiac children is often less implicated than that of adults, due perhaps to the fact that the peripheral circulation of the child does not readily fail. A circulatory disturbance must be very severe to restrain the urge to activity and to growth of the child.—*Klinische Wochenschrift,* December 20, 1930.

The Role of Glandular Fever in Clinical Medicine and Pathology.—The existence of glandular fever as a morbid entity, says Emil Schwartz, in the *Klinische Wochenschrift* of December 13, 1930, has been firmly established by observations covering the last 10 years. It is an infectious disease well defined both clinically and epidemiologically, produced by a lymphotropic virus, and characterized by fever, swelling of the lymph nodes, enlargement of the spleen and, especially, by a changed blood picture, in which an initial leucopenia or slight polynuclear leucocytosis passes over into a second phase with 12,000-20,000, or even more, leucocytes per cubic millimeter, 70-80 per cent of which are lymphocytes. These are large and are frequently immature or atypical forms, with nuclei often consisting of a loose network with several nucleoli. Large numbers of these cells exhibit a tendency to turn into plasma cells. Eosinophils are nearly always present, and monocytes in large numbers, but these are as a rule damaged, and look like azure granules. Even myelocytes may be found. This blood picture persists with great intensity during the period of fever, and returns only slowly to normal, being sometimes still demonstrable after months. After an incubation period of about a week, the attack begins clinically with fever, soon followed by swellings of the lymph glands, first behind the angle of the jaw, then the anterior cervical glands and those of the nape, the supraclavicular fossae, the axillae, and groins. The spleen is palpable on the 3rd or 4th day 2 or 3 finger breadths below the margin of the ribs, and is characterized by a pecular resistance. The liver, too, may be felt below the ribs in some cases. Occasionally the condition is complicated by angina at the end of the first week, which may be follicular, pseudomembranous, or ulcerous. No specific bacillus has been found. Glandular fever attacks almost exclusively children and young persons under 30 years of age. The first lesson taught by its recognition as a disease entity is that what has heretofore been known as a lymphocytic reaction (not in a morphologic but in a pathogenetic sense) must undergo a complete remodelling.

Celiac Disease.—Leonard G. Parsons, writing in *The Lancet,* January 10, 1931, ccxx, 5602, states that the characteristics of celiac disease are: (1) The passage of feces containing large amounts of fat, ranging from 40 to 60 or even 80 per cent of the dried feces; (2) wasting and stunting of growth, amounting to infantilism; (3) abdominal distention; (4) anorexia and certain other nervous symptoms, such as muscular tenderness said to be due to peripheral neuritis; (5) deficiency symptoms—in infancy osteoporotic bone with rickets, which disappears as the stunting in growth becomes established, though it not infrequently reappears at a later stage. Other deficiency symptoms which may be present are tetany, scurvy, and edema. There is little doubt that many of the symptoms of celiac disease are the consequence of avitaminosis, resulting from defective alimentary absorption. Parsons made a study of the blood fats of normal children as compared with those suffering from celiac disease which afforded no evidence to support the view that the increased fecal fat in celiac dis-

ease is due to increased excretion of blood fat. The most probable explanation of the low blood fat and low blood sugar curves that were found is that they are due to defective absorption in the intestine. The secret of successful treatment is based on the facts detailed above. It is essential that a high protein diet be given with a moderate amount of carbohydrate, a very low or absent fat content, and an adequate supply of vitamins, salt and water. The three phase diet, employed with considerable success by John Howland, best fulfills these conditions. In the first phase protein skimmed milk is given. The second phase consists in the addition of bovril or other form of beef juice from which the fat has been removed, and other proteins, such as egg albumin, small quantities of rabbit, or chicken breast. In the third phase the amount of proteins is increased, and small quantities of carbohydrate are added, such as ripe banana, zwieback, grapenuts, and potato crisps without fat. Finally well-cooked cereals, such as rice and arrowroot, in small amounts are allowed. Vitamin B is supplied by giving marmite and vitamin D by ultraviolet irradiation, or by giving in the dry form irradiated ergosterol. The administration of carotin, closely related to vitamin A, is well worth a trial.

The General Mechanism of Growth and of Newgrowths.—Robert Hirsch says that he has demonstrated by experiments in 320 rabbits and white mice that during the period of youth, that is, of rapid growth, the growing organs have a high capacity for oxide reduction (in reduced glutathion) while that of the blood is low. As the animal grows, the concentration in reduced glutathion of the tissues diminishes progressively, while that of the blood rises. Growth stops when stable equilibrium between these two factors is reached. Attempts were made to determine whether in tissue of low capacity for oxide reduction, of an organism that has completed its growth, certain causes could not be set in motion to bring back this capacity at a given point of the tissues. It was found that any chronic irritation exercised upon an adult tissue (one, that is, whose potential of oxide reduction in reduced glutathion is low) causes the potential of oxide reduction to rise to a figure equal to that of a young tissue. Tar and arsenic, by causing a chronic intoxication, lower the oxide-reducing power of the blood to a figure approximating that of the blood of a young animal. Consequently, if tar is repeatedly painted upon the same tissue experimentally, it creates anew a difference in capacity for oxide reduction between this tissue and the blood, equivalent to that which exists in a young growing animal. If this is maintained over a sufficient period it seems to produce a lysis of cellular barriers and a proliferation similar to that of normal growth, with a progressive drop of oxide reduction toward that of the blood. It is therefore seen that in a tissue whose potential of oxide reduction has been thus artifically increased, a gradual fall of the potential takes place until it approaches that of the blood, whereupon a proliferation occurs according to the law of growth just stated. Studies are still in progress to determine whether the cause of cancer is the same in man.—*Bulletin de l'Académie de Médecine,* December 2, 1930.

A Little Recognized Source of Fatal Carbon Monoxide Intoxication.—In the *Journal de Médecine de Lyon* of November 20, 1930, F. Naville and Ch. Soutter describe a singular mode of carbon monoxide poisoning that sometimes occurs when a large wash boiler is used over the flame of a gas stove. The formation of carbon monoxide appears to be the combined result of two factors: the smallness of the space between the burner and the bottom of the boiler, and the large extent of surface covering, and tending to stifle, the flame. An obstacle thus hinders the free escape of the gas from the holes of the burner, resulting in a diminished aspiration of the air which should be drawn into the gas pipe to mix with the gas before the latter flows from the burner, and also in a diminished secondary mixing with air after the gas escapes. In addition the flame is cooled down by licking the floor of the boiler, in which is a large quantity of cold water requiring considerable time to heat. Illuminating gas is a compound of hydrogen, hydrocarbons, and carbon monoxide, in which the characteristic odor is given by the hydrocarbons. These are completely burned and thereby dispose of the odor. But the carbon monoxide is only in part consumed, and the residuum confers toxicity upon the product of combustion. The conditions responsible for fatal poisoning that has been known in several cases to occur under these circumstances are: (1) the large size of the vessel over the fire; (2) the considerable time necessary to heat the contents; (3) the narrow space between the vessel and the fire, and (4) the insufficient aeration. Experiments by Harber and by Meyer have demonstrated conclusively the production of carbon monoxide under receptacles in contact with the flame of the gas. It is present in enormous proportions in the cooled flame when the aeration from the primary mixing is insufficient, being 14 to 18 times that normally present. Prophylaxis lies in the invention of a better type of stove, and the warning of the public to have their rooms properly ventilated.

LEGAL

CRIMINAL LAW—CONFESSION SECURED BY THREATS AND VIOLENCE CONDEMNED

By LORENZ J. BROSNAN, ESQ
Counsel, Medical Society of the State of New York

In the administration of the criminal law in this country, every defendant is presumed to be innocent until he has been proven guilty beyond a reasonable doubt; and the Constitution of this State guarantees to every defendant in a criminal case a fair and impartial trial. Our courts are extremely zealous in criminal cases to preserve and guard the defendant's constitutional rights. While it is true that under our laws some of the guilty escape, it is better that that be so than that a single innocent person be unjustly punished.

We cannot fail to sympathize with the task of prosecuting authorities and officers of the law whose duty it is to arrest and prosecute vigorously those charged with the commission of a crime. Certainly in this day their task is not an easy one. The menace of the gunman, thief and racketeer is ever present in every State of the Union.

While it is true that no right-thinking man desires a criminal to escape punishment, it is equally true that we do not and cannot countenance the so-called third-degree methods employed by some police officers and prosecuting attorneys, either through mistaken zeal or through a desire to further their own interests. When a person has been arrested in a homicide case, it is customary for the police or the prosecuting authority of the County where the crime is alleged to be committed to seek to exact from the person so arrested a confession. Very often the only evidence which the police are able to secure is circumstantial in its nature and, realizing the difficulty of securing a conviction on circumstantial evidence, an attempt is made to buttress the people's case by securing from the defendant a written confession.

In practically every case where such a confession is secured, the defendant's counsel upon the trial seeks to exclude such confession on the ground that it was involuntary and was made only by reason of direct physical violence or threats of physical violence on the part of the police or prosecuting authorities. In many instances this claim is entirely without foundation, but our courts have had before them cases where the facts disclosed that the alleged confession was by reason of the circumstances under which it was exacted an involuntary confession. In such instances, where the confession has been admitted by the trial court and the trial has resulted in a conviction of the defendant, our Court of Appeals has consistently reversed such conviction, serving notice upon the police and the prosecuting authorities that convictions obtained by such means will not be upheld by the court.

The rule of law applicable to confessions in a criminal case is very simple, and may be thus stated:

"Only where a fair question of fact is presented should the jury be permitted to determine whether the confession is voluntary. If there is no such conflict and if the evidence points clearly to the involuntary nature of the confession the judge should exclude it as without evidence to support it."

A recent case considered by the Court of Appeals illustrates the principle here enunciated. A woman was strangled to death in her apartment at some time late Saturday night or early Sunday morning. The defendant was taken into custody by the police officers Sunday afternoon at a place some thirty miles from the scene of the crime. When arrested, he asserted his innocence and claimed that he could not have committed the crime as he was some thirty or forty miles from the scene of the crime, at the time when it was claimed that the crime was committed. He was taken to the police station on Sunday at midnight and questioned by the District Attorney, and to the District Attorney he again asserted his innocence. After questioning him for nearly an hour, the District Attorney departed leaving the defendant in the hands of three police officers. Thereafter, about six o'clock on Monday morning the defendant wrote on a card: "I kill ....." At about noon of the same day a stenographic record was taken of an interview with defendant by an Assistant District Attorney at the station house, in which he again said that he killed ....., but refused or was unable to state why or how he killed her. Another stenographic record was made of an interview at the District Attorney's office at about five o'clock in the afternoon, in which the defendant said: "I can say I killed her because she tried to break up my home" and "I don't remember a thing what happened there. I will plead guilty, I am willing to go to the electric chair for it."

The defendant testified that one of the police officers struck him on the jaw and knocked him to the floor; that the other two pulled his hair and knocked him about with blackjacks, kicked

him, cursed him, threatened to kill him, and made him write: "I kill ....." because they menaced him with further abuse if he refused; that he was still under the influence of fear when he made the later statements, so that he made no complaint to the Assistant District Attorney or the District Attorney.

The following day the defendant was arraigned in the Homicide Court and was committed to the county jail. The next day he complained of pain to the warden. The warden called a physician who examined him. As to the defendant's condition at that time the examining physician testified:

"Q. Now, doctor, will you tell this jury what your examination disclosed?

"A. I found echymoses, that means black and blue marks, over the right arm, with some swelling of the arm, with a hemetoma over the middle of the arm. A hemetoma is a little collection, or tumor of the blood. There were several abrasions over the right elbow, and right forearm. Abrasions are superficial scratches. There are livid stripes over the right farearm and back of the right hand. There are echymoses, black and blue marks, over the left arm, also over both eyelids on the left eye; over the left malar bone, that means the cheek bone here (indicating); there were some abrasions in the right temporal region, that is, up here (indicating)—

"The Court: Witness indicates by placing his hand on the left temple.

"A. (continuing)—There were a few echymoses over the back of the neck, and he complained of pain on manipulation of the head. There are some echymoses over the right scapula; that is the shoulder blade. There were echymoses over both sides of the back, and in the left lumbar region, that is, the left loin, in the left lower axillary region—the axillary region is the side of the chest, and the left lower axillary region would be the lower part of the side of the chest—there were echymoses over the right buttock, and over the front of the right thigh and over the front of the left thigh and over the back of both thighs, there were some abrasions of the right leg."

This evidence means that his body was covered with black and blue spots and lumps or swellings, caused by a fusion of blood under the skin, which might result from a beating. The doctor also saw the black eye which the defendant had.

Two or three days later, over the objection of the District Attorney, the defendant's counsel procured an order that the defendant be photographed in a nude condition. These photographs were introduced in evidence and corroborated the testimony of the examining physician.

The Court of Appeals held that the confession in this case was an involuntary one, and that as a matter of law the trial court should have excluded the confession instead of submitting it to the jury as a question of fact to determine whether it was voluntary or involuntary. In reversing the judgment of conviction the court said:

"After denying his (the defendant's) guilt, from the time of his capture until six o'clock the following morning, defendant suddenly writes on a card: 'I kill .....' Was his change of mind due to reflection and repentance under the long-continued questionings and exhortations of the police officers * * * or did they scare him into making it? He gives no details of the killing, either because he cannot or because he will not. One might consider, as bearing on the question of his guilt and the voluntary character of his confessions, why he was thus reticent. He made to the police officers a bare admission of guilt. They are unable, as was the District Attorney, to get more out of him except his statement that he was at the apartment of the deceased. He comes out of the long interview with the officers with palpable evidence of the application of physical force to his body. Nothing but the merest supposition suggests that his eye was blackened or his body bruised when he was first brought to the station house. When he was taken to jail, his body bore evidence of severe beating and bruising.

* * *

"It has been said: 'One is driven to the conclusion that the third degree is employed as a matter of course in most states, and has become a recognized step in the process that begins with arrest and ends with acquittal or final affirmance.' * * * The practice in England seems otherwise. Statements made after arrest in answer to questions by police officers, if legal evidence (as to which the law is not settled), are cautiously received (citing a case). Lawless methods of law enforcement should not be countenanced by our courts even though they may seem expedient to the authorities in order to apprehend the guilty. Whether a guilty man goes free or not is a small matter compared with the maintenance of principles which still safeguard a person accused of crime. If torture is to be accepted as a means of securing confessions, let us have no pretense about it but repeal Section 395 of the Code of Criminal Procedure and accept all evidence of all confessions however obtained, trusting to the jury to winnow the true from the false. As long as the section remains in the Code, the courts are bound to give as full protection to an accused as the evidence warrants."

In so holding, the Court of Appeals again reiterates the fundamental principle underlying the administration of the criminal law, "Whether a guilty man goes free or not is a small matter compared with the maintenance of principles which still safeguard a person accused of crime."

ALLEGED NEGLIGENCE IN PRESCRIBING MERCURY INJECTIONS

In this case the plaintiff called at the office of the defendant doctor complaining of a thickening of the tendons of his right and left hands, numbness in the balls of his feet and a feeling of heat in his toes. He had no pains in his legs, however, and no bladder difficulty. His physical examination showed that the pupil of his right eye was fixed to light and that it was irregular, and the left pupil was similarly abnormal, though not quite so slow in its reaction to light. There was slight swaying in the Romberg position, and the reflexes in his arms and legs were entirely lacking. On the basis of this examination and with the history that some years previous the patient had suffered an attack of what he called rheumatism in his legs, the doctor made a diagnosis of cerebrospinal syphilis of the tabes dorsalis type, together with a Dupuytren's contraction of the hand. The doctor concluded that the patient was either a chronic alcoholic or suffering possibly from the first stages of paresis.

The doctor advised him that in order to treat him properly it would be necessary to extract some fluid from his spine, to which the patient consented. Thereupon ten c.c. of spinal fluid was withdrawn, and a Wasserman test based on this spinal fluid and also on the blood of the patient gave negative findings. In spite of such findings, the doctor considered him a case of long-continued cerebrospinal syphilitic infection in which the condition had lasted for so long a period of time that the Wasserman test had become negative.

The doctor suggested that the patient undergo a series of mercury injections, followed by sodium iodide. Seven injections of mercury were given, each of which caused slight constitutional reactions and local tenderness over the site of injection as is usual. The patient then notified the doctor that he wished to discontiue the treatment as he was confined to his home and was being treated by another doctor for sickness which he claimed to be due to the mercury injections.

Suit was thereafter instituted by the patient claiming that by reason of the improper diagnosis and treatment of his case, he had become greatly damaged. The plaintiff failed to press the case, and a motion to dismiss the complaint was subsequently granted for that reason, thereby terminating the matter in the doctor's favor without trial.

ALLEGED NEGLIGENCE IN FAILURE TO COMPLETE OPERATION

In this case the plaintiff consulted the defendant doctor, who specialized in surgery especially regarding conditions involving the circulatory system, and gave a history of having had his right leg amputated below the knee about a year previous. The patient explained that the amputation had been performed because of gangrene, and he feared that his other leg was in about the same condition that his right leg had been before the amputation.

Upon examination the doctor determined that the patient was suffering from thrombo angiitis obliterans, a condition of the outer covering of the arteries which prevented circulation and tended to cause thrombosis involving both the whole leg and the stump. The doctor decided that the only relief for this condition was an arterial sympathectomy (Leriche operation). To this the patient consented and entered the hospital, where in preparation for the operation the doctor gave the patient intravenous injections of 5% saline solution, and caused heat treatment to be applied to the patient's legs. The patient was placed under a local anæsthesia of novocaine and the doctor proceeded to incise the leg over the popliteal artery. At that time the patient became restless and complained of the pain, and he was put under a general ether anæsthesia. The doctor proceeded to make an incision six inches long over said artery, exposing it, and then discovered that the artery was thrombose and that the thrombosis extended down to the foot. He then decided that it would be useless to continue the Leriche operation and did not make any attempt to strip the outer covering of the artery, but caused the wound to be closed and sutured it in the usual manner.

The incision healed nicely and the patient left the hospital in apparently somewhat better shape than when he entered.

The patient instituted suit against the doctor, charging that because of his negligence the ultimate result was that gangrene set in and it became necessary that his left leg be amputated. The plaintiff claimed in his complaint that the improper treatment on the part of the doctor consisted of commencing an operation to restore circulation in his left leg and failing to complete that operation which greatly aggravated the condition from which the plaintiff was suffering.

After the case had been instituted the plaintiff's attorneys did nothing to press the case and at the end of about three years a motion was made on behalf of the defendant to dismiss the action for want of prosecution, and the matter was terminated in the doctor's favor without a trial.

NEWS NOTES

NEW YORK STATE HEALTH COMMISSION, PRELIMINARY REPORT

The following abstract of the preliminary report of the New York State Health Commission appointed by Governor Franklin D. Roosevelt, on May 1, 1930, has been prepared by Dr. William H. Ross, a member of the Commission, and President of the Medical Society of the State of New York. It summarizes the recommendations submitted by each sub-committee, and deals chiefly with matters presenting urgent need for legislative action. The Commission will formulate a final report later in the year.

STATE DEPARTMENT OF HEALTH

In the organization and function of the State Department of Health, the Commission believes that New York State stands second to no other state in the Union. One of the most far-reaching results of the 1913 Commission was the creation of a Public Health Council, whose important accomplishment has been to create the Sanitary Code and prescribe qualifications for those appointed to direct public health activities. It has thus had great influence in promoting uniformity of health service.

In special contrast with the efficiency of the State Department of Health the Commission finds that the local health organizations are antiquated and inadequate. More specially trained personnel is required to stimulate and coordinate the individual small communities. Especially does the Commission recommend that the town and village units of today be organized and administered under a county unit plan. It directs attention to the effect the great advancement in methods and means of communication and transportation and the unparalleled advancement in science have had upon the conditions of living, particularly in the rural areas, and concludes that it will be easier to conduct a county unit today than it was to conduct a town and village unit fifty years ago. It cites the county health unit as possessing the following advantages over the present system:

1. The unit of population is sufficiently large to permit the employment of trained personnel.
2. One responsible board will be substituted for the many town and village boards of health, the county nursing committee, county milk inspection committee, county clinic committees, and board of managers of county laboratories.
3. A plan of continuing health service can be developed for the whole county, and all of the health personnel can be mobilized to meet emergency conditions in any part of the county.
4. Duplication and over-lapping of effort which now exists will be prevented, and better health protection can be furnished for present expenditures.
5. The relative needs for various types of health service in the county can be determined, and available public funds allotted in proportion to these needs.
6. School nursing activities now lacking in many rural schools can be furnished by nurses employed by the county board of health.
7. If school medical inspection is made a function of county boards of health, this important activity can be conducted more efficiently on a county-wide basis with trained personnel than under the present system.
8. Through the permissive provision under which tuberculosis control activities may be administered by the county board of health, this activity can be directly coordinated with other health services. This is particularly desirable in the smaller counties.
9. Under the permission granted to cities and large villages to join the rest of the county for purposes of health administration further coordination of health work on a county-wide basis is made possible. Such a union is desirable, especially for those cities and villages centrally located in the counties, and those of less than 50,000 population.
10. New and much needed health activities not now carried out and not possible under the present system can be undertaken.
11. Maternity and infant hygiene measures can be organized and efficiently conducted.
12. Treatment facilities for the control of the venereal diseases can be provided.
13. The sanitary quality of milk can be assured through a county-wide inspection service.
14. The sanitary quality of water supplies can be supervised through a county sanitary engineer.
15. Modern epidemiological methods can be applied for control of the communicable diseases in place of the present ineffective sys-

tem. Toxin-antitoxin, smallpox vaccination and other activities can be conducted by personnel provided for these other services

16 Less intimate state supervision and fewer direct services from the State Health Department will be required because of the better local organization.

In concluding its observations on the state and local (rural) health administrative machinery, it makes the following recommendations:

1. That the appointment of county boards of health be required in all counties.
2. That all villages of less than 5,000 population be included in the jurisdiction of the county board of health, and that the inclusion of larger villages and of cities be permitted upon the consent of the county and the city or village authorities.
3. That local health officers as assistants to the county health commissioner be continued in office for the term for which they previously have been appointed, and thereafter in the discretion of the county board of health
4. That at least three physicians be placed on the membership of the county board of health.
5. That the county health commissioner devote his entire time to the duties of his office in counties having a population under the jurisdiction of the board of health of more than 30,000; and that in the counties having less than 30,000 population the district state health officer be detailed by the State Commissioner to act as county commissioner.
6. That the effective date for the appointment of county boards of health be not later than July 1, 1931, and the appointment of county health commissioners be not later than January 1, 1932.
7. That laws relating to local boards of health be amended so as to abolish all town boards of health, consolidated health districts, and village boards of health in villages of less than 5,000 population not later than January 1, 1932.
8. That the public health law be amended to remove all reference to town boards of health, consolidated health districts and village boards of health for villages of less than 5,000 population.
9. That the county health commissioner be given concurrent power with the county board of health to abate nuisances affecting public health.
10. That the local health officer, upon the establishment of a county unit, be appointed deputy county health commissioner.

The following special recommendations are offered for the manner in which public health should be administered in cities under and above 50,000 population:

1. That in cities of more than 50,000 population health officers hereafter appointed be required to devote their entire time to the duties of their office.
2. That cities of less than 50,000 be encouraged either to employ whole time health officers at adequate salaries, or to include themselves in a county department of health for purposes of health administration.
3. That more adequate budgets be provided in cities in order that basic health activities may be efficiently conducted.

TUBERCULOSIS

The Commission finds the tuberculosis situation in the state far from satisfactory. Considering the number of years the state has been making special efforts to eradicate tuberculosis, there are far too many deaths occurring annually from the disease. It is conservatively estimated that not less than 20,000 active cases of the disease exist in up-state New York and another 25,000 cases in New York City. The disease still takes its largest toll in life and illness among children, among men in the period when their economic value is greatest, and among women at ages from twenty to thirty-five years, the period of their greatest fertility. In the light of these facts, the Commission concludes there is need for more adequate protection of infants and young children from infection, for further study of and more effective mitigation of industrial and occupational hazards, and for more adequate care of tuberculous patients and their families. In considering what the state can do to develop a more effective program, it came to the conclusion that further reductions can be effected by the use of available methods of combating the disease. These methods include:

(a) More adequate facilities for the discovery of active cases as sources of infection.
(b) Protection of persons, particularly infants and children, against infection from active cases in the family.
(c) The discovery of cases in their early stages.
(d) Efforts to remove or ameliorate these conditions of domestic
dustrial dusts,
lack of sunshine and light, and insufficient or unwholesome recreation,

All anti-tuberculosis activities must be co-ordinated to produce the greatest degree of efficiency. The weakest link in the chain today is the local rural health unit which is unable to discharge the responsibility for the discovery, diagnosis, reporting, and sanitary supervision of cases of the disease in the areas where they occur. Hospital facilities for the tuberculous are inadequate. Although the law authorizes counties to build tuberculosis sanitaria, there are still twenty-four counties with a total population of nearly one million with no tuberculosis hospitals, and six in which the existing institutions are not suitable for continued use. To remedy this situation the Commission makes the following recommendations:

1. That the state provide three additional state district tuberculosis sanatoria for all types of tuberculosis cases to be located geographically with reference to the unmet needs of sections of the state; and that the cost of maintenance of patients in these sanatoria be borne in large part by the counties served.
2. That legislation at this session authorize the establishment of these sanatoria, and appropriate funds for the purchase of sites and the preparation of plans.
3. That the administration of the state sanatorium at Ray Brook be centralized in the State Department of Health; and that when the other district sanatoria are constructed, the facilities at Ray Brook be available for incipient cases from New York City and all types of cases from surrounding counties.
4. That the state provide through the Department of Health and the district state sanatoria facilities for (a) cooperation with local health departments in the diagnosis, instruction and follow-up of patients; (b) scientific studies of tuberculosis; (c) instruction of physicians and nurses in tuberculosis diagnosis, treatment and care; (d) a uniform system of records for use by local health authorities.
5. That field activities for the control of tuberculosis be coordinated with other local health activities under county departments of health with the consultative assistance of the state; and with an adequate social service and relief program of local public welfare authorities.
6. That the Public Health Council be authorized to prescribe the qualifications for the position of chief medical officer of all public tuberculosis sanatoria in the same manner as for other public health positions.

VENEREAL DISEASES

The Commission will later make a more complete report upon the venereal diseases, but it is in possession of sufficient facts to warrant its making several very important recommendations. Syphilis alone ranks with cancer and tuberculosis as a chief cause of illness, death, and economic loss. More than two thousand patients in state mental hospitals are there because of a syphilitic infection. This represents ten per cent of the total admission to these institutions, and it costs $8,000,000 to provide the beds now occupied by these patients. Accurate methods of prompt diagnosis and speedy sterilization of infectious cases, the two possibilities of reducing the prevalence of the disease, are at hand, but they are not being employed as effectively as they should be.

Fifty-four local clinics in thirty counties treat more than six thousand patients annually, but twenty-seven counties have no clinics. The Commission makes the following recommendations:

1. That present laws be amended to provide for treatment of the venereal diseases as a public health problem, irrespective of whether or not the individual case be indigent or infectious.
2. That the county and city boards of health be required to provide facilities for the diagnosis and treatment of the venereal diseases, which meet the standards prescribed by the State Commissioner of Health.
3. That provision be made in the organization of county boards of health for the diagnosis, treatment, and follow-up of cases of the venereal diseases. If the county boards of health are not generally established with state aid, then it is recommended that state financial aid be given to encourage local boards of health to establish satisfactory facilities for the diagnosis and treatment of these diseases.

CANCER

Cancer ranks second as a cause of death in New York State. The state has for several years interested itself in the problem through its institution in Buffalo, where intensive research has been conducted and diagnostic service and treatment rendered many people. Recent additions to the amount gives this institution the largest single supply of radium of any institution in the world.

During 1930 a total of 1,697 new patients presented themselves at the hospital for examination, an increase of 247 over 1929.

It is to be hoped that individual counties will provide themselves with the following services

(a) Special hospitals for the treatment of advanced cases of cancer.
(b) Special departments of general hospitals where surgical and radiation therapy can be given by qualified experts.
(c) Out-patient services at these hospitals for the early diagnosis of cases.
(d) Intermittent clinics in the smaller centers of population where expert diagnostic skill can be made available.

The Commission offers the following recommendations:

1. That a division of cancer control be established in the State Department of Health, of which the State Institute for the Study of Malignant Diseases will be a part.
2. That existing studies now being conducted at the State Institute in Buffalo be extended to include field studies of the nature and extent of facilities available for the diagnosis and treatment of malignant disease.
3. That the State Department of Health conduct general public and professional education concerning the diagnosis and treatment of cancer; and that it cooperate with local authorities and agencies in the development of needed services for diagnosis and treatment of this disease.
4. That the present system of approval of public health laboratories and of bacteriologists be extended by the State Department of Health to include pathological laboratories and pathologists.

MATERNITY AND INFANCY HYGIENE

Among the more vital public health problems of the present day is that of adequate protection of the health of mothers and infants. In fifteen years infant mortality in New York State has been cut in half, but there has been no corresponding reduction in maternal mortality. The findings in New York State support the views of the White House Conference that pre-natal care is poorly organized and inadequately done, and in the country as a whole only a small portion of women receive "adequate pre-natal care." A more extensive report will be made later, but at present the Commission makes the following recommendations:

1. That in order to carry out a satisfactory program for saving the lives of mothers and children these activities need to be combined with a general health program for the community. For rural areas this can be done best through the organization of county health departments.
2. That more adequate pre-natal and child health activities should be organized and carried out in all local health departments.
3. That effort should be made to stimulate better teaching of obstetrics and pediatrics in medical schools.
4. That the benefits of the crippled children's act be extended to children of pre-school age who are suffering from orthopedic or other defects which are apt to handicap them seriously in later life.
5. That provision should be made for wider dissemination of knowledge of nutrition.
6. That facilities for promoting dental hygiene should be made available.
7. That the parents of pre-school children should be reached more extensively with health education.
8. That in the rural areas intensive efforts be made toward the vaccination and immunization of pre-school children against smallpox and diphtheria.

SCHOOL HYGIENE

The Commission is convinced that in the future there must be close cooperation between the Departments of Education and Health in providing for the health of the school child. The health authorities cannot relinquish any responsibility for the protection of health of the school child since it has a responsibility for the promotion of the health of all citizens regardless of age, and there must be a certain continuity of program planning. The joint responsibility can be outlined in the three following divisions:

1. Medical service to provide for periodic physical and mental examinations and correction of handicapping conditions, and medical guidance of the educational program which will emphasize the preventive health service through health teaching.
2. A program for the correlation of health serv-

ices of the school, home, and other community endeavors to the best interest of the pupil through community nurses and visiting teachers.

3. Health instruction and training aimed to equip such child to carry the full load of responsibility for his personal health by the development of sound health habits and practices as well as by the imparting of actual health information.

All medical examining and nursing services should be conducted so as to develop in pupils sound hygienic practices. The discovery of physical defects is of importance only when adequate steps are taken to provide for the correction of these defects. The Commission is of the opinion that full-time, trained personnel is needed in the administration of school health service. In the rural areas and small villages this service should be administered on a county or other comparable basis. And if county boards of health are organized, this could logically be made one of their functions.

ORTHOPEDICS

The state has accomplished much in the protection of its citizens against disability from infectious diseases, but the rehabilitation of the crippled child which, in a measure is comparable, is far from being adequately secured. The epidemic of infantile paralysis in 1916 left many cripples whom the State Department of Health, through a system of traveling clinics, has done much to prevent from becoming permanently deformed. A commission appointed by the state has made a careful survey of the state and secured legal provision for promoting the care, treatment, and education of such children. The present problem is to make available adequate service for the cases now requiring care, and steadily to increase that service until all those needing advice are found. The most hopeful possibility for the accomplishment of this aim lies in the development of the county unit. The Commission offers the following three recommendations:

1. *New York State Reconstruction Home.* It is recommended that the State Department of Health be made entirely responsible for the administration of the Reconstruction Home at West Haverstraw, and that efforts be made to affiliate it with several of the teaching medical centers of the state so that it may become a training center both for the physicians and the nurses in the orthopedic field.
2. *Unimprovable Cripples.* It is recommended that a separate building be provided at the Reconstruction Home with suitable facilities to care for such cripples.
3. *Legal Recognition of Orthopedic Division.* It is recommended that the designation of "Orthopedic Division" be legally authorized in the Public Health Law.

INDUSTRIAL HYGIENE

The most important phase of the health servicing activities of the state is assurance of safe and sanitary work-shop conditions for industrial workers. The industrial board has legal authority for formulating and enforcing rules and regulations for the protection of employees. The rules and regulations are prepared by advisory committees composed of representatives of employers and employees and qualified experts, and the material is collected by the Bureau of Industrial Hygiene. The bureau of workmen's compensation is doing much for the relief of the workman, but it is evident that if the schedule of disabling diseases arising out of employment were more general, the fields of source-prevention cooperation would be extended and encouraged, and a further reduction accomplished in the sum of personal disabilities and loss of productive services.

The Commission makes the following recommendations:

1. That the present requirement of the labor law, which makes it the duty of local health officers in villages and towns to inspect certain business offices and factories, be changed so that this duty is performed by the State Department of Labor in the same manner as now provided by law for similar business offices and factories located in cities.
2. That the present limited schedule of occupational diseases be extended to include other diseases arising out of employment.
3. That the State Department of Labor be given additional facilities to conduct investigations of health hazards in industry with a view to their prevention.

SANITATION

Greater progress has been made in reducing typhoid fever and other diseases caused by contaminated water and food than among any other groups of diseases. The State Department of Health now supervises 620 public water supplies, but it lacks definite authority to approve plans for construction of new plants. The State Department may also order municipalities to install and operate sewage treatment plants, but certain difficulties, among them increase of debt, prevent practical application of this authority. The discharge of industrial waste into streams presents a problem also in which the State Department of Health should have additional authority A modern water purification plant or sewage treatment plant requires competent local supervision; therefore, all operators of such plants should be required to meet qualifications prescribed by the Public Health Council.

Recommendations

1 That the laws be amended so as to give the State Department of Health specific authority to approve of plans for proposed new, and extensions to existing public water supplies, insofar as the sanitary quality of the water supply is concerned.

2 That the pollution of streams by industrial wastes not containing sewage be regulated in the same manner as such wastes which do contain sewage.

3. That specific authority be given and sufficient facilities provided for more intimate supervision of the sanitary conditions of state parks.

4 That the Public Health Council be given power by law to prescribe by regulations the qualifications of and grades for operators of water purification and treatment plants and sewage treatment works.

PUBLIC HEALTH PERSONNEL

The Commission makes the following recommendation with regard to the qualifications of personnel, recognizing that for efficient administration of the highly scientific public health laws of today a well-trained personnel is essential:

That the present authority of the Public Health Council to establish the qualifications of public health nurses and other personnel named in the law be extended to include operators of water purification plants and of sewage treatment works, pathologists in charge of approved laboratories, superintendents of public tuberculosis sanatoria, and other professional and technical personnel.

OTHER PUBLIC HEALTH PROBLEMS

In addition to the topics which are presented in this preliminary report, the Commission has embraced within its deliberations studies of the subjects of: Mental Hygiene, Medical Care, Public Health Nursing, Control of Communicable Diseases, Laboratory Service, Milk Sanitation, Dental Hygiene, Public Health Education, and State and Local Volunteer Health Agencies. The Commission is formulating a series of administrative recommendations in regard to many of these problems. There is no pressing need at this time, however, for legislative action on these subjects, and they are, therefore, excluded from this preliminary report.

SUMMARY OF MAJOR LEGISLATIVE RECOMMENDATIONS

The Commission submits herewith a summary of its major legislative recommendations, and urges their favorable consideration by the Governor and their submission to the legislature for action during its present session.

1. *County Boards of Health.* That the organization of county boards of health be required in all counties.
2. *City Health Administration.* That in cities of more than 50,000 population, health officers hereafter appointed be required to devote their entire time to the duties of their office.
3. *Tuberculosis.* That the construction of three district state tuberculosis sanatoria be authorized and that the administration of the state sanatorium at Ray Brook be placed under the State Department of Health.
4. *The Venereal Diseases.* That the Public Health Law be amended to provide for treatment of the venereal diseases as a public

health problem irrespective of whether or not the individual case be indigent or infectious.

5. *Cancer.* That a Division of Cancer Control be established in the State Department of Health.
6. *Maternity, Infancy and Child Hygiene.* That adequate measures for protecting the health of mothers and children be included in the program of every city and county health department.
7. *Crippled Children.* That the administration of the State Reconstruction Home at West Haverstraw be placed under the State Department of Health, and that a separate building be provided for unimprovable cripples.
8. *Industrial Hygiene.* That the inspection of certain industrial establishments in villages and towns be performed by the State Department of Labor instead of by local health officers.
9. *Public Water Supplies.* That the State Department of Health be given specific authority to approve of plans for proposed new and extensions of existing public water supplies, in so far as the sanitary quality of the supply is concerned.
10. *Stream Pollution.* That the pollution of streams by industrial wastes not containing sewage be regulated in the same manner as such wastes which do contain sewage.
11. *Public Health Personnel.* That the present authority of the Public Health Council to establish qualifications for certain public health personnel be extended to include other positions in the public health field.

CONFERENCE OF LEGISLATIVE CHAIRMEN

The annual conference of the chairmen of the Legislative Committees of the County Medical Societies of New York State was held in the DeWitt Clinton Hotel, Albany, on Tuesday, February 10, 1931, with the representatives of over thirty societies present, and Dr. Harry Aranow, of Bronx County, Chairman of the State Committee on Legislation, presiding. A morning session was held, beginning at 10 o'clock. Luncheon was served at one o'clock, and was followed by an afternoon session.

The first bills to be discussed were seven relating to workmen's compensation, including the establishment of a medical advisory committee as an adjunct to the council of the Department of Labor. This bill has been proposed for several years in succession, and if enacted, it would provide a means by which misunderstandings with physicians could be eliminated.

The chiropractors have introduced a bill legalizing the practice of their cult, and are pushing it more actively than in previous years. They were also active in the campaign previous to the last election, especially in New York City, and openly advocated the election or defeat of several candidates for the Legislature. They even distributed circulars asking such questions as the following: "What would you do if your doctor had given up a case as hopeless, when chiropractic could restore your child to health?"

One speaker suggested that, if some medical school should make a scientific investigation of the basis and claims of the chiropractors, and should issue an authoritative statement condemning the practice, the legislators would give heed to the opinion. But the representatives of the medical schools and the educational authorities have always taken the ground that all who practice the healing art, including the chiropractor, should be required to possess the same basic scientific knowledge that a physician or dentist, or veterinarian must have. The chiropractors are willing to agree to this provided only that those now in practice are exempted from the requirement. The bill is only a bold attempt to secure special business privileges for a few. The story of exemptions has always been that, if one cult is exempted, another cult will spring up and its backers will ask similar privileges. After the osteopaths, for example, had been granted exemptions, their successors, the chiropractors, arose with similar demands, and already the naturopaths are waiting for their opportunity,—and there are fifty-seven other brands in New York City according to a census made three years ago.

Another perennial bill is that of the so-called anti-vivisectionists, whose protection is extended only to dogs. This movement is maintained by an endowment without which it would soon die a natural death.

The conference took notice of a bill which authorizes the State Department of Education to establish depots for supplying alcoholic liquors for medicinal purposes. Several other bills were also considered, among them being one for preventing the mixing of babies in hospitals; one providing every birth certificate should contain the fingerprint of the mother and the footprint of the child; and one forbidding the sale of bichloride of mercury except on the prescription of a physician.

What will probably be the most important medical legislation of the year will probably be introduced within the next fortnight as the result of the report of Governor Roosevelt's Health Commission, whose recommendations are summarized on page 230 of this Journal.

LEGISLATION

The Committe on Legislation has adopted the plan of sending bills and descriptive letters to the county society Legislative Chairmen, and also a general bulletin from time to time. The following letters and bulletin have been issued:

January 19, 1931.

The first instalment of bills, as you will observe, contains only one stranger and the introducer of that is a familiar character.

Mr. Cuvillier has reintroduced his bill of former years, asking that the state establish compulsory health insurance. May we suggest that you review this bill anew and with a little more care than in previous years, simply because there are so many articles appearing in the magazines and newspapers today, either commenting upon the English system of health insurance or advocating some variety for America. It is well to remember, also that Governor Roosevelt appointed a commission last summer for the study of health and medical activities and it will report to him within the next month. We are eagerly awaiting that report. (See page 230.)

Mr. Vaughan has reintroduced his dog bill and Mr. Horn his amendment to the Workmen's Compensation Law.

The new bill is by Dr. Love. His scheme for maintaining the identity of babies is foolproof in our opinion.

May we ask again that each chairman endeavor to send us a comment upon each bill that we send out? It seems like asking a good deal, but you must remember that your committee in Albany is unable to determine the reaction of the various County Societies except through such comments as you and your committee may make. Give us your cooperation.

January 26, 1931.

Assembly Int. No. 227, by Mr. Doyle, would add a new section to the Penal Law regarding the sale and manufacture of bichloride of mercury and compounds thereof. Look this over carefully and let us know whether, in your opinion, such regulation would interfere with the practice of medicine.

The second bill, Senate Int. No. 211, by Mr. Mastick, is identical with the bill he introduced last year, known then as Senate Int. No. 32. We opposed the bill at that time. Do you feel that we should continue that opposition this year? If so, give us your reasons.

January 30, 1931.

Enclosed you will find another bill amending the Workmen's Compensation Law in relation to occupational diseases, Senate Int. No. 278-Hickey (Assembly Int. No. 451-Gimbrone).

Mr. Hastings has reintroduced, with some modifications, his medicinal liquor bill of last year, Senate Int. No. 263. As reported before, this bill has been referred to the Finance Committee.

Senator Downing has reintroduced, with some modifications, his bill of last year in the Senate-Int. No. 53 (Assembly Int. No. 344-Livingston), which would provide that all public employees be insured in a state fund and opportunity provided for insurance in the state fund by all employers in private industries. Last year we opposed this bill, as you will find by referring to your records.

February 2, 1931.

Enclosed you will find a bill introduced in the Assembly by Mr. Byrnes-Int. No. 432—amending the Education Law in relation to physiotherapists. The amendment you will find very objectionable and we recommend that you immediately file with your legislators the most powerful protest you can muster.

In addition, there are three other bills that are reintroductions. All of these bills were before the legislature last year.

Senate Int. No. 344-Cilano (Assembly Int. No. 442-Esmond), was carried last year by Mr. Baumes. We were in favor of the bill at that time.

Senate Int. No. 345-Cilano (Assembly Int. No. 441-Esmond), is a greatly modified reproduction of Assembly bill Int. No. 960-Byrnes, of last year.

Senate Int. No. 361-McNaboe, of New York City. This is the chiropractic bill that Mr. Porter carried last year. It has not been revised and contains the same objectionable waiver clause upon which we centered our opposition last year.

The chiropractors are sponsoring a bill as in former years, and are conducting an active campaign of publicity, especially in New York City. As usual they ask that all now practising the cult be licensed. They are perfectly willing to exclude all others from practising their brand of treatment. Physicians must be on guard lest the cultists succeed in their attempts to secure official recognition.

The physiotherapists are also actively campaigning for increased recognition, even to asking

that they be permitted to give x-ray and light treatments without a prescription from a physician. This amounts to a recognition of their diagnostic ability, which of course does not exist.

Physicians throughout the State can obtain information from the chairmen of the legislative committees of their county medical societies, for copies of all medical bills are sent to the chairmen.

BULLETIN NUMBER 2

January 28, 1931.

We have had quite a few letters from chairmen advising us that they will be present at the conference on February 10th. Hope that you haven't overlooked the matter, and that we will have the largest attendance we have ever had. We are going to have plenty of material to discuss at that time. (See page 236.)

Yesterday there appeared in the legislature the following bills:

Senate Int. No. 344-Cilano (Assembly Int. No. 442-Esmond), creating qualified psychiatrists.

Senate Int. No. 361-McNaboe—the Porter chiropractic bill of last year. Senator McNaboe comes from the 16th district, New York City.

Assembly Int. No. 432-Byrnes, amending the law with regard to the practice of physiotherapy. He would remove the limitations placed on the practice of physiotherapy by technicians and add the privilege of treating diseases by actiotherapy and electrotherapy, exclusive of the x-ray, and adding to the examining board a member of the New York State Society of Physiotherapists. Mr. Byrnes comes from the 12th district, New York City.

Assembly Int. No. 451-Gimbrone (Senate Int. No. 278-Hickey), is another bill providing for the treatment of all diseases arising out of employment. It is the third bill of this type to be introduced this year.

Copies of these bills will be sent out as soon as they are printed.

Senator Hastings has reintroduced his medicinal liquor bill of last year—Senate Int. No. 263—and it has been referred to the Finance Committee.

The Committee on Codes announces a hearing will be given on the Vaughan anti-vivisection bill—Assembly Int. No. 143—on Tuesday, February 24th.

HARRY ARANOW,
WALTER A. CALIHAN,
JOHN J. RAINEY,
Committee on Legislation.

HOTELS OF SYRACUSE

The next annual meeting of the Medical Society of the State of New York will be held in Syracuse, N. Y., June 1-3, 1931. The headquarters and meetings will be in the Hotel Syracuse. The rates in the principal hotels of Syracuse are shown in the following table:

	Room for One Person			Room for Two Persons			
	With Bath	Without Bath	With Shower	With Bath	Without Bath	With Shower	With Twin Beds and Tub
Hotel Syracuse.....	$4.00 and up	.....	.....	$6.50 and up	.....	.....	.....
Jefferson-Clinton.....	$3.00	$2.50	.....	$5.00 and $6.00	$4.00	.....	.....
The Onondaga.....	$3.00 and up	$2.50 and up	$3.00 and up	$5.00 and up	$4.00 and up	$5.00 and up	$6.00 and up
The Yates.....	$3.00	(With running water, $1.75) (With toilet—$2.25)		$4.00 and $5.00	(With running water—$3.00) (With toilet—$3.50)		

ASSOCIATED PHYSICIANS OF LONG ISLAND

The thirty-third annual meeting of the Associated Physicians of Long Island was held on Saturday, January 31, 1931, in Brooklyn. The organization consists of about eight hundred members from every part of Long Island. It has published its own organ, the *Long Island Medical Journal*, which was merged with the *Medical Times* at the beginning of this year. The objects of the Association are both scientific and social.

The program of the annual meeting was in two parts. An all-day session was held in the Methodist Episcopal Hospital at Seventh Avenue and Sixth Street, Brooklyn. The morning was given over to clinics, both medical and surgical, and to observation of the work of the several departments.

A luncheon was served at one o'clock by courtesy of the Hospital.

A business meeting was held at two o'clock followed by a scientific session at three o'clock. The scientific program followed the usual plan that has been successfully carried out by the Association for several years, eighteen members of the Hospital Staff giving five-minute talks on clinical topics. The program was as follows:

1. The Diagnosis of Acute Osteo-Myelitis. Dr. H. K. Bell.

2. The Arsphenamines in Syphilis Dr. John C. Graham.

3. Is Spinal Anesthesia a Plaything or a Necessity? Dr. Henry F. Graham.

4. Case Report: Dislocation of a Cervical Vertebra Dr. Donald E. McKenna.

5. Prevalent Hypothyroid Manifestations. Dr. Irving L Cabot.

6 An Unusual Case of Rectal Hemorrhage. Dr. Seymour Clark.

7. Maternal Mortality in 15,000 Cases of Midwifery at the Methodist Hospital. Dr. H. W. Mayes.

8 Gastro-Enterostomy. An Unusual Complication. Dr. Russell S. Fowler.

9. Moving Picture: Simple Procedures in Infants. Dr. Walter Watton.

10. Contrasting Types of Cardiac Dyspnea. Dr. Frank B. Cross.

11. An Acidotic Type of Dyspnea Dr. A. T. Mays.

12. Statistical Review of Accidental Hemorrhage in 10,000 Cases of Pregnancy at Methodist Hospital. Dr. Harvey B. Matthews.

13. Hemochromatosis. Dr. E. B. Smith.

14. Volvulus of the Cecum. Dr. Pierre Renaud.

15. Cerebral Hemorrhage of the New Born. Dr. Walter R. Coles.

16. Thrombophlebitis Following Tonsilectomy. Dr. Charles A. Anderson

17. Tumor of the Frontal Lobe—Case Presentation Dr. Harold R. Merwarth.

18. Roentgen Diagnosis of Gall-Bladder Disease. Dr. George W. Cramp.

H. D. Langworthy, M.D, Chairman

The evening session was held in the Montauk Club and began with a social supper, at 6:30 o'clock. This was followed by a presentation of the subject of "Oysters From a Modern Point of View" by Dr. Herbert D. Pease, of the Pease Laboratories, New York City, who has been engaged in research work for years under the auspices of the Oyster Growers and Dealers Association of North America, Inc. Dr. Pease gave an illustrated lecture on the living processes of the oyster, with special reference to its feeding habits and their relation to its wholesomeness as human food. Some of the modern dealers market their oysters by placing them in sea water which has been purified by filtration and chlorination, and in twenty-four hours each shell fish has passed enough water through its gills and stomach to free itself of all food materials. It will then keep longer under marketing conditions and is in prime condition.

Another process that acts for the protection of human beings is the fact that oysters close their shells tightly and hold them closed when the temperature of the water falls to 40° F.; and within a few days the process of digestion has destroyed the bacteria within the shell. They are then substantially sterile.

Dr. Pease also described researches which are now being carried on in regard to the vitamin content of the oysters and their value in anemia. The dark part of the oyster and the clam is an organ for the conduct of digestive operations. It is somewhat analogous to the liver of mammals and probably has the like effects The white part of the oyster also has the anti-anemic qualities of glands.

Mr. Howard W. Beach, of New Haven, Connecticut, President of the Oyster Growers' Association, showed two reels of moving pictures which had been made in the course of the research work of the Association and supplemented with some by the United States Government. These pictures were distinct and vivid and showed the whole process of reproduction from the extrusion of the ova and sperm from the adult oysters, through the stage of fertilization and the division of cells, the free swimming larvae, and finally the method of their attachment to a solid object, such as a stone or shell. The picture is of intense interest not only to physicians, but also to biology students in colleges and high schools. The members of the Associated Physicians of Long Island felt that the pictures and the lecture combined practical instruction and entertainment in a most happy manner.

The newly elected president of the Association is Dr. Henry C. Courten, of Richmond Hill, who succeeds Dr. Charles H. Goodrich, of Brooklyn. Dr. James Cole Hancock of Brooklyn was re-elected secretary for the thirty-second time.

BLOOD DONORS IN NEW YORK CITY

Hundreds and even thousands of persons in Greater New York are willing to sell their blood for transfusion purposes; and agencies have been formed for the purpose of supplying donors on short notice. The service is of such importance that the Department of Health of New York City has undertaken to examine and certify the physical condition of those who apply for registration in the agencies.

Regulations governing the licensing of agencies and the employment of blood donors were adopted by the Department of Health of New York City on November 21, 1930. Section 109 concerns the agencies and their duties in regard to records of donors.

Section 108 goes into great detail regarding the examination and certification of blood donors and their identification. It also requires every physician to examine the donor before taking his blood and to record his examination in a book carried by the donor, and also to report the transfusion to the Department of Health for the purpose of tracing the donor should occasion require. Making the record and the report is a service which one physician renders to another.

The record book carried by each donor contains twelve pages bound in cloth and card board covers. It carries a photograph and description of the donor, his physical tests, including the luetic, and a concise statement of his blood classification.

The book also has blank pages on which the physician employing the donor shall enter the results of a physical examination made by him, before taking the blood. If the donor is rejected because of a physical condition, the physician shall make an entry of the reason for the rejection. The book is a complete record of the donor's experience in giving blood.

The certification of a donor is no guarantee of his fitness in all respects. The doctor employing a certified donor is expected to make his own tests and record them in the donor's book. But a certification is evidence that the donor has been subjected to scientific tests and is safer by far than a stranger on whom no tests have been made.

The regulations of the Department of Health do not interfere with the privilege of a physician to use a relative or friend of a patient as a donor, the theory being that the family of the sick person knows about the physical condition of such a donor.

PHYSICIANS ART CLUB EXHIBIT

The fifth Annual exhibition of the New York Physicians Art Club will be held at the Academy of Medicine, 103rd Street and Fifth Ave., New York City, from February 14th to March 14th.

A cordial invitation is extended to all members of the medical profession who wish to show original work in the plastic or graphic arts to participate in the coming exhibition. Membership in the New York Physicians Art Club is not necessary in order to exhibit. Further details may be obtained by addressing, Dr. Louis C. Schroeder, Secretary, 50 East 72nd Street, New York City.

The previous exhibitions have been of great interest to physicians and to the public and have been described in this Journal.

BRONX COUNTY

A regular meeting of the Bronx County Medical Society, held at Concourse Plaza, on January 21, 1931, was called to order at 9 P. M. the President, Dr. Gettinger, in the Chair.

Election of candidates being in order, it was moved and carried that the Secretary be instructed to cast one ballot for the following candidates for membership: Drs. Abraham L. Kornzweig, Jacques L. Kubrick, Morton R. Milsner, Milton I. Schwalbe and Edna Walck.

Reports of Committees being in order, Dr. Aranow, Chairman of the Legislative Committee of the Medical Society of the State of New York, appealed for the united cooperation of the profession in the matter of legislation this year.

Dr. Keller submitted his Annual Report as Treasurer.

Dr Magid, Chairman of the Committee on Medical Economics, reported relative to a plan of our Counsel for the collection of debts for medical service rendered by our members

The President reported on a meeting of the Presidents of the five County Medical Societies and the Director of the Academy of Medicine with the Commissioner of Health on January 5th The object of Commissioner Wynne in calling the meeting was to gain the constructive cooperation of the medical profession The Commissioner made some valuable suggestions, among which were that a committee be appointed consisting of representatives of the various County Medical Societies to consider questions concerning community welfare and the economic stability of the physician

The President also reported regarding a meeting of the State Committee on Public Relations, of which Dr Sadlier is chairman and at which our Society was represented by the Editor of our Bulletin, the President and First Vice-President The meeting was very interesting It discussed the question of educating the public on what the doctor is doing in order to gain the public confidence

Dr William Klein reported on the work being done by the Program Committee of the Bronx Tuberculosis and Health Committee The Chairman of this Committee is Dr Podvin, and its work is being guided largely by members of this Society Its purpose is to popularize immunization against diphtheria and for examination of the pre-school child As the campaign is to be carried on in the interest of the family physician as well as the public, Dr Klein appealed for the cooperation of the members

The Scientific Program then proceeded as follows

Papers

1 Salpingography A Review of Cases, Illustrated by Lantern Slides, Elsie Fox

2 The Diaphragm: Its Relation to Diseases of Contiguous Structures Illustrated by Lantern Slides Jacob Fierstein

3 Some Common Rectal Disorders Newer Considerations and Treatment, Frank M Frankfeldt

Respectfully submitted
I J LANDSMAN, M D, *Secretary*

GREENE COUNTY

The regular meeting of the Society was held at the Saulpaugh Hotel, in Catskill, on the 13th of the month, at 7 P M

The business and scientific sessions were preceded by a dinner and the attendance was about fifty per cent of the membership, some of the men driving thirty-five miles to attend

The meeting was called to order at the conclusion of the dinner Dr Rapp, Chairman of the Committee appointed at the October meeting to further the plan to establish a County Hospital and a County Health Unit, reported the results of their efforts, and stated that there had been a meeting with the Trustees of the Hospital Fund and two meetings with the Board of Supervisors, that the matter was still being investigated by a special committee appointed by the Board of Supervisors and that a special meeting of this Board would be called later to act on the matter There seems to be a strong sentiment among the people for the proposed hospital

The County Health Unit does not seem to be well understood even among some of the physicians and a resolution was adopted following Dr Rapp's report that a special meeting of the Society be called to discuss this matter

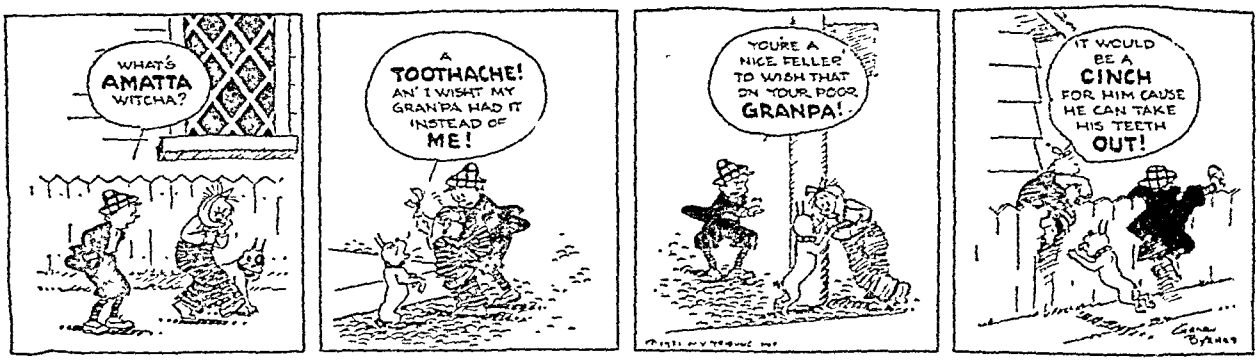
Dr Charles L Willard, Treasurer of the Society, presented his resignation It was decided that as Dr Willard would end his term of forty years as Treasurer on March 12 1931, his resignation be accepted to take effect on that date, and that Dr Rapp be appointed acting treasurer until that time

Dr O D Chapman, Assistant Bacteriologist of the University of Syracuse, and Director of the Syracuse City Laboratory, presented a paper on Tularemia, illustrated by lantern slides This was delivered in a very pleasing and entertaining manner and was thoroughly enjoy by all

W M RAPP, *Secretary*

THE DAILY PRESS

Reg'lar Fellers — Bump Said a Mouthful — By Gene Byrnes



From the New York Herald Tribune of January 8, 1931

THE DEAR OLD PAST

We once told a musician that we envied his marvellous ear for chords, but he wished he could get out of it for every discord was torture to him. Modern comforts exact their own prices; and the happiest man is probably the one with the least care,—the primitive man. So thinks James J. Montague in the following verses in his column "More Truth Than Poetry" in the New York *Herald Tribune* of January eighth:

"One does not see the dinosaur
About the dooryard any more.
The pterodactyl's cheerful lay
Cannot be heard at all today.
Along the lane or thoroughfare
There never stalks a great cave bear.
And though one search the world around,
The missing link cannot be found.
In vain the hills and vales we scan
To see a Neolithic man.
And from the prairie and the lawn
The eohippus long has gone.
Fled with the world's departed youth.
The tiger of the saber tooth;
The mastodon's earth-shaking roar
Shakes down the forest trees no more.
The ichthyosaur's piercing eyes
No more are tilted toward the skies.
And only meaner creatures dwell
Upon the heights or in the dell.
But, backward though our eyes are cast,
We can't bring back the vanished past.
But only sorrowing sighs can raise
In memory of the good old lays,
Which must have vastly happier been
Than those we now are living in."

HEADACHE RESEARCH

The University of Illinois is conducting an investigation into periodic headache or migraine, and advertised for a patient for observation. The *New York Times* of January 7, commenting on the response, says:—

"In its search for a cure the research and education hospital offered $50 a month and board for a 'perfect' subject. The first day ninety-two persons applied. Out of a total of 750 applicants Theodore Roberts, 23 years old, an electrician, of Geneva, Ill., was selected. He believes his headache is 'the oldest and splittingest in existence.' It lays him low for a day or two every two weeks and has ever since he was 11. His headaches, he says, are 'dandies.' He inherited them from Mother.

"Now he is to be lodged in the quietest room in the laboratory, his sole task being to produce his headaches on regular schedule for three months. Should he fail to do so, it is uncertain whether the doctors will be distressed or delighted. Rest and quiet might prove a cure, but whether it is the one the research workers want is another matter.

SUBWAY NOISE

The Department of Health of New York City and other agencies are making scientific studies of noises, in which the subway officials are actively cooperating, through the engineering staff of the Western Electric Company. The New York *Times* of January 7 describes tests made in the Seventh Avenue Subway Manhattan with the following results:

"It was discovered at once on the trip to the Battery and return that the acceleration of the motors produced the greatest noise from a single source within the car. When the train left a station, where the noise found some escape in the open space of the platform, the roar increased. The greatest noise occurred as the motors accelerated in the tunnel while another train passed by. The maximum sound recorded on the trip was represented by 120 decibels.

"It was next discovered that more sound entered the microphone inside the car than through the one in the window, except when another train passed the test car. The greater din inside was attributed to the grinding gears, wheels and motors beneath the floor of the car and the fact that this noise could not easily escape from the closed car. The rattle in the structure of the old car also made its impressions on the instruments.

C. I. Conover, division engineer of the Board of Transportation who watched the tests, said the Board was studying several remedies offered for the reduction of subway noise, and that the findings of the acoustic engineers were expected to aid the board in reducing noise on the present lines as well as the new Eighth Avenue subway.

Studies are being made, it was said yesterday, on sound deadening materials for subway cars, motors, tracks and tunnels. One suggestion has been the use of a new worm gear to reduce motor noises, and pads to be inserted under steel rails."

HEALTH SERVICES TO COLLEGE STUDENTS

The principles and facts regarding health services to college students stated in an editorial in this Journal on page 91 of the issue of January 15, 1930, and in a report by Dr. Mitchell in the Journal of November 1, 1930, page 1283, are confirmed by the following news item from the New York *Sun* of January 8:

"Responsibility for the health of students was laid on the doorstep of the colleges today by the Federal Office of Education.

'The governmental agency, noting a failure on the part of land grant college authorities to learn of illness promptly warned officials they 'cannot free the schools of responsibility for the health of students.'

"'Adequate health facilities must be provided,' the report said. 'The present method of discovering and checking student illness is entirely inadequate. Only a few schools have any definite suggestions for improving this service.

'At present most of the schools rely upon the voluntary good auspices of fraternities, house mothers, solicitous friends or upon the students themselves to report illness.

'Where students lives for the most part, as they do in land grant institutions, in privately operated rooming houses, it is possible for a boy and less frequently for a girl to be seriously ill for days without causing solicitude upon the part of anyone.

"'There is no indication that the cause of students absence from classes is investigated until some untoward circumstance creates apprehension. There should be some means devised for remedying this serious defect.'

'Thirty-four of the colleges kept approved lists of rooming houses but only twenty-six inspected them, 'and this inspection is obviously in many cases too cursory to have real value.'

"Eighteen of the institutions reported examining food handlers regularly, while nineteen did not.

"'The laxness in examining employees who handle food is far from reassuring in the light of our knowledge of spreading contagious disease,' said the report.'

THE PRICE OF AN EAR

The 'Intern' column of the *New York Herald-Tribune* of January 10 contains the following story which may possibly be more entertaining than truthful:

'Here's a true hobo story from the Bowery. A gandy-dancer working out on Long Island, fell and bumped his head against the third rail, just about singeing off his right ear. The railroad company put him in hospital and employed expert plastic surgeons who after two months of artistic skin grafting work built him up an ear almost as good as new. The railroad paid the surgeons $1,400. The old gandy-dancer was outraged.

"Give all that dough to the docs! Why didn't you give it to me? To hell with the ear!"

BOOKS RECEIVED

Acknowledgment of all books received will be made in this column and this will be deemed by us a full equivalent to those sending them. A selection from this column will be made for review, as dictated by their merits, or in the interests of our readers.

MEDICAL CLINICS OF NORTH AMERICA. Vol. 14, No. 3. November, 1930. (Mayo Clinic Number.) Published every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues). Cloth, $16.00 net; paper, $12.00 net.

ASSOCIATION FOR RESEARCH IN NERVOUS AND MENTAL DISEASE. Vol. 6. The Cerebellum: an investigation of recent advances. Editorial Board Frederick Tilney, M.D. and others. Octavo of 649 pages, illustrated. Baltimore, Williams & Wilkins Company, 1929. Cloth, $10.00.

ASSOCIATION FOR RESEARCH IN NERVOUS AND MENTAL DISEASE. Vol. 8. The Intracranial Pressure in Health and Disease: an investigation of the most recent advances. Editorial Board Charles A. Elsberg, M.D. and others. Octavo of 519 pages, illustrated. Baltimore, Williams & Wilkins Company, 1929. Cloth, $6.00.

THE BEHAVIOR OF THE NEWBORN INFANT. By KARL CHAPMAN PRATT, PH.D. and others. Octavo of 237 pages. Columbus, The Ohio State University Press, 1930. Paper, $3.00. (Ohio State University Studies, Contributions in Psychology, No. 10).

TEXT-BOOK FOR NURSES: Anatomy, Physiology, Surgery and Medicine. By E. W. Hey Groves, M.D., and the late J. M. Fortescue-Brickdale, M.D. Fourth Edition. Octavo of 641 pages, illustrated. London and New York, Oxford University Press, 1930. Cloth, $6.50. (Oxford Medical Publications.)

PIERSOL'S HUMAN ANATOMY: Including Structure and Development and Practical Considerations. Ninth Edition revised under the supervision of G. Carl Huber, M.D., Sc.D. Quarto of 2104 pages, illustrated. Philadelphia, J. B. Lippincott Company, 1930. Cloth, $10.00.

A TEXT-BOOK OF THE SURGICAL DYSPEPSIAS. By A. J. WALTON, M.S., M.B. Second Edition. Octavo of 720 pages, illustrated. New York, Longmans Green & Company, 1930. Cloth, $15.00.

OPERATIVE GYNECOLOGY. By HARRY STURGEON CROSSEN, M.D., F.A.C.S. & ROBERT JAMES CROSSEN, M.D. Fourth Edition. Octavo of 1078 pages, illustrated. St. Louis, C. V. Mosby Company, 1930. Cloth, $15.00.

MEDICAL JURISPRUDENCE: A Statement of the Law of Forensic Medicine. By ELMER D. BROTHERS, B.S., LL.B. Third Edition. Octavo of 309 pages. St. Louis, C. V. Mosby Company, 1930. Cloth, $3.50.

A MANUAL OF NORMAL PHYSICAL SIGNS. By WYNDHAM B. BLANTON, B.A., M.D. Second Edition. Octavo of 246 pages, illustrated. St. Louis, C. V. Mosby Company, 1930. Cloth, $3.00.

PHYSICAL DIAGNOSIS. By WARREN P. ELMER, B.S., M.D., & W. D. ROSE, M.D. Sixth Edition. Octavo of 903 pages, illustrated. St. Louis, C. V. Mosby Company, 1930. Cloth, $10.00.

MICROBIOLOGY AND ELEMENTARY PATHOLOGY: For the Use of Nurses. By CHARLES G. SINCLAIR, B.S., M.D. Octavo of 362 pages, illustrated. Philadelphia, F. A. Davis Company, 1930. Cloth, $2.50.

CHRONIC ARTHRITIS AND RHEUMATOID AFFECTIONS with recovery record by Bernard Langdon Wyatt, M.D., F.A.C.P. with the collaboration of Louis I. Dublin, Ph.D. Octavo of 141 pages. New York, William Wood & Company, 1930. Cloth, $2.50.

METHODS AND PROBLEMS OF MEDICAL EDUCATION. (Eighteenth Series). Quarto of 329 pages, illustrated. New York, The Rockefeller Foundation, 1930.

SURGICAL CLINICS OF NORTH AMERICA. Vol. 10, No. 6. December, 1930. (Philadelphia Number). Published every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues). Cloth, $16.00 net; paper, $12.00 net.

THE PATHOLOGY OF INTERNAL DISEASES. By William Boyd, M.D., M.R.C.P. Octavo of 888 pages, illustrated. Philadelphia, Lea & Febiger, 1931. Cloth, $10.00.

THERAPEUTICS, MATERIA MEDICA AND PHARMACY; The Special Therapeutics of Diseases and Symptoms, the Physiological and Therapeutical Actions of Drugs, the Modern Materia Medica, Official and Practical Pharmacy, Prescription Writing, and Antidotal and Antagonistic Treatment of Poisoning. By Sam'l O. L. Potter, A.M., M.D. Fifteenth edition, Revised by R. J. E. Scott, M.A., M.D. Octavo of 997 pages. Philadelphia, P. Blakiston's Son & Company, Inc. 1931. Cloth, $8.50.

ANNALS OF THE PICKETT-THOMSON RESEARCH LABORATORY. Vol. VI, The Pathogenic Streptococci: the role of the streptococci in scarlet fever. Quarto of 470 pages. Baltimore, The Williams and Wilkins Company, 1930.

RECENT ADVANCES IN BIOCHEMISTRY. By John Pryde, B.Sc., M.Sc. Third edition. Octavo of 393 pages, illustrated. Philadelphia, P. Blakiston's Son & Co., Inc., 1931. Cloth, $3.50.

TRAUMATOTHERAPY: The Treatment of the Injured. By John J. Moorhead, B.Sc., M.D. Octavo of 574 pages, illustrated. Philadelphia and London, W. B. Saunders Company, 1931. Cloth, $7.00.

PRACTICAL RADIATION THERAPY. By Ira I. Kaplan, B.S., M.D. With a special chapter on applied x-ray physics by Carl B. Braestrup, B.Sc., P.E. Octavo of 354 pages, illustrated. Philadelphia and London, W. B. Saunders Company, 1931. Cloth, $6.00.

THE FACTOR OF INFECTION IN THE RHEUMATIC STATE. By Alvin F. Coburn, M.D. Quarto of 288 pages, illustrated. Baltimore, The Williams & Wilkins Company, 1931. Cloth, $6.00.

A MANUAL OF THE COMMON CONTAGIOUS DISEASES. By Philip Moen Stimson, A.B., M.D. Octavo of 351 pages, illustrated. Philadelphia, Lea & Febiger, 1931. Cloth, $3.75.

BIOASSAYS, A HANDBOOK OF QUANTITATIVE PHARMACOLOGY. By James C. Munch. Octavo of 958 pages, illustrated. Baltimore, The Williams & Wilkins Company, 1931. Cloth, $10.00.

BOOK REVIEWS

MANUAL OF PHYSIOLOGY By H WHITECHURCH LEE MD, BS FRCS, and DAVID DESMOND MD DSc FRCP Third Edition 12mo of 520 pages illustrated London and New York Oxford University Press, 1930 Cloth (Oxford Medical Publications)

This book on physiology first appeared in 1911 and is very much like the other standard works in that it is both in its academic presentation and in the information it offers to the student Its choice should therefore be left not to the recommendations of the reviewer but to the tastes of the individual purchaser

EMANUEL KRIMSKY

INJURIES TO JOINTS By SIR ROBERT JONES Bart KBE CB Third Edition 16mo of 176 pages illustrated London and New York Oxford University Press 1930 Cloth $2.00 (Oxford Medical Publications)

This manual originally written as a war manual has now passed through its third edition and is a book of almost two hundred pages In the first year of the war 1914 it was found that there were such divergencies of opinions and methods of the treatment of acute injuries and that as the mass of material was great that some method of standardization must be arrived at in treatment Sir Robert Jones through this manual was able to standardize traumatic injuries of the skeletal body and every English surgeon in Europe had one of these manuals in his kit It is proven that those same principles are applicable to the injuries of civil life that now occur in the great mechanical age following the war It is an excellent manual for both student and practitioners

JA C R

ALIMENTARY ANAPHYLAXIS (Gastro intestinal Food Allergy) By GUY LAROCHE CHARLES RICHET FILS and FRANÇOIS SAINT GIRONS 12mo of 139 pages Berkeley, University of California Press 1930 Cloth $2.00

This book is a translation from the French by Mildred and Albert Rowe It deals with food sensitization and is the most extensive summary in English of this subject Besides a discussion of the history and etiology of this phenomenon there is a long and detailed chapter on symptoms with a large list of case reports The authors devote much space to *pathogenesis with considerable* theoretical speculations They also report their results with *experimental food sensitization* The chapter on treatment contains many helpful clinical suggestions

WILLIAM S COLLENS

A SYNOPSIS OF SURGERY By ERNEST W H GROVES MS MD BSc (Lond) FRCS (Eng) Ninth Edition 12mo of 676 pages illustrated New York William Wood & Company 1930 Cloth $5.00

An immense amount of information is concentrated in the less than 700 pages in this book

The arrangement of subjects is along standard lines and quite complete The symptoms of Treatments are necessarily dogmatic but are in a rule up to date The section on Spinal Anesthesia could be re written with advantage No mention is made of the newer anesthetics such as Sodium Amytal

For the student seeking terse phrases to memorize or as a ready reference for the busy doctor the book is well suited Of readable size and fairly legible type its popularity is attested by its numerous editions the last being the ninth

STANLEY P THOMAS

HYPERTENSION By LESTER I GAGER MD Octavo of 158 pages Baltimore, Williams & Wilkins Company 1930 Cloth $3.00

As books on hypertension go this new addition by Dr Gager will no doubt find its place among the best Because of our incomplete knowledge of this subject we are necessarily obliged to deal with hypothetical speculations and theories The writer has made a serious survey of the literature and has classified 500 articles which have served as a basis for his text

The practitioner is primarily interested in treatment In the face of such discrepancies of opinion the evaluation of any single method of treatment cannot be recommended with any degree of confidence For example the use of nitrites is disparaged Liver extract is mentioned as a former remedy Diathermy so enthusiastically recommended by the late Clifford Allbutt as the best single method of treatment is not even mentioned

Dr Gager places faith mainly in two methods first the psychic approach and second the use of sulphocyanates

EMANUEL KRIMSKY

A TREATISE ON ORTHOPEDIC SURGERY By ROYAL WHITMAN MD MRCS LACS *Ninth Edition* Thoroughly Revised Octavo of 1085 pages illustrated Philadelphia Lea & Febiger 1930 Cloth $10.00

This astounding treatise on orthopedic surgery has passed through its ninth edition First published in 1901 it has grown from a text book of a few hundred pages to its present size of a thousand pages and it is of itself an indication of the present scope of orthopedics and the expansion of the subject in thirty years The original plan of the book is unchanged a compliment to the foresight of the writer but each subject treated is enlarged and so kept abreast with the latest thought Through its size it almost ceases to be a text book but has become a reference book however it is too well established as the standard text book in the English language to lose this position

JA C R

METHODS OF REFRACTION By JAMES THORINGTON A M M D Second Edition Revised 12mo of 406 pages illustrated Philadelphia P Blakiston's Son & Company 1930 Cloth $3.00

This work has been popular for so long that the name Thorington is almost synonymous with refraction in the minds of those physicians who practice ophthalmology In the special hospitals the interne reaches for Thorington as an answer to his every refraction problem

This new edition is concise as the first is written in the same clear manner One feels that he is being instructed in every detail and the statements are based on accepted evidence Obsolete matter and devices have been discarded and new ones inserted

All in all we feel safe in saying that Methods of Refraction still holds the first place among works of its kind We recommend it to every ophthalmologist young or old

J N EVANS

OXIDATION REDUCTION POTENTIALS By L MICHAELIS Octavo of 199 pages illustrated Philadelphia J B Lippincott Company 1930 Cloth $5.00 (Monographs on Experimental Biology)

The latest addition to the series of Monographs on Experimental Biology founded by Jacques Loeb is this volume on oxidation reduction potentials by Michaelis This book is a pioneer treatment of a new subject by a distinguished investigator

"Stimulated by his own experimental work on these questions, the author thought it timely and useful to venture to weigh the investigations so far made, to collect and to analyze their application to biological problems and to discuss the theoretical principles of oxidation reduction potentials with the hope that future work by others as well as by himself will be facilitated," says Michaelis in the foreword to the book.

The subject is treated under two main divisions. Part One, dealing with physico-chemical considerations, is a discussion of what is known at present regarding the mechanism and theory of redox potentials, together with a review of the experimental data obtained to date. Part Two deals with physiological applications. The physiologically important redox systems—cystein, glutathione, hemoglobin, cytochrome, Warburg's respiratory ferment and others are presented and discussed.

M. J. SHEAR.

THE PRINCIPLES AND PRACTICE OF HYGIENE. By DEAN F. SMILEY, A.B., M.D., ADRIAN G. GOULD, Ph.B., M.D., and ELIZABETH MELBY, M.A., R.N. Octavo of 415 pages, illustrated. New York, The Macmillan Company, 1930. Cloth, $2.50.

This book is intended as a text for use in the nursing curriculum. Every effort has been made in it to discuss subjects about which there is widespread misinformation. Simply written, yet presenting a mass of information in easily digestible form, it is worthy of recommendation to nurses for the study of personal hygiene.

FREDERIC DAMRAU.

APHASIA IN CHILDREN. By ALEX. W. G. EWING, M.A., Ph.D., with an introduction by E. D. Adrian, M.D. Octavo of 152 pages. London, Oxford University Press, 1930. Cloth, $3.50. (Oxford Medical Publications.)

We believe this book will be of great interest to the Otologist interested in the hard of hearing. About one-half of its pages are devoted to hearing tests and the amount and character of residual hearing in those who seem to have little or none. The remaining half is devoted to Aphasia, using the word in its larger sense.

It is a practical work based on experimental observation. It can be heartily recommended. W. D. L.

CLINICAL NUTRITION AND FEEDING INFANCY AND CHILDHOOD. By I. NEWTON KUGELMASS, M.D., Ph.D., Sc.D. Octavo of 345 pages, illustrated. Philadelphia and London, J. B. Lippincott Company, 1930. Cloth, $6.00.

This should prove to be a very helpful little volume for the practitioner's library.

The author handles such subjects as alimentary diseases, deficiency diseases, metabolic and allergic conditions in a brief yet concise manner, aided by graphs and illustrations.

Samples of diets are given in detail, also the tables of food values at the end of the book should not be overlooked.

THURMAN B. GIVAN.

EMBRYOLOGY AND EVOLUTION. By G. R. DE BEER. 12mo of 116 pages. London and New York, Oxford University Press, 1930. Cloth, (Oxford Medical Publications.)

This interesting little book will be eagerly read by students of Embryology and Evolution. It is really an essay in refutation of the theory of recapitulation of Haeckel by a series of progressive arguments in favor of the theories of Von Baer and his disciples.

In it the author seeks to prove that the modification of the shape of the adult animals in the successive generations during evolution could now be ragarded as a series of stages in the history of the race (phylogency) depends on modification in ontogeny (the series of shapes through which the individual passes in its own development from embryo to adult), and that changes in characteristics are due to the differences in the speed of the development of internal factors, mendelian factors, or genes. It also shows that the growth of genes can be changed by external factors.

This book is, in a way, a review of an enormous amount of work on this subject as evidenced by the Bibliography which covers nearly five pages.

The author's style is clear and concise and makes very interesting reading, and the book making is of the usual excellence of the Clarendon Press. G. G.

AMERICAN POCKET MEDICAL DICTIONARY. Edited by W. A. DORLAND, A.M., M.D. Fourteenth Edition, revised, 16mo of 837 pages. Philadelphia and London. W. B. Saunders Company, 1930. Flexible binding. Plain $2.00; Thumb Index, $2.50.

The new edition has been enlarged by about 3,000 additional terms and contains 60 more pages. This work continues to fill the needs of those desiring a medical lexicon in compact form. FREDERIC DAMRAU.

RADIUM AND CANCER. By DUNCAN C. L. FITZWILLIAMS, C.M.G., M.D., Ch.M., F.R.C.S. Octavo of 172 pages, illustrated. New York, William Wood & Company, 1930. Cloth, $4.50.

A text-book on radium therapy especially adapted for practical use. Avoiding discussion of perplexing theories, the author has presented the subject in a simple style, reviewing the physics, the effects of radium on the tissues, and the paraphernalia associated with its use. Abundant illustrations, many in color further elucidate the subject.

A complete description of radium therapy as applied to cancer of the mouth, pharynx, larynx, œsophagus, rectum, thyroid, breast, prostate, bladder, penis and skin furnish the physician with a reference handbook that will guide him in the use of radium.

HARRY MANDELBAUM.

STUDIES IN ETHICS FOR NURSES. By CHARLOTTE A. AIKENS, R.N. Third Edition, thoroughly revised. Octavo of 339 pages. Philadelphia and London, W. B. Saunders Company, 1930. Cloth, $2.50.

A splendid book. Could be read with benefit by all those who contemplate embracing the difficult rôle of trained nurse. It emphasizes the most important requirements of a nurse, good moral character, a capacity for obedience, loyalty and tactfulness, and above all a desire to be of real service to patients.

Every phase of a nurse's work, and difficulties likely to be encountered, are discussed in detail. Rules of conduct, not alone towards patients, but towards the vast number of people who form contact with a nurse, are suggested.

A tendency towards reiteration is the only fault to be found with the book. E. O. S.

MANUAL OF THE DISEASES OF THE EYE. By CHARLES H. MAY, M.D. Thirteenth Edition (Revised). 12mo of 461 pages, illustrated. New York, William Wood & Company, 1930. Cloth, $4.00.

As the author says in his preface to the first edition the great difficulty in preparing a book of this sort is to say enough but not too much. One feels that he has done this excellently well.

In the present edition the subject is well kept up-to-date in every respect, the most notable addition being part of a chapter devoted to the slit lamp and corneal microscope.

A new edition of this work is always welcome and this one is no exception. E. CLIFFORD PLACE.

DOSAGE TABLES FOR ROENTGEN THERAPY By Professor Friedrich Voltz Translated from the Second German Edition 12mo of 120 pages illustrated London Oxford University Press 1930 Cloth $2.50 (Oxford Medical Publications)

An excellent and instructive monograph for all interested in X-Ray therapy The author first distinguishes between physical versus biologic dosage and explains such terms as dosage quotient percentage depth dose effective and practical dose etc

Methods of measurement are briefly given with preference for the now generally accepted ionization instruments

The main purpose of the little book is the arrangement of sixty five tables the proper usage of which will permit the therapeutic adjustment of dosage under varied conditions The key dosage or practical unit must be biologically obtained following which from the proper usage of the tables any and all adjustments can be made

The author stresses the necessity of constant physical factors in the energizing apparatus and the control check up of the skin erythema dose (S E D) as best determined by ionoquantimetric study

MILTON G WALSH

CHRONIC NASAL SINUSITIS AND ITS RELATION TO GENERAL MEDICINE Based on the Author's Semi Jubilee in the University of London The Toll of Nasal Focal Sepsis on Body and Mind By Patrick Watson Williams Octavo of 221 pages illustrated New York William Wood and Company 1930 Cloth $5.00

This book which deals with the nasal accessory sinuses as cavities which harbor foci of infection is timely and of great value. Its value lies in the fact that most rhinologists are in accord with the writings of the author but require a book like this to stimulate them to better and more thorough work in the field of sinus disease

There are several procedures featured in this work which the author has spent a life time of concentrated effort to popularize and this is a fitting instrument with which to inform the rhinologists and others interested of the value of these procedures

The exploratory puncture and aspiration of previously introduced sterile fluid for culture from the maxillary and sphenoidal sinuses although not new have been practised by relatively few men The use of the nasopharyngoscope or a suitable endoscopic instrument for study of the nasal chambers is being used extensively by the specialists in this country

The greatest value of this book will be demonstrated in the stimulus that it will afford toward better and more accurate investigation of latent sinus disease There are times when one might infer that the author is perhaps too enthusiastic but his attainments and his contributions justify a whole hearted confidence and an interest on the part of all those who may be concerned with conditions which can be traced to a focus of infection Rhinology and Medicine in general owe much to Patrick Watson Williams for this fine contribution

M C MYERSON

DISEASES OF WOMEN By ten teachers under the direction of Comyns Berkeley M A M D Edited by Comyns Berkeley H Russell Andrews and J S Fairbairn Fourth Edition Octavo of 558 pages illustrated New York William Wood & Co 1930 Cloth $6.00

It is a pleasure to call attention to this the fourth edition of a work on gynecology by ten English authorities for it is a highly competent production which covers thus special field in its entirety The last word as to the most recent advances will here be found set down clearly and thoroughly The student practitioner and gynecologist will find style arrangement and content satisfactory

A C J

PRACTICAL MIDWIFERY FOR NURSES By PETHEL SOLOMONS M D F R C P I Octavo of 354 pages illustrated London Oxford University Press 1930 Cloth $2.75 (Oxford Medical Publications)

As the text book for lectures for nurses Although simple very practical and well illustrated it will not prove of great value to American nurses Normal labor is emphasized in Simpson position Much space is devoted to obstetric methods of infant resuscitation and the rules of the Central Midwives Board (Ireland)

C A G

THE MORPHINE HABIT By G LAUGHTON SCOTT M R C S M A 12mo of 94 pages New York William Wood & Company 1930 Cloth $2.25

Dr Scott maintains that the term morphinism but is misleading for the dependence of morphinism is as involuntary and relentless as thirst in the desert These addicts desire to be cured but cannot tear themselves away from it because it is too agonizing and painful On the basis of such an attitude he strongly advises that the actual withdrawal of the drug must be gradual He insists that harsh methods in treatment are responsible for most relapses The essential point is to accomplish withdrawal under gradually developed tolerance to belladonna and hyoscine with free and increasing use of luminal

EMANUEL KRIMSKY

THE GOLD HEADED CANE By WILLIAM MACMICHAEL M D A new Edition with an Introduction and Annotations by George C Peachey Octavo of 195 pages New York The Macmillan Company 1930 Cloth $6.50

The Gold Headed Cane was carried successively by Drs Radcliffe Mead Askew Pitcairn (William and David) and Matthew Baillie

The autobiography of the Gold Headed Cane was published anonymously (the author was Dr William Macmichael) in 1827 In the following year a new and enlarged edition by the author was published also anonymously

In 1884 a third edition was published edited by Dr William Munk who added considerable to the text and brought the narrative down to 1858 In 1915 an edition of text and illustrations of the second edition with an introduction by Sir William Osler and preface by Dr Francis R Packard was published in the U S

The present edition published in England in 1923 contains the text and illustrations of the second edition with the addition of six photogravure portraits of the possessors of the cane The edition is edited by George C Peachey who writes an interesting and instructive preface and adds many notes and annotations which throw light on matters referred to in the text

After the death of Dr Baillie who was a nephew of William and John Hunter his widow presented the Cane to the Royal College of Physicians where it still is

I O TRACY

A TEXT BOOK OF PATHOLOGY Edited by E T BELL M D Octavo of 627 pages illustrated Philadelphia Lea & Febiger 1930 Cloth $8.00

This book is written by Dr E T Bell and his associates in the Department of Pathology in the University of Minnesota It is essentially a text for medical students not a reference work for pathologists

The method of presentation is the conventional one first general pathology and then the pathology of special diseases and organs It is largely descriptive with occasional brief references to etiology and symptoms where such reference would be of value in teaching There are also references to the literature to aid the student in collateral reading The reviewer liked especially the chapters on the diseases of kidney and spleen

The volume is compact and the illustrations are mostly original from the collection at the University of Minnesota

E I SMITH

OUR NEIGHBORS

GRADUATE EDUCATION IN VIRGINIA

The House of Delegates of the Medical Society of Virginia on September 22, 1929, approved and adopted a report of the Committee on Medical Education and Hospitals, outlining a plan for bringing graduate medical education within reach of the physicians of the State through the cooperation of the State Medical Society, the two medical schools of the State, and the State Department of Health. The plans were reported in several issues of the *Virginia Medical Monthly*, abstracts from which were published in four issues of the NEW YORK STATE JOURNAL OF MEDICINE as follows:

December 15, 1929, page 1550.
February 1, 1930, page 188.
February 15, 1930, page 248.
April 15, 1930, page 486.

We have just received a booklet of 68 pages entitled "Post-Graduate Medical Education in Virginia," published by the University of Virginia, Charlottesville, Va. The booklet is a review of graduate work not only in Virginia, but also in other States. The Virginia booklet, part 1, opens with the sentences:

"Various plans in thirteen American states, Colorado, Iowa, Michigan, Minnesota, Missouri, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, West Virginia and Wisconsin, are known to have been inaugurated, with different degrees of success, as state programs of graduate medical education. Such data as could be found for each state have been summarized." In addition to these thirteen states, the NEW YORK STATE JOURNAL OF MEDICINE of 1929 and 1930, has abstracted descriptive references to graduate work from the Journals of seven additional states: Georgia, Indiana, Kentucky, New Jersey, South Carolina, Texas and Washington. The New York State Journal also quoted Kansas and Nebraska as seriously considering the establishment of graduate courses.

The Virginia booklet devotes three pages to the New York State Society courses, and says:

"New York has the largest undertaking, conducted by the strongest State Society, on the most generous plan." Its description of the methods in other States is a mine of information.

The *Virginia Medical Monthly* for January says editorially:

"Throughout the past year Dr. Hodges as Chairman of this Department has had an article on this page in each issue of the Medical Monthly, discussing the work of the Department (of Clinical Education), setting forth his plans for post-graduate medical education and appealing for cooperation to the Councilors of the State Society and to the leaders in the various Component Societies.

"It will be our policy to carry out the same plan with some changes which will, I think, add to the general interest of these articles. I shall at various times during the year ask other members of the Department of Clinical Education to contribute short papers giving their views on various phases of the work, and feel sure that this will add materially to the effectiveness of our whole undertaking. We may also from time to time ask specialists to discuss the importance of holding clinics in certain specified diseases. In some cases these may be teachers connected with one of our Medical Schools and in others general practitioners or specialists in private practice. I feel that this departure will meet with the approval of the membership of the State Society."

The January Journal also has the following news note:

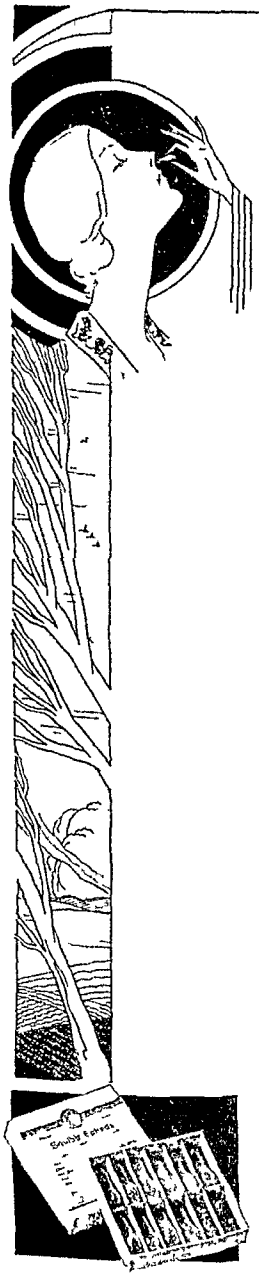
"A post-graduate clinic for negro physicians of Virginia is announced by Dr. W. T. Sanger, president of the Medical College of Virginia. This is stated to be the first educational venture of its kind in the South and will be established by the College in connection with Saint Philip Hospital, Richmond. The instruction will begin June 16th. The negro physicians have been asked to decide upon the courses. The College has had the plan under consideration for several years and it has the endorsement of the Department of Clinical Education of the Medical Society of Virginia."

MEDICAL ECONOMICS IN COLORADO

A special meeting of the House of Delegates of the Colorado State Medical Society was called for January 17, to consider recommendations of the Committees on Public Policy and on Economics. The following report of the Committee on Economics is printed in the January issue of *Colorado Medicine*, to be presented to the House of Delegates:

"Our preliminary survey of the duties of this committee brings us to the realization that it is a more difficult task than one might suppose and

(*Continued on page 250—adv. xii*)



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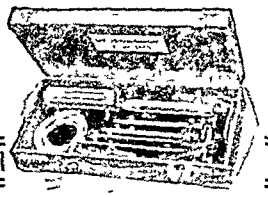
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COMMITTEE ON PUBLICATION

(*Continued from page 251—adv. xiii*)

of the question. Recently a statement was issued by the Committee on Public and Industrial Relations of that society which this Journal was requested to publish. It seemed unwise to comply with that request, lest favor might seem to be extended toward those supporting one view of the controversy. Now the opponents of the claims of this committee have prepared a reply to its statement, the publication of which has also been requested. Since both sides of the argument can thus be considered contiguously, it has been decided to publish both of these statements, which will be found on subsequent pages. They appear without the endorsement of this journal which maintains a neutral attitude so far as an expression of opinion is concerned."

The statement favoring contract practice was prepared by Dr. A. Macrae Smith, of Bellingham, President of the Society of Industrial Surgeons of the State of Washington. He first described the Medical Aid Act of 1917, as follows:

"This Act provided that the cost of the medical and surgical treatment should be paid for equally by the employer and employee. Two types of treatment were authorized, generally known as the 'State Plan,' and the 'Contract Plan' of treatment. Where the 'State Plan' operates, the employee and employer pay their joint fee to the State, which in turn pays the doctors for services rendered the injured workmen. Where the 'Contract Plan' operates it is provided that upon the consent of a majority of the employees and employer, a contract for the care of injured workmen can be executed with any physician or hospital association for a period not to exceed three years. However, the supervisor of the Industrial Insurance Division is required to investigate fitness and ability of the surgeon or hospital association to render satisfactory service prior to this arrangement becoming effective.

"The policy of the legislature to exact an unusually high professional standard from those engaged in contract practice is seen by the provision of the Medical Aid Law, permitting cancellation of these arrangements where unsatisfactory treatment is rendered the injured workmen, and the carte blanche authority of the Supervisor of Industrial Insurance to transfer an injured workman elsewhere for treatment where he deems it advisable so to do.

"During the past few years there has been a very noticeable trend towards the contract form of treatment by workmen and employers who had previously operated under the 'State

(*Continued on page 253—adv. xv*)

(Continued from page 252—ad xi)

Plan' The workmen and employers have observed with alarm and suspicion the increasing medical aid contributions required of them These rates have increased from 100 to 300 per cent during the thirteen years of operation under the 'State Plan' and their joint contributions from 1917 to 1929 when the last figures were available, was the astounding sum of $7 800 000 00 which sum was required for hospital and medical care of injured workmen, while the total amount paid for compensation to the injured workmen since the creation of the Act in 1911 to 1929 was only $48,000,000 00, a truly disproportionate ratio So the workmen and employer have taken counsel in the matter in an effort to correct the above seeming discrepancy, and for a remedy have turned to the 'Contract Medical Plan' as permitted by the law, in order to avail themselves of a more specialized and economic service

"Under the 'Contract Plan' of treatment the average time loss per claim filed in 1929 was 34 days, as against 40 days per claim under the 'State Plan' It is obvious that the worker lost six days in wages, and the State paid six additional days compensation on State claims in these two industries Nor were the results as to permanent partial disabilities any more favorable under the 'State Plan' The records show that the degree ratings on permanent partial disability awards cost $60 per claim more under the 'State Plan,' as against the contract medical service The figures just quoted indicate that the injured workmen under the 'Contract Plan' received wholesome medical treatment by reason of their speedier recovery, with a lower time loss, and are returned to their work with a lesser functional disability

'It is further charged by the Chairman of the Public and Industrial Relations Committee of the King County Medical Society that 'under the contract plan, a leg may be amputated to save the hospital expense incident through effort to save the leg This allegation is wholly without foundation and persons making such charges are either misinformed or they are deliberately misstating the facts

"The records prove that for the year 1929, with three times the number of cases treated as against the year 1912 (when the 'State Plan was at its height), the ratio on amputations to claims adjusted was 400 per cent lower

"Surgeons following the contract plan of treatment do not desire to abolish the state plan of treatment They believe that the workmen and employer should be allowed to choose

(Continued on page 254—ad xvi)

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(*Continued from page 253—adv. xv*)

the form under which they consider it most favorable to operate."

The statement against contract practice was prepared by Dr. H. J. Davidson, of Seattle and may be summarized as follows:

"Early in 1930 King County Medical Society ordered fact finding investigation and initiation of effort to correct certain conditions which were known to have progressed to the point of having become public health problems.

"Official action of the medical society limited the activities of the committee to three specific problems:

"1. Certain contracts under the Medical Aid Law.

"2. Certain so-called medical contracts executed by doctors contracting under the Medical Aid Law.

"3. Commercial solicitation of professional business, particularly to secure the above contracts either by physicians themselves or by lay agents hired directly or through corporate agencies.

"The Medical Aid Law has been in operation thirteen years. Conceived in altruism toward the workmen to ease the financial burden incident to the surgical care of injuries, it has made possible the exploitation of medical aid fund by contract doctors for profit to the possible tragic detriment of the injured, a condition contrary to good financial and good public health policy.

"The Law legalizes contracts and provides that the employer and employees in conference may choose the contract alternative. It does not provide nor does it specifically prohibit, nor was it the intent of the law that doctors should take the initiative, go themselves or send their hired lay representative to employers and groups of employees to solicit the contracts as they have done and are now doing.

"Under the terms of the contracts as executed by contract doctors, ten cents on the dollar of the medical aid trust fund goes to the state for administrative expense; ninety cents on the dollar, at the time of collection from labor and industry, is turned over to the contract doctor. He is custodian of the fund: he administers it, determining what service shall be rendered, including his own professional services, hospital, nurses, drugs, appliances and even professional consultants. He disburses for all services and keeps as his own the unexpended portion. Therein lies the censurable financial policy, and therefrom arise

(*Continued on page 255—adv. xvii*)

(Continued from page 254—adv. xvi)

the possibilities of detriment to public health.

"In exploiting financial possibilities for personal gain under the law, contract doctors sometimes reduce services to injured workers to the point of inadequacy and incompetence. Under their administration of the fund, limbs may be amputated to save the hospital expense incident to effort to save them, and workmen with fractures and serious internal injuries may be allowed to succumb without effort to determine and treat the internal injuries because of the hospital expense entailed during repair of the fractures in case the life is saved. They hire laymen to solicit the contracts, thereby diverting a considerable portion of the fund to channels of commercialism, and, as a corollary to the medical aid law contracts, contract doctors are carrying on a wildcat health insurance business. They are known to have paid up to 20 per cent of the gross revenue derived from the contract and up to $600 a month to lay agents, through whom the contracts were secured. Through the use of hired lay agents they secure contracts remote from their home towns, then sublet to local doctors for 25 per cent of the total revenue, their sole service being to secure and to sublet the contract; or they hire the cheapest available local doctor to render service under the remote contracts and often require him to pay them 50 per cent of the gross revenue derived from all private practice developed while in their employ.

"The group of workmen included under the medical aid law contracts comprise convenient groups to bring into the wildcat health insurance activities. For from seventy-five cents to one dollar and fifty cents a month, contract doctors agree to render all professional services and pay all costs incident to the care of accidents not included under the medical aid law and all sicknesses with specific limited exceptions. This contract is a limited health and accident insurance policy with all the evil possibilities of wildcat insurance, to wit:

"1. The contract doctor is the insurer.

"2. The insurer is unsupervised as to financial resources, and as to performance under his contract.

"3. He determines the rates, administers the insurance fund, determines what services shall be rendered, renders that service personally or through agents in his hire, and retains the unexpended portion.

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(Continued on page 256—adv. xvii)

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(*Continued from page 255—adv xvii*)

prejudiced physician will testify to instances of failure of the insurer to fulfill his contract.

"A man with a perforating ulcer of the duodenum went nine times to the contract doctor. The eighth and ninth times he was so ill his son had to take him after refusal of the contract doctor to call at the home. No adequate history was obtained, absolutely no examination was made. He was given a box of pills, some ten cents in value, which proved so laxative that their use had to be discontinued. He then consulted his family physician who rendered proper service, including hospitalization and operation, incurring some $400 expense. The contract doctor willfully and negligently evaded financial obligation, the professional responsibility and effort, to save for himself the cost of hospitalization and special nurses.

"The ideals and ethics of the medical profession have through all time paralleled very closely those of the legal profession. The Legal Practice Act of the State of Washington specifically prohibits the use of hired lay solicitors for securing professional work for lawyers. It is declared to be against public policy. The Medical Practice Act does not contain any similar clause, although seventeen states and territories do have laws prohibiting the practice, with revocation of license as the penalty.

"To remedy the situation we propose:

"1. An amendment to the present Medical Aid Law, providing that the doctor shall receive or have an interest only in that portion of the fund which he earns through personal professional service.

"2. An amendment to the insurance code bringing the supplemental medical contracts under the jurisdiction and supervision of the Insurance Department.

"3. An amendment to the Medical Pratice Act making it unlawful for doctors to solicit professional business.

"The critical activity of the medical profession is not directed against industrial medicine as developed by such companies as the Pacific Coast Coal Company, the Puget Sound Light and Power, and the Northwest Improvement Company. Under their system the fund is administered conjointly by the company; and employees and individual cases are sent to doctors competent to treat the particular ailment, while the doctor has financial interest in only what he receives for his personal services. We recommend that provision for that type of service be retained."

PROGRAMS OF ANNUAL MEETINGS IN GEORGIA

The January issue of the Journal of the Medical Association of Georgia contains the following editorial plea for contributions of scientific papers for the annual meeting:

"The criterion by which a medical meeting is ultimately judged is its scientific program. We do not under-rate the enhancement of good will which comes naturally out of our annual gatherings. When one tries to see the worthy qualities which abound in his neighbor,

(*Continued on page 257—adv. xiv*)

(Continued from page 256—adv. xviii)

or his medical colleague, these are usually found sufficient to erase any cause for misunderstanding and to furnish a sound basis on which mutual friendship may be built. If therefore, one attended regularly the annual assembly of our Society for no other reason than that he might mingle with the rank and file of its membership, he would be amply paid. Nor should entertainment in the form of open house parties, banquets, golf, trapshooting and the like, be given a dominant place when the assembly's program is planned Such natural expressions of Southern birth and tradition will continue to express the pride and pleasure felt by the host society when it is honored by a paternal visit in its home city. Moreover, the building of good fellowship and the program of entertainment must be looked upon as the adornment which, by design, augments the scientific appetite—lest we go away from a repast whose caloric value will be found inadequate to prepare us for the strenuous problems of every-day practice. We want a program then, with the customary embellishments, but let us also have more meat; and since the mental attitude of the diner predetermines his ability to take lustily of the bill of fare, the Committee on Scientific Work urges that you point especially for the meat course in the approaching session in Atlanta and that you come with your appetite for scientific and clinical medicine so well whetted that you will stay by the program from soup to nuts.

"But how shall we eat if we have no meat—meat that represents the viewpoint and experience in clinical medicine of the various districts of our great state? For years the Committee on Program has issued its appeal for papers to the whole membership, to have a response only from the centers of population with here and there a representative of our smaller cities and rural communities. Our program, to pursue the simile further, represents a 'state products' dinner and should be contributed to from all parts of the commonwealth. We want the viewpoint of the doctor who digs deeply into the truths of the science of medicine but there is room for good old-fashioned clinical medicine such as grows out of the experience of the practitioner somewhat removed from the atmosphere of scientific debate.

"With these thoughts in view your Committee at a recent meeting authorized the publication of this appeal. You are requested to mail titles for papers to the secretary, Dr. A. H. Bunce, not later than March 15, 1931, at which time the program will be made up. We want it to be, in fact, a state wide product."

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CARE OF THE POOR BY MEDICAL SOCIETIES, A MICHIGAN OPINION

The January issue of the Journal of the Michigan State Medical Society has the following editorial discussion of the Iowa plan by which county medical societies treat the indigent at public expense:

"Once a year state secretaries and editors of State Medical Journals respond to a call to the headquarters of the American Medical Association, where they meet in a two day convention. What do they discuss? Nothing in the field of scientific medicine or surgery. The subjects that engage their attention belong rather to the social and economic phases of medicine, such as the care of the indigent sick, health insurance or medical publicity.

"There is a strong feeling that in the care of the indigent sick the medical profession is doing more than its share. The problem is not the concern of the medical profession alone; it is a community problem. As the situation is at present, provision is made in most communities to meet the expenses of every factor concerned except paying the doctor, who is expected to contribute his services, in most instances without any remuneration whatsoever.

"Among the plans proposed for the care of the indigent sick is a blanket contract scheme which has been tried out in eleven counties in Iowa for periods ranging from twenty-six years to one year. The County Medical Society enters into an agreement with the supervisors of the county to provide medical and surgical care to indigents for a fixed annual sum. This sum is paid over to the County Medical Society and is divided among its members, all of whom, some time during the year, have served in a rotating service. Details of the contract plan may be obtained from the County Medical Society at Des Moines, Iowa.

"Membership in the various county societies in Iowa which have adopted the blanket contract with the county ranges from ten to eighty-six. We presume the number of physicians indicates in a general way the density of population. The distribution of funds for the medical care of the poor ranges from $1,600 to the county having the ten physicians to $12,600 in the county with eighty-six doctors.

"The sum paid into the treasury of the county medical societies takes care of the expenses of the society, including medical protective insurance and fees for providing scientific programs and such other items as are ordinarily met by membership fees. The distribution of remuneration

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(*Continued from page 258—adv. xx*)

to members is made after deducting such incidental expenses as we have mentioned

"This plan should not be lightly dismissed by county societies of Michigan without serious consideration. Enabling legislation may be necessary before a Michigan County Medical Society can enter upon such a contract. The plan has been tried and proven successful in the smaller municipalities How it would work in the larger centers of population remains to be seen"

WOMAN'S AUXILIARY CONTEST IN KENTUCKY

The Woman's Auxiliary is popular in many States, and many State Journals conduct departments on their activities. The Kentucky Medical Journal for January contains an outline of a contest between the county auxiliaries. The contest is in twelve parts to each of which from twenty to five hundred points are assigned. The winner will be the Society earning the greatest number of points per capita; and this figure will be the total number of points earned by the society, divided by the number of its members. The parts of the contest are as follows:

1. For each paid-up member, 30 points.

2. For each subscription to *Hygeia,* 20 points.

3. For each biography of a physician born or practicing in the county, 25 points.

4. For each story of medical practice, superstition, or other interesting data, 20 points.

5. For each dollar secured for the Jane Todd Crawford Fund, 50 points Mrs. Crawford was the patient on whom Dr. Ephraim McDowell performed the first ovariotomy on December 13, 1809, in Donville, Kentucky.

6 For each Auxiliary scrapbook brought to the annual meeting, 50 points.

7. For each article for the State scrapbook, 20 points.

8. For each monthly contribution of Auxiliary news to the Kentucky Medical Journal, 20 points.

9. For each regular meeting held, 50 points.

10. For each study course of nine health lessons, 500 points

11. For completing four or more lessons sent out by the A.M.A. Auxiliary, 200 points

12 For each member attending the annual meeting, 25 points.



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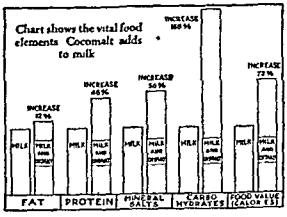
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HEALTH BUREAU OF CAPE COD

The editorial department of the November 27th issue of the *New England Journal of Medicine* contains the following report of the meeting of the Health Bureau of Cape Cod:

"The fall meeting of the Cape Cod Health Bureau was held in Hyannis on November 19. Anti-mosquito work, the Cape as a tuberculin-tested area, and standardization of the regulations of boards of health received especial consideration. The President, Mr. G. W. Hallett of the Barnstable Board of Health, in his opening remarks referred to the system of health units, the formation of which is of such vital interest to the State Department of Public Health.

"With reference to mosquito elimination Dr. A. P. Goff, County Health Officer said that $75,000 had been available for the work on the Cape this year. About one-third of this amount was spent in ditching, now practically half completed, and the other two-thirds was spent on local work. Various localities report a great diminution in the mosquito pest and it is expected that many other areas will be practically mosquito-free next year.

"In his regular report Dr. Goff presented some statistics with respect to the diminution of disease and noted that the State is making a special endeavor to secure the earlier reporting of venereal diseases. The earlier diagnosis of tuberculosis is also receiving the attention of the Bureau and an effort is being made to interest physicians in that problem.

"At the afternoon session Mr. J. T. Mecarta, County Milk Inspector, reported two convictions for the violation of the cattle quarantine in introducing non-accredited cows into Barnstable County.

"The rest of the session was devoted to a discussion of the uniform regulations for health boards, with the usual careful consideration of practical details which characterizes these meetings.

"For its final action the association voted that a committee on regulations be appointed to confer with the joint committee of the Massachusetts Association of Boards of Health and the State Department of Public Health."

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TUMOR CLINICS IN PENNSYLVANIA

The January issue of the *Pennsylvania Medical Journal* describes one phase of its work of cancer prevention as follows:

"In the furtherance of its plan for the installation of Tumor Clinics throughout the State, our Cancer Commission recently requested Jefferson Medical College and Hospital to conduct a Tumor Clinic Day for those especially interested in the organization of tumor clinics. The all-day tumor clinic and demonstration held at the above-named hospital, in Philadelphia, on December 12, was, in the following words of President Ross V. Patterson a great success: 'There were over one hundred in attendance, and they came from every quarter of the State. Chairman Wainwright was much pleased. I really feel that the Cancer program has gotten a splendid impetus for the coming year in the gathering here in Philadelphia.'

"It is hoped that many general hospitals throughout the State will develop tumor clinics along the lines advanced by the Cancer Commission, and that Pennsylvania may soon equal the record credited to the State of Massachusetts by the Committee on the Costs of Medical Care in the following words: 'Over eighty per cent of the people in the State (Mass.) who have cancer, it is estimated, have been seen by physicians. For every cancer patient visiting one of the eighteen state clinics, twenty-two visit a physician's office.'"

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AN EVALUATION OF THE NEWER METHODS OF TREATING SYPHILIS:*

(Clinical Features)

By MIHRAN B. PAROUNAGIAN, M.D., NEW YORK, N. Y.

IT is with much pleasure that I present to you a semi-historical and fully clinical review of experiences in treating syphilities for the past thirty or more years Yet, contact with students, and internes as well as recent graduates who are all interested in syphilology, convinces me that a review such as this should prove of value. Oftentimes, new procedures and new remedies make us forget the old and when specifics are offered, nearly every vestige of previous clinical experience is forgotten.

In no other field than syphilis does this last hold so true. Someone has said that if a physician forgets nearly everything else, he remembers chrysarobin for psoriasis. But even the physician who can not recall chrysarobin, remembers salvarsan. May I carry you back to the pre-salvarsan era?

Treatment of syphilis prior to 1910 or thereabouts had remained unchanged for practically four hundred years. The accidental finding, for accident it must have been, that the use of mercury by inunction, by inhalation, by oral administration and then by intramuscular, and finally intravenous routes led to a schedule of therapy which was varied only by the caprices of the administrator and the steadiness of the patient.

The first reference which we find to mercury as a remedy for syphilis occurs in the immortal poem of Hieronymus Fracastor, to whom, indeed, we are indebted for the first accurate description of the clinical phases of syphilis, and who has given to us the name of the disease. In the prose translation of this fifteenth-century masterpiece we find the following interesting paragraph:

"At the beginning, mercury was employed associated with lard; later it was combined with the turpentine of Epirus and with the resin of the majestic birch. Certain physicians today combined it with horse fat or bear's grease, or bdellium, and with the juice of cedar; others with myrrh, with male incense, with mibium, and with burning sulphur. For my part, I prefer to alloy it with a mixture of black hellebore, orisroot, galbanum, asafetida, and oil of mastic and oil of native sulphur. Patients, a truce to the disgust which may be caused by this remedy. For if it is disgusting, the disease is still more so. Besides, your cure is at this price. So, without hesitation, spread this mixture on your body and cover with it your entire skin, with the exception of the head and of the precordial region. Then, carefully wrap yourself in wool and tow; then get into bed, load yourself with bed covering, and thus await until a sweat bathes your limbs with an impure dew. Ten days in succession renew this treatment, for ten entire days you are to undergo this cruel trial whose beneficial effect will not cause you to wait."

Here, one has the expounding of a treatment which, with slight modification, had come down to us through almost four centuries as an ideal method of combating syphilis. Besides recommending mercury as an inunction, Fracastor also recommended its use by method of fumigation or inhalation. This method, as you know, enjoyed excellent repute up to the middle of the last century.

It was but natural that early excellent results of mercurial treatment in this form should have been followed by its use internally in the form of pills and in combination as mercury salts. The internal administration of mercury had been perhaps the most commonly accepted form of treatment in the last century, and indeed Sir Jonathan Hutchinson, maintained its supremacy over all other methods

In the last quarter of the nineteenth century, mercury was employed in France in the form of injection; here, also, as in the internal administration, the various salts had been lauded

*Read at the Annual Meeting of the Medical Society of the State of New York, at Rochester, N. Y., June 4, 1930.

one above the other. In the opinion of the most eminent syphilographers of that day, the insoluble salts were capable of controlling the disease with far greater ease, with less personal inconvenience to the patient, and with less personal care on the part of the physician than the soluble salts. Employed daily the soluble salts of mercury were held to be the most efficacious but there were few patients who were able to stand the financial strain in that day of private practice, not to mention the loss of time and discomfort.

I cannot pass from the history of mercurial treatment without alluding to the inhalation method of treatment, which at certain spas enjoyed excellent repute. While good results were obtained, the method did not commend itself on account of its impracticability. The method of inunction, however, differed but little from the inhalation method, for it had been conclusively shown by investigators that the chief benefit derived from this method lay in the volatilization of the mercury and its subsequent absorption into the lungs, very little if any mercury being absorbed through the skin itself. The chief objection to this method lay in the fact that, one could not estimate the dose, and the undeniable fact that stomatitis was far more common than with other methods. However, it was an efficient and at times the most practicable form of administration.

I close this section on the use of mercury in the olden days by this quotation from, J. William White, writing on the Treatment of Syphilis, in Morrow's System:

". . . . the essential point in the treatment of syphilis is the administration, during a sufficiently long period of the largest dose of mercury which can be taken and absorbed without prejudice to the general health."

I will not bore you with the list of drugs used in the adjuvant treatment of syphilis. You all recall the iodides we ordered, either by drop method or as mixed treatment. Our prosperous patients left us periodically to get boiled out at one or another of the Hot Springs in this country or Europe.

Looking backward with calmness to our results with mercury, can we say that we cured patients with undoubted syphilis in those days? We admit that symptoms were controlled, but a large proportion of late recurrences which came under our observation had been treated early in the disease with the mercurial popular at the moment.

Most of you among my colleagues remember with what acclaim the medical and lay world was startled by the discovery of a new and powerful chemical remedy for syphilis. Thanks to the untiring efforts of the late Professor Ehrlich and his co-workers, arsphenamin and neoarsphenamin were offered as the possible means of eradicating or at least controlling syphilis with a single treatment. At first, it was hoped that the remedy was entirely specfiic, that is, that its single application sufficed to eradicate the disease for all times. Beautiful in theory, the fact was sadly admitted that such was not the case. The remedy readily controlled the symptoms of the disease, but a single injection seldom if ever eradicated it. We soon knew that arsphenamin, in order to effect a cure, must be repeated time after time. At first arsphenamin was injected intramuscularly in neutral suspension, into the buttocks or the muscles of the back between the scapulae; later in the form of oily emulsion, etc. On account of pain, sloughing and necrosis, as well as painful infiltrations remaining for months and years in some cases, this method was discarded for the intravenous method.

Few among you need be reminded of the changes in arsphenamin brought on by the World War, or of the alterations made in its composition by researches in our own country. As you know, we have the old, neo- and silver-arsphenamin to select from in the choice of our most potent arsenical remedies to use in the treatment of syphilis.

Having used it from its introduction, I am one of those who have strongly favored the old arsphenamin in preference to neo. There is some difference of opinion on this point, some syphilologists believe that neo is just as efficacious as the old. The popularity of neo to my mind is due to its ease of preparation and administration. While I strongly favor the old arsphenamin wherever I can, I use discretion in the selection of the particular variety. In pregnant women, children, in patients with advanced degenerative nerve conditions, aneurisms, and those with extensive cardiac and renal lesions, I give preference to neo.

Deprived of proper facilities for treatment of neuro-syphilis on a larger scale with malaria inoculation or by artificial hyperpyrexia induced by electrical currents, I would use sliver or neo-silverarsphen, in preference to the others available in the arsphenamin group.

But, unconsciously we have come to modern times in the treatment of syphilis. Was mercury dropped because arsphenamin came to the fore? It was not. Programs of use of both mercury and arsphenamin were proposed and followed. The patients were given the opportunity of cure which arsphenamin held out, but were not denied the benefits following

the use of mercury. That arsphenamin was superior to mercury has never been questioned.

Not so many years ago another metal was advanced in the treatment of the syphilitic, namely bismuth. Heralded as superior to every other drug, bismuth has gradually fallen in favor so that it is battling for second place to arsphenamin and truth to tell, probably will come in a poor third.

At present, I have retained bismuth essentially for those patients who have become intolerant to arsphenamin and mercury. Most patients tolerate bismuth without difficulty.

The iodides are still used having regained popularity in the late manifestations of syphilis at least. The patient gets iodides by mouth or by injection intravenously. Despite the ease, and rapidity of absorption of iodide on oral administration, it is my clinical judgment that the intravenous route offers advantages not to be disregarded.

Let us examine our results with arsphenamin and its various modifications. The newer remedies cause a more rapid disappearance of active infectious lesions which result in reduction of period of danger to the family, and public at large.

It was not unusual to have a patient exhibit an ulcerated throat for many months despite mercurials and all sorts of local applications in the olden days; with the advent of arsenicals, in a few days these symptoms readily disappear.

Since the main hope for permanent cure of syphilis depends on early sterilization of the blood, the newer remedies offer the best means of cure which mercury could not effect.

The expectant mother with syphilis treated with the newer remedies has a fair chance of delivery of a living child, because of the quicker and surer destruction of the spirochetes. Congenital syphilis is not the hopeless task it was a generation ago.

Visceral syphilis is more amenable to the newer remedies than the old, and the danger to the patient in therapeutic attack has been diminished but not extinguished.

The bête noir of former years of syphilology, namely neuro-syphilis, particularly paresis is not beyond relief with the newer treatment of hyperpyrexia induced by malaria or by electrical means. Shock treatment with foreign proteins offer a substitute for the other methods if they are feasible.

My experience with unquestioned instances of reinfection has been a broad one. Many of those who objected to official recognition of this possibility have been convinced of it. Yet, reinfection was a rarity in the pre-arsphenamin period. It seems to me that patients whom I observed throughout one sequence of syphilis and who remained with me for their courses of arsphenamin and mercury, with gradual reversal of the serology and who subsequently reappeared with definite syphilitic chancre at sites distant from the draining area of the first chancre must be regarded as reinfection. I have from time to time, had such patients before the various societies devoted to dermatology and syphilology and the histories have been recorded in our official journal.

Let us draw a balance between the old and the new. I would have you consider for a moment how you would react therapeutically, if you were deprived of the newer remedies in treating syphilis. Would you be content to depend on the mercurials to which we were limited prior to 1910?

SUMMARY

After experiences extending over twenty years with arsphenamin, its modifications, and substitutions, I have arrived at a number of distinctions as to the best use of the most popular.

Arsphenamin, is the drug of choice in early syphilis, chancre and secondaries among the young patients, robust and otherwise in good physical condition.

Neo-arsphenamin, I prefer in elderly people, pregnant women, children, persons with kidney, cardiac and other complications.

Silver-arsphenamin, quite valuable in neurosyphilis, extensive gummatous ulcerations, in anæmic subjects and for those who do not tolerate other arsenicals. I favor this preparation for provocative Wassermann test.

Mercury, is always included in therapeutic attack on syphilis, although the reaction of the patient decides the type, dosage and period of use.

Bismuth, is substituted for mercury, if the latter is not tolerated, and also when the patient is sensitized to both arsphenamin and mercury. I have at times noticed some pleasing clinical improvement with the use of colloidal bismuth in congenital syphilitics and tabetics.

Iodides, are employed in all types of infiltrating lesions, such as remains of chancre, deep-seated secondaries and gummous deposits.

The acceptance of re-infection of syphilis in modern times of arsphenamin treatment seems to me to be the best indication that the newer methods are more successful than previously, when reinfection was rarely if ever accepted as possible when and if the first infection of syphilis was beyond reproach.

N. Y. State J. M.
March 1, 1931

A MODIFICATION OF THE DOUBLE CIRCLE OPERATION FOR PENDULOUS BREASTS

By CLIFFORD F. DOWKONTT, M. D., NEW YORK, N. Y.

THE condition described as pendulous breasts is an extremely common one, and one which causes women much suffering, both physical and psychical.

Among the physical discomforts of large prolapsed breasts may be mentioned the following: pain and dragging sensations in the neck and shoulders as well as in the breasts; interference with respiration and the free movement of arms and body; maceration, inflammation and eczema of the skin caused by cutaneous friction and an unsightly disfigurement of the normal bodily contour. In order to hide this disfigurement women resort to such practices as a stooped posture or bandaging the breasts tightly to the abdomen.

Psychically, the changes vary from embarrassment and feelings of inferiority to actual psychotic reactions with suicidal tendencies, as in a case reported by Kausch.[1]

Economically, actresses, singers and dancers, whose earning capacity depends almost to as great an extent upon their appearance before a critical audience as upon their talent, are put at an enormous disadvantage by this condition which in many instances may be the cause of absolute vocational failure. In private life the economic disadvantage is less obvious; but it is easy to understand that a sensitive business woman, or one who has to appear in public in any capacity, would suffer from the abnormality and ugliness of enormous pendulous breasts.

On December 4th, 1929, the author[2] reported a series of ten cases of pendulous breasts successfully operated upon by means of a technique which involved the use of two circular incisions, the removal of the skin and adipose tissue between them, and the suturing of the two incisions to each other, leaving a linear scar completely encircling the breast. It was pointed out that although the scar was reduced to a minimum by a special suturing technique, that part of it which extended around the upper half of the base of the breast was an undeniable disadvantage. Accordingly the author devised a modification of the two circular incisions, changing the circles to semicircles and placing all suture lines at the level of the nipple or below it; but retaining all other features of the original technique.

In considering the advantages of the modification of the original technique, it is apparent at once that the avoidance of any suture line in the upper half of the breast is a very important improvement. Costumes and evening gowns of extremely low-cut may be worn without hesitation or embarrassment by patients so operated upon. The social and economic advantages are obvious. Moreover by adherence to the original technique of firm suspension of the gland by the pectoral fascia flap, permanence of the results is assured. In addition there has been no sacrifice of contour, and exposure is sufficient to allow the safe excision of excess glandular tissue if present.

It has been the author's practice to excise completely whatever breast tissue may lie peripheral to the normal border of the gland. This procedure leaves behind no islands of gland tissue, undrained by ducts, to give rise to trouble during lactation. The dissection near the areolar border is carried out in a direction away from the nipple. The ampullae and main ducts therefore are safe from injury.

To a superficial observer this operation might seem quite formidable. From the surgeon's standpoint the technique is certainly intricate and involved and requires the use of some 150 interrupted sutures. However, the complete operation on both sides is now performed by the author in an hour and a half to two hours, depending on the degree of prolapse present. A very satisfactory anesthesia is obtained by using nitrous oxide-oxygen together with small amounts of ether (3 or 4 ounces for the entire operation). This causes slight discomfort to the patient. There is surprisingly little post-operative pain, and the patient's chief complaint is the boredom of a week's confinement in bed.

Summary and Conclusions

1—Operations for pendulous breasts must recognize the importance of the following features:

a—Permanency of the results.
b—Scars which are not visible.
c—Contour approximately normal.
d—Equality of the two breasts in size and position.

2—The modified technique is based on the following principles:

a—Semi-circular skin incisions.
b—Under-mined semi-circular skin flap which forms the covering for the upper half of the breast.
c—Peripheral excision of excessive adipose and glandular tissue as in the original technique.
d—Pectoral fascia flap suspension of the gland.
e—Placing of all suture lines at the level of the nipple or below it.

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The following reports describe four illustrative cases in which the improved technique was used with results that were entirely satisfactory.

CASE 1

L. V., nullipara, aged 20 years, complained of large and pendulous breasts, a condition which had existed for 5 to 6 years. She stated that this deformity prevented her from obtaining employment in her profession,—that of an actress. Remainder of history negative.

On examination both breasts were found to be moderately pendulous and hypertrophied. See Figure 1. No tumor masses, no discharge from the nipples present.

A plastic operation on both breasts, including peripheral removal of excess glandular and adipose tissue, together with pectoral fascia flap suspension, was performed April 11, 1930. About 11 ounces of tissue were excised from each breast. Microscopically this tissue was that of normal non-lactating mammary gland.

Except for a slight intercurrent pharyngeal infection, the patient made an uneventful recovery and on April 21st was discharged from the hospital. Figure 2 shows the appearance of the breasts 6 weeks after operation. At that time the patient had already begun rehearsals and has since then been employed regularly on the stage in parts which require the wearing of extremely low-cut costumes. See Figures 3 and 4.

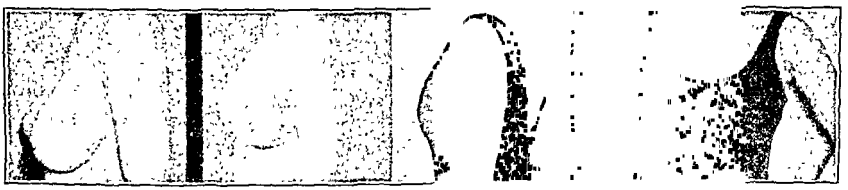


FIG. 1 FIG. 2 FIG. 3 FIG. 4

Fig. 1—Moderate hypertrophy and prolapse of the breasts

Fig. 2—Appearance of the breasts following plastic operation by the author's method, showing normal size, position and contour.

Fig. 3—Appearance in evening gown; after operation.

Fig. 4—Same as Figure 3, front view showing that a low cut gown may be worn.

CASE 2

Mrs. B. W., age 24, nullipara. Actress and dancer. Breasts interfered with her livelihood, and were painful while dancing. Result of operation satisfactory.

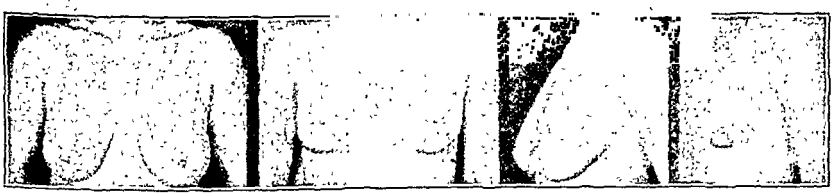


FIG. 5 FIG. 6 FIG. 7 FIG. 8

Fig. 5—Front view of moderately prolapsed breasts.

Fig. 6—Same patient; after operation.

Fig. 7—Side view; before operation.

Fig. 8—Side view; after operation.

CASE 3

Mrs. L. M., age 30, nullipara, housewife. Pendulous breasts seven years, causing pain in shoulders and breasts. Result of operation, relief from symptoms.



FIG. 9 FIG 10 FIG 11 FIG. 12

Fig. 9—Upper cut. Markedly prolapsed and adipose breasts, showing evident widening as well as elongation.

Lower cut Appearance of the patient in ordinary dress before operation.

Fig. 10—Upper cut. Breasts reduced to their normal size and position by operation. Suture line encircles lower half of breast and extends across to areolar border.

Lower cut Patient in ordinary dress after operation.

Fig. 11—Upper cut. The breast seen from the side before operation.

Lower cut. Side view; before operation.

Fig. 12—Upper cut. The breasts after plastic reconstruction by author's method 3¼ pounds of excess adipose tissue were removed.

Lower cut Side view; after operation.

CASE 4

Mrs. A. R., age 25, nullipara. Wished to obtain employment as a model in a dress shop. Pain at times. Operation satisfactory.



FIG 13 FIG 14 FIG 15 FIG. 16

Fig. 13—Front view after operation. Dotted lines show position of breast previously

Fig 14—Appearance in evening gown, front view.

Fig. 15—Contour of breasts following operation viewed from the side.

Fig. 16—Side view of same patient in an evening gown cut very low in the back.

CLINICAL TYPES OF OCULAR PATHOLOGY DUE TO DISEASE OF THE PARANASAL SINUSES*

By LUTHER C. PETER, M.D., PHILADELPHIA, PA.

IN a paper read before the Pittsburgh Ophthalmological Society last January, I discussed "Determining Factors in the Ocular Complications of Nasal Sinus Disease." In that communication, I presented, first, the factors which lead to a difference in opinion as to the frequency of the occurrence of such complications; second, the anatomic factors which might be responsible for ocular involvement in sinus disease; and third, the pathologic evidence of such complications and the channels through which they are brought about.

The clinical evidence of this relation which I propose to discuss with you today as Part II is largely in the form of a lantern slide demonstration of types of cases which one encounters in an average practice. In 1921 in my presidential address before the Eye, Ear, Nose and Throat Section of the Pennsylvania State Society, I presented evidence of the cause and effect relationship of nasal sinus disease and obscure forms of uveitis and choroiditis. The facts offered at that time are up-to-date after the lapse of nine years. I can add nothing to that phase of ocular complication but increasing numbers of clinical cases to corroborate and substantiate the claims made at that time.

The other clinical evidence which I wish to present is that in which visual field studies are of outstanding value, in the form, first, of enlargement of the blind spot of Mariotte; second, retrobulbar neuritis; third, manifest optic neuritis, neuroretinitis, and papillitis; fourth, papilledema in all instances, unilateral or bilateral; fifth, chiasmal and tract disease; and finally, residual optic atrophy in a large number of cases.

Enlargement of the blind spot of Mariotte, the first group, is an almost constant symptom in sphenoid and posterior ethmoid disease. In acute involvement of the sphenoid, it is a most dependable sign, and in cases of posterior ethmoidal disease, it is rarely absent. (See Fig. 1.)

Retrobulbar neuritis is the second group. In the absence of visible fundus changes, this form of optic nerve disturbance is full of interest, and calls for skill in determining the correct etiologic factor in any given case. Some are inclined to believe that the usual cause for retrobulbar neuritis is to be found in multiple sclerosis. Conceding that many cases are due to this condition, it is a correct scientific attitude to maintain an open mind in each case, until the correct etiologic factor has been determined. If one's mind is closed to other causes, he is apt to be led astray and to fail in the proper diagnosis in many instances. Possibly it has been my good fortune to find spheno-ethmoidal disease as the cause of many cases of retrobulbar neuritis and multiple sclerosis a factor in comparatively rare instances. At all events, I have seen many cases which were promptly relieved by sinus surgery, and others, after late interference, less improved. When these cases are carefully studied with due regard for a logical sequence of events, the suspicion is strong in many instances, and the therapeutic remedy directed to the sinuses, medical or surgical, most convincing. A careful history will often elicit an admission of a "cold in the head."

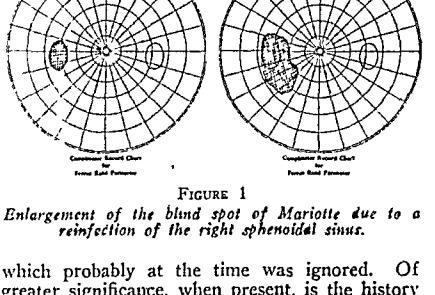


FIGURE 1

Enlargement of the blind spot of Mariotte due to a reinfection of the right sphenoidal sinus.

which probably at the time was ignored. Of greater significance, when present, is the history of fleeting attacks of visual disturbance, or more momentary loss of vision in one eye. This warning is present in many cases before a definite central scotoma can be demonstrated. In other instances, central blindness is sudden and at times complete, and restoration of vision most striking after prompt lavage of the sphenoid, with or without evidence of sphenoidal pathology. The channel through which this interesting condition is brought about is probably through the central vein of the retina. Whitnall calls attention to the fact that most of the orbital veins, which drain into the cavernous sinus, are wanting in valves, and because of this, reverse currents can be established. Furthermore, the same author stresses the comparatively small total caliber of the vessels which empty into the sinus, as compared with the caliber of the vessels coming from the orbit and nose to this sinus. This would lead to stasis, and even blocking of the venous circulation at times. Backing up of the current can in part explain some of these cases. That many cases of a retrobulbar character are largely toxic is evi-

*Read at the Annual Meeting of the Medical Society of the State of New York, at Rochester, N. Y., June 4, 1930.

dent from the rapid recovery which one observes after lavage of the sphenoid or free establishment of drainage, either by surgical or medical means. (See Figure 2.)

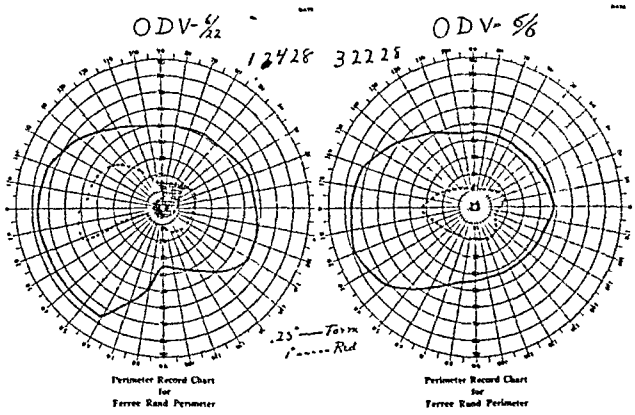


FIGURE 2

Retrobular neuritis with subsequent optic neuritis and residual atrophy.

In some instances, cases which begin as retrobulbar toxemia, if unrelieved, show evidence of inflammation in the form of optic neuritis, neuroretinitis, or papillitis, the third group of optic nerve lesions which may be considered together. These forms of optic nerve involvement are probably observed more frequently than any other type. The patient usually is conscious of central visual disturbance. Fundus changes are visible at a very early period in the inflammation, and if untreated, increase in intensity from simple blurring of the disc, venous engorgement with tortuosity, to a well-marked neuroretinitis and in aggravated form, a papillitis. The latter condition should be carefully distinguished from the next form to be discussed, namely, papilledema. (See Figures 3 and 4.)

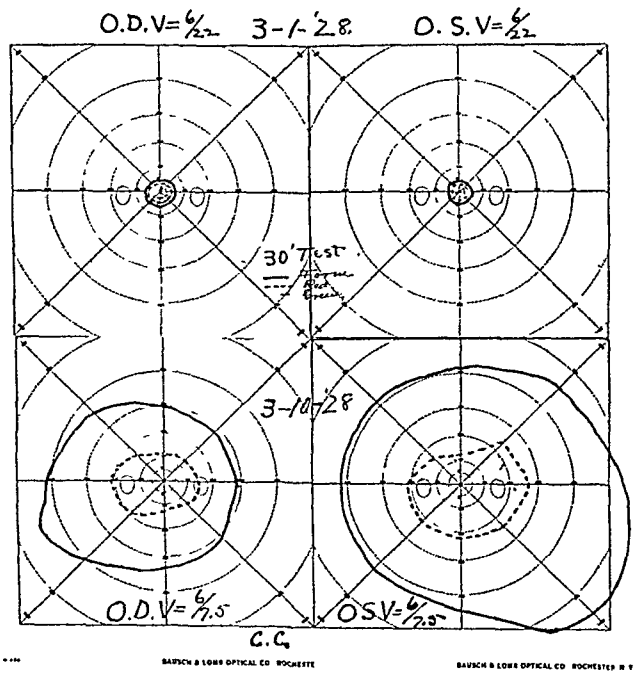


FIGURE 3

Bilateral optic neuritis due to bilateral sphenoiditis.

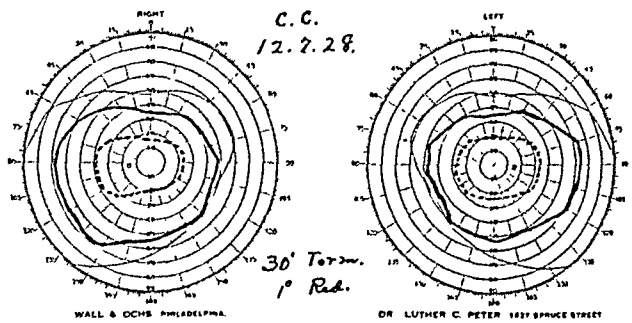


FIGURE 4

Complete recovery of Case No. 3, Figure 3.

This third group, like the one to follow, demands prompt attention on the part of the rhinologic surgeon if post-neuritic atrophy is to be averted. Field studies determine the progress from day to day, and if progressive loss is observed, prompt intra-nasal surgery is indicated. Judging from the many cases which have been under my observation, I am convinced that the degree of residual atrophy which will be present bears a direct relation to the length of time that is allowed to elapse between the onset of ocular disturbance and the incidence of surgery directed to relieve the sinus condition. The central scotoma of retrobulbar neuritis tends to disappear in most instances if properly treated, but unless the relief is prompt in optic neuritis, residual disturbance of vision with optic atrophy is the rule. (See Figure 5.)

Papilledema, the fourth group, is of unusual

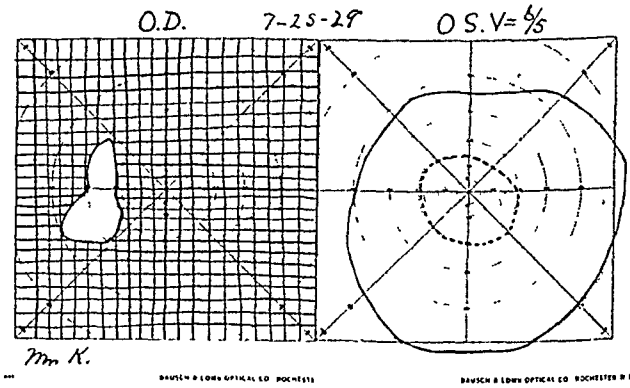


FIGURE 5

Neuroretinitis followed by postneuritis atrophy in O. D., due to a neglected sphenoiditis. In this case the patient had recurrent attacks of temporary amblyopia. Operation was performed too late ta prevent atrophy and blindness—a common type.

interest. Contrary to the belief of some, choked disc of varying degree is observed fairly often. It may be unilateral or bilateral. As pointed out in a former communication, the swollen nerve differs in two essential respects from the choked disc usually observed in increased intracranial pressure. There is more exudate present than is usually observed in the types of intracranial origin. The swelling sometimes assumes unusual proportions laterally and in elevation. Exudates are marked. It is, however, in the matter of recovery, in which the choked disc of this character differs from the usual form. After a decompression of the skull, the usual form of papilledema promptly subsides. In sinus disease, the elevation subsides slowly after sinus surgery, even though central vision improves and the peripheral fields are restored. This tendency of the discs to remain elevated for considerable periods is more or less general. Because of these peculiarities, I believe we should qualify choked disc of this type in order to call attention to its rather specific character. "Inflammatory choked disc" is open to criticism, but it is peculiarly applicable to the papilledema of sinus disease (See Figures 6, 7, 8, 9.)

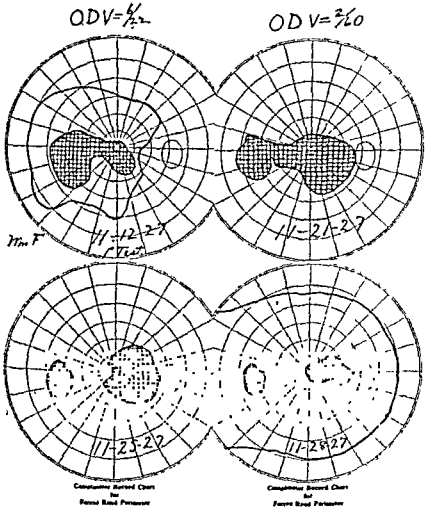


FIGURE 6

Monolateral papilledema due to acute sphenoiditis.

Chiasmal and tract complications may conveniently be included in one group. A glance at several of Schaeffer's dissections will do more than much discussion to convince the reader that sinus pathology may extend to these parts of the visual pathway. The following case is illustrative of a lesion which reached as far as the right tract. By a process of elimination and careful studies, a diagnosis of sinus disease was made. The fields show the subsequent course of events. This type is probably the rarest of the forms discussed. (See Figures 10 and 11.)

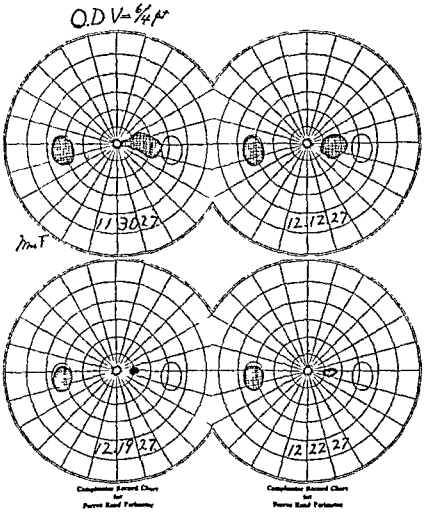


FIGURE 7

Same as Figure 6, but showing recovery after operation.

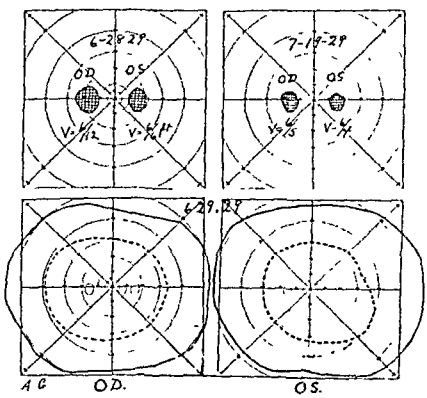


FIGURE 8

Bilateral papilledema due to chronic bilateral sphenoethmoiditis. Recovery after operation with persistence of swelling of the nerve heads for many months, but prompt recovery in the fields.

Any of the forms of optic nerve involvement but the first and probably the last may be followed by a postneuritic form of atrophy if operative interference is not practiced as soon as the etiologic factor is determined as sinus disease.

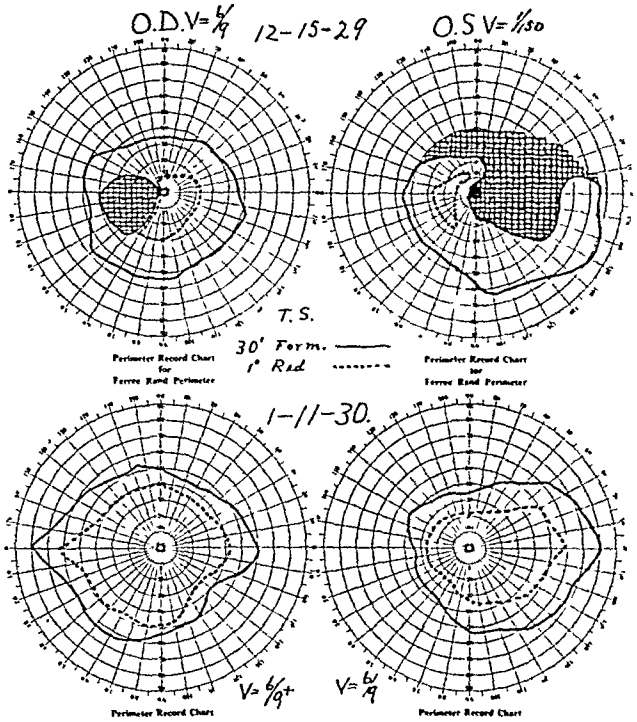


FIGURE 9

Fields in the same case following operation. Papilledema improved, but later was increased. Subsequently this case developed an abscess of the left frontal lobe of the brain.

In fact, experience teaches one that under certain conditions, exploratory surgery is justified without frank evidence of sinus pathology. These conditions are, first, a sequence of events which direct attention to the sinuses, e.g., the history of a nasal cold, followed at intervals by fleeting attacks of monolateral amblyopia; second, the exclusion of all other possible causes by a process of elimination. I have repeatedly requested exploratory surgery under such conditions, when rhinologic signs were too meagre upon which to warrant nasal surgery. The results in a majority of instances were most gratifying. The procedure is justified on the ground that the risk of an exploratory operation upon the patient is less if the sinuses prove to be negative, than is the risk of atrophy in a failure to remove operable pathology.

My plea to the rhinologist, therefore, is to operate when the ophthalmologist, upon proper study of a given case, makes the request.

Although the ocular muscles are not as often exposed to sinus pathology as are the uveal tract, the retina and the optic nerve, the motility of the eye is vulnerable and a sufficient number of cases are observed to keep one awake to disease of the sinuses as causative factors in functional and organic motor disturbances. My time is too limited to more than call your attention to the varying degrees of superior oblique disturbance, to ocular palsies especially of the internal rectus to varying grades and types of heterophoria, and to even profound proptosis, associated with ophthalmoplegia, when the orbit is invaded from spheno-

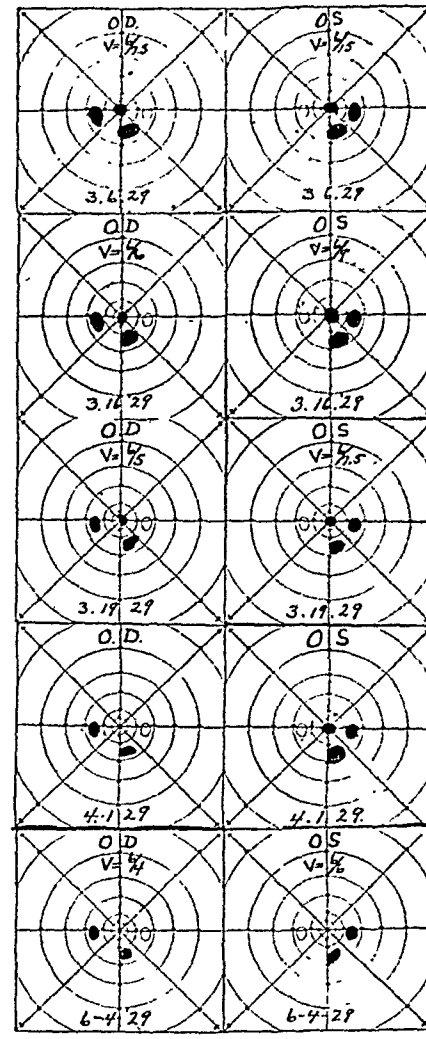


FIGURE 10

Bilateral retrobulbar neuritis with left homonymous hemianopic scotomas due to bilateral sphenoiditis, most marked on the right side. Recovery was prompt after operation; two small homonymous areas, however, remained as permanent defects.

ethmoidal disease, and in cavernous sinus thrombosis of nasal origin. The bizarre forms of motor disturbance, due to sinus disease, could well form the basis of a separate communication.

This discussion would fall short of completeness if I failed to call attention to a less frequent complication, but one which is concerned with the life or death of a patient when present—namely, cavernous sinus thrombosis of nasal ori-

gin. For a detailed report on cases of this character, those who are interested are referred to my communication in the Transactions of the College of Physicians of Philadelphia for 1929, and to the monograph by Eagleton on "Thrombophlebitis." At this time, let me but direct your attention to this most fascinating field in which prompt cooperation between rhinologist and ophthalmologist may save lives which otherwise are doomed to the usual results in this serious disease.

Discussion by Dr. Thomas H. Johnson, New York, N. Y.: Where there is pathology in the sinuses that can be demonstrated by *x*-ray or by the rhinologist, I think that operative interference in these cases is indicated, but I am not yet convinced that it is required in cases of optic nerve involvement where no pathology can be demonstrated. It is the common experience of men seeing brain tumor cases to have the patients

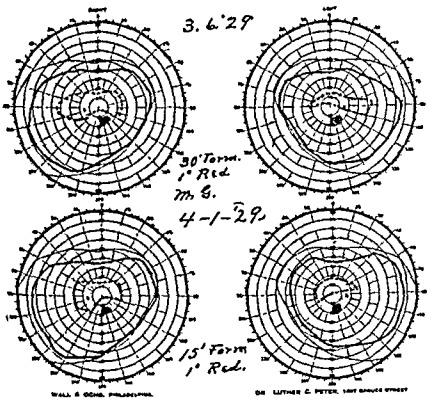


FIGURE 11
Peripheral fields in the same case—chiasmal and tract lesions.

give a history of having had various sinus operations upon the onset of eye symptoms which are so often the first to appear in brain tumor. I have under observation now two patients sent to the Neurological Institute as suspected brain tumors. One is a man and the other a woman and their history is very similar. Each had a rapid loss of vision in one eye. When I saw them each had a swollen optic nerve in one eye with a large central scotoma and vision reduced to hand movements. The fellow eye was normal In each case *x*-ray of the sinuses was normal and an experienced rhinologist did not find any pathology in the sinuses. Having the courage of my convictions I took the responsibility of not operating upon these cases. They were kept in the hospital for three or four weeks and a thorough study was made and no cause could be found for the optic nerve condition. I have observed these cases over a period of months and in the case of the man the swelling of the optic nerve head has entirely receded, the scotoma has disappeared and his vision has returned to normal. In the case of the woman the swelling of the nerve has receded entirely and there is only a blurring of the nasal disc margin. Vision has improved and the scotoma is disappearing. Neither case had sinus therapy. I recall a case I saw about three years ago in which a healthy young man of about 18 years of age came to see me giving a history of rapid loss of vision. After a few days his vision was reduced to hand movements in each eye and there was an edema and a swelling of both optic nerve heads. A competent rhinologist could not find any pathology in the sinuses and declined to operate. The patient was sent to another rhinologist who operated the sphenoid and ethmoids and found no pathology. The outcome in the case was that after about two weeks the patient developed a frank disseminated myelitis which after some six or eight months caused his death.

Last fall I saw in the clinic a child about 7 or 8 years of age who had rapidly within a short time lost his vision. This child had been advised to have his sinuses operated and was brought to the clinic for a confirmation of that opinion. The vision in each eye was hand movements and there was an advanced papilledema. The child was sent to the Neurological Institute for observation. Because of the rapidly advancing papilledema a decompression operation was done. Patient eventually lost light perception and after several months died. The autopsy showed that he had an internal hydrocephalus, a result of an ependymitis.

I cannot agree with the statement that there is no danger in operating the accessory sinuses. We all may recall the death a few years ago of one of our prominent confrères in ophthalmology subsequent to an operation upon his ethmoid sinuses, and I am quite sure we all have had cases that have had prolonged and annoying symptoms following operations upon their accessory sinuses.

N. Y. State J. M.
March 1, 1931

THE MEDICINE OF THE FUTURE

By GEORGE W. CRILE, M.D., CLEVELAND, OHIO

Read at a public dinner meeting under the auspices of the Committee on Periodic Health Examinations of the Medical Society of the State of New York, the Medical Society of the County of Monroe, and the Rochester Chamber of Commerce, at Rochester, N. Y., on June 4, 1930.

MEDICINE and religion date back to the tribal stage ancestors. Their evolution has paralleled the general evolution of mankind. The fog of mysticism of the days of savagery is still present in lesser degree even among apparently cultured people, but is clearing away by degrees as science and education create and disseminate knowledge.

Among the tribes of African natives today—with their ignorance and fears and superstition—there is no organization to spread even such meager medical and biological facts as they recognize. An organization for the dissemination of knowledge must wait for science to supply the facts to be taught.

No one group or organization should attempt to monopolize intelligence, but schools, churches, health agencies, the Red Cross organization, etc., should work together in the dissemination of useful knowledge. Let us review some of the achievements of the accumulation and dissemination of knowledge—facts that we hold securely even now—and let us consider what may reasonably be expected in the future.

The mortality among mothers from puerperal fever has been reduced from 57 per cent fifty years ago to 0.08 per cent today, while infant mortality has been reduced more than 50 per cent in the past 27 years. Surgery and orthopedics have conquered most of the deformities of children. The oculist has corrected the defective eyesight of children. The infected tonsils, which once were the cause of so many damaged heart muscles, are now discovered early and removed. In many cases the onset of diseases of the heart and of the kidneys later in life may be anticipated by the prevention of contagious diseases in children.

Our knowledge of the value of the vitamins, of fresh air and sunshine, of proper plumbing and of sewerage systems arose primarily from a knowledge of disease. Antitoxins and vaccines are curing and preventing infectious diseases so that the great scourges of the Middle Ages cannot be repeated. Lockjaw is prevented by the injection of a serum. Yellow fever is under almost complete control—indeed that disease is in a fair way to being exterminated.

We have learned, too, that within the body certain organs form specific chemical compounds, and these compounds are thrown into the blood and influence distant organs. For example, there are four glands so small as almost to elude detection—the parathyroids, the removal of which is followed by violent convulsions and death; there are the two small adrenal glands, the removal of which causes progressive weakness and death; and there is the thyroid gland, the excessive activity of which speeds up the entire organism until a state of frenzied nervousness and intense oxidation is produced, with rapid loss in weight, a wearing-out of essential organs and ultimate death; while individuals with a deficient thyroid tend to become dull and sleepy and cold and flabby and fat and coarse. As a result of the study of these glands of internal secretion, remarkable advances have been made in the study of various diseases. The hormones of the thyroid gland and the adrenals can now be made in the laboratory or we may borrow each from the sheep or the pig. It is well within the range of possibility that with the general application of the principles worked out by many investigators, by Marine and his co-workers in particular, simple or endemic goiter with its sequellæ, cretinism, infantile and adult myxedema, idiocy, imbecility, mutism, nodular goiter, and a high percentage of malignant tumors of the thyroid, may be eliminated from among the scourges of mankind. The discovery of insulin by Banting and MacLeod provides a control for diabetes, a disease which in the past has claimed about 80,000 victims a year. And now Dr. Minot and his associates in Boston have found that the cause of pernicious anemia is a deficient amount of a certain substance in the liver. This substance has been identified and pernicious anemia is now curable.

The surgeon who performs hundreds and thousands of operations each year can now provide his patients with the solace of anesthesia, the protection of aseptic methods, the conservation of his bodily energies by the prevention of shock and the restoration of them by blood transfusion. Thus today, armed with the findings of scientific investigations, the surgeon successfully invades every part of the body, even the deep parts of the brain, and thousands upon thousands of men, women, and children are taken out of the path of danger and restored to health.

In another field, victories are being achieved. This age of continuous excitement, of fierce struggle, of heavy mental strain pays a heavy toll in mental breakdowns. In this field the newer psychology has strengthened the hand of the psychiatrist and many good results are being achieved.

As the result of the great diminution in the

hazards of childbirth, of our better knowledge of diet, of the control of infectious diseases, of the increased efficiency of surgery,—and to these must be added better housing, better food, better living conditions,—the span of life has increased as follows: In the 16th century the average length of human life was 18 to 20 years; in 1800, less than 25 years; in 1900, between 45 and 48 years; in 1924, 56 years. Not only is life longer but it is better —better physically, better mentally, and, I believe, better morally.

So much for the present. What of the future? What will be the trend of medicine in the last 70 years of this century which has already seen such remarkable progress?

I feel that I am justified in making the prophecy that before many decades the role of the physician will have changed to such an extent that his profession will seem an entirely new one as compared with the practice of medicine today. This change will be the result of many factors. Education in the public schools and universities and education of the public at large will have brought the public—at least the intelligent public—to a point where it will be as well informed along general medical lines as is the physician of today, and diet, hygiene and preventive measures in the treatment of the more common diseases will be matters of general knowledge. Consequently the chief duty of the physician will be to develop the race, to direct the development of youth and to guide the adult along sound biological lines so that he may safely engage in the maximum of work and of play. In other words, the physician will be called upon to study the whole problem of man in relation to his environment. As for disease, the physician will be more concerned with its prevention than with its treatment. In fact, treatment of disease some day will be a confession of failure.

The physical conditions under which medicine is practiced will also have undergone great changes. The division of the field of medicine into specialties will have been carried even farther than it is today, so that only a superman will be able to have a complete knowledge of the entire field of medicine.

As for the different divisions of medical science, the present outlook would seem to indicate that in the future their individual progress will vary greatly. Surgery will continue to make advances, but most of its obstacles have already been conquered, and its field will grow narrower as preventive medicine advances.

The field of the internist, on the other hand, will be widened by advances, particularly in his knowledge of the ductless glands and the mechanism of the mind—psychology, memory, reason. Every physician will be trained to understand the psychological problems of his patients as well as their physical ailments, for this will be made necessary by the increased nervous strain and resultant nervous exhaustion encountered even in the life of the average individual. It will be an interesting question in the study of evolution to observe how the nervous system will adjust itself to this increased strain. Nor will the adaptation of psychology be limited to medicine; practical use of it will be made in schools in an effort to adapt the pupils to their environment.

As for individual problems which we are now trying to solve, I feel that their solution will meet with varying degrees of success: Tuberculosis and diabetes will be conquered. The public will learn the importance of the early eradication of focal infections and the incidence of other infectious diseases will be reduced, and it will follow that to the extent that diseases of the heart and blood vessels, high blood pressure, and diseases of the kidneys are due to infections their incidence will be reduced. On the other hand to the extent that these diseases are caused by nervous and mental strain—by the kinetic drive of environmental conditions the incidence may even be increased.

The incidence of venereal disease will decline greatly. Because of the change in the attitude of the public toward it, venereal disease will be openly controlled. The hazard of childbirth will be even further reduced, but congenital deformities will occur with the same frequency. The span of efficient life will be lengthened still further. The nature of cancer will eventually be revealed, but it will still claim many victims.

It is in the field of nervous and mental diseases that we shall be "in red ink." The complicated mechanism of the web of life in which civilized man is enmeshed will lay a heavy toll on the brain and nervous system and on the ductless glands and in consequence on the heart and blood vessels and kidneys. Therefore as time goes on, there will appear an increasing number of wrecks. The reproduction of the unfit will be reduced and as a consequence there will emerge the beginnings of a superior race.

Within certain limits, therefore, the physician of the future will be able to control the growth of the body and the development of the mind. He will acquire such a knowledge of biochemical and biophysical processes that he will be able to guide his fellowmen as an engineer of living processes.

We may confidently expect that science will

reveal the nature of life—and with it the physical nature of mind and personality. These expectations are based on the achievements of chemistry and physics. The biochemist has been able to construct many of the compounds of which the body is made, and surely the end is not yet. The biophysicist has already identified the energy that organizes and drives living things; he has found that the physical laws of the living organism are identical with the laws of the non-living. It will be a long and difficult task for the chemist and the physicist and the workers in the medical sciences to reproduce the infinitely delicate balance between energy and form which endows the non-living with the attributes of beauty and movement, and growth, the reproduction, and memory and ends in unbalance with resultant death and disintegration. It is the task of the medical scientist to discover and control as far as he can the causes of man's infirmities and to prolong his useful life. But the layman as well as the physician has an important role to play in the achievement of such an ideal.

END RESULTS IN ECLAMPSIA*

By ALFRED C. BECK, M.D., BROOKLYN, N. Y.

From the Department of Gynecology and Obstetrics of the Long Island College Hospital.

THE material which furnishes the basis for this study consists of 97 consecutive cases of eclampsia treated in the past 16 years. During the first quarter of this period our chief consideration was the prompt removal of the products of conception. Having evacuated the uterus our attention was then directed towards stimulation of the emunctories and relief of the symptoms in the desperately sick mother. All cases were considered to be dangerously ill but we seldom swerved from the principle that the removal of the cause of the toxemia, the living products of conception, must be accomplished most promptly. Accordingly untimely and forcible measures frequently were employed. Among them were: manual dilatation of the cervix and forceps; multiple incisions of the cervix and forceps, vaginal hysterotomy, followed by version and extraction; high and mid forceps and even cesarean section.

Immediately after these anything but trivial operations, the unfortunate women who survived were subjected to eliminative measures that would have taxed the strength of a strong and healthy laborer. They included the use of hot wet packs, gastric lavage, croton oil and castor oil or magnesium sulphate by mouth, followed by frequent colonic irrigations, hyperdermoclysis and phlebotomy. Anaesthesia, morphine, chloral and veratrum viride often were added and the hypersensitive patient frequently was thrown into a convulsion by repeated catheterizations and blood pressure determinations.

To sum up the routine followed in this early period we might say that these desperately ill women were subjected to major operative procedures when they were poor risks for any operation and, surviving operation, recovery was further jeopardized by the use of eliminative measures little short of heroic.

Twenty-five per cent of these patients died. As I look back on this experience I wonder not that so many died from eclampsia but that so many survived the treatment.

These figures compared favorably with those of other clinics which like ourselves employed the accepted routine in eclampsia. However, when compared with the results published by Stroganoff and Tweedy, they were most disappointing. Although these men taught that the products of conception should not be disturbed, a principle then regarded as rank heresy, we felt that even this apparently unwise practice should be given a trial.

Throughout the next four years neither interruption of pregnancy nor the hastening of labor was attempted except for a definite indication other than eclampsia. Morphine in large doses was freely given and the milder eliminative measures were employed. While our results were much less favorable than those reported by the exponents of this routine, they were considerably better than any previously obtained by us.

About eight years ago the histories of all of our eclampsias were carefully studied with a view to further improving our routine. A separate chart was made for each case to show the relation between the various therapeutic measures and the onset of the convulsions. In over half of the cases in which a stomach tube was passed this procedure caused a convulsion. The insertion of a rectal tube occasionally, was immediately followed by a seizure. The same observation was made, only less frequently, in

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regard to catheterization, blood pressure determinations and hypodermic injections. These charts clearly showed that we often failed to recognize the fact that the woman suffering from eclampsia is hypersensitive to external stimuli and that convulsions may be provoked by very slight irritation.

Protection of the Patient: We now try to protect all eclamptics from unnecessary external stimuli. They are placed in a darkened room that is kept as quiet as possible. Gastric lavage no longer is employed. Colonic irrigations are given but once or twice in 24 hours. Whenever possible, hypodermics and other treatments are given during the coma that follows a convulsion. In doing a phlebotomy we withdraw the blood through a large paraffin-coated needle and thus avoid the irritation usually produced by cutting down a vein. Frequent blood pressure determinations and catheterizations are no longer done. In general we try to protect all eclampsias from avoidable irritation, just as is the custom in the treatment of tetanus, strychnine poisoning and hydrophobia.

Phlebotomy: The same study led us to feel that phlebotomy often was beneficial. This was particularly true in the cases where the blood was withdrawn soon after the onset of convulsions and was large in amount. As a result we included in our new routine early large phlebotomy. We aim to withdraw 1000 c.c. of blood through a paraffin-coated needle immediately after the first convulsion that occurs in the hospital. During the phlebotomy the blood pressure and pulse are constantly observed. If the blood pressure falls below 100 or the pulse rises rapidly the phlebotomy is discontinued, otherwise the full 1000 c.c. are withdrawn.

Morphine Routine: An outstanding fact also revealed by this survey of our records was the remarkable tolerance for morphine exhibited by the eclamptic patient. To obtain the desired effect it was necessary to repeat the drug in quarter-grain doses at hourly intervals. In some patients two to four grains were given within 24 hours. In one instance 4½ grains in 16 hours had no harmful effect on the mother or child. This tolerance for morphine led us to increase the initial dose to one-half grain and follow it with quarter-grain doses at intervals of one hour until the convulsions cease or respirations are below 12.

End Results: The routine just described has been in use for 8 years. During that time 48 women suffering from eclampsia have been admitted to The Long Island College Hospital. Three of these died, a mortality of 6.3% This figure compares most favorably with that obtained in the preceding 8 years when 49 women were treated for eclampsia and 13 or 26.5% died Details of the two series are shown in tables 1, 2 and 3.

TABLE 1

End Results in Eclampsia

	8 Years 1914-1922				8 Years 1922-1930			
	Cases	Deaths	%		Cases	Deaths	%	
Antepartum	15	2	13 3		13	1	7.7	
		40	9	22.5		27	1	3.7
Intrapartum	25	7	28		14	0	0	
Postpartum	9	4	44 4		21	2	9.5	
Total	49	13	26 5		48	3	6 3	

TABLE 2

Method of Delivery

8 Years 1914-1922

	Cases	Deaths Maternal	%	Fetal	%
Not Delivered	4	3	75	2	50
Spontaneous	14	0	0	7	50
Breech Extraction	1	0	0	1	—
Forceps	7	2	28.5	1	14 3
Man. Dil. Version and Extraction	1	0	0	1	—
Incision of Cervix and Forceps	1	1	100	1	—
Vag. Hysterotomy	6	0	0	3	50
Cesarean Section	6	3	50	1	16 6
Postpartum	9	4	44 4	—	—
Total	49	13	26.5	17	34.7

TABLE 3

Method of Delivery

8 Years 1922-1930

	Cases	Deaths Maternal	%	Fetal	%
Not Delivered	11	1	9+	10	90 9
Spontaneous	8	0	0	4	50
Low Forceps	5	0	0	2	40
Vag. Hysterotomy	1	0	0	1	—
Cesarean Section	2	0	0	1	50
Postpartum	21	2	9.5	—	—
Total	48	3	6 3	18	37.5

The low maternal mortality, we believe, was due in a large measure to early large phlebotomy. Our faith in this measure has been greatly strengthened by the fact that in 30 of the 40 cases in which phlebotomy was done not a single convulsion was observed after the blood letting.

The fetal deaths were high in both series. Usually the fetal heart disappeared within a few hours after admission. While the conservative routine in our hands has been most beneficial to the mothers it has given us very poor fetal end results.

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THE HEALTH OFFICER'S DUTY IN TUBERCULOSIS CONTROL*

By ROBERT E. PLUNKETT, M.D., ALBANY, N. Y.

PREVENTION, as in all public health work, is the keynote of tuberculosis control. The successful application of the principles of such control depends upon two fundamental factors; first, a properly trained and qualified health officer; and second, the proper facilities such as dispensaries, sanatoria, and public health nursing service.

Inasmuch as the character of tuberculosis work in a given community is usually in direct proportion to the ability of the health officer, a few words concerning the qualifications of health officers are appropriate. We all admit that the degree of Doctor of Medicine alone does not make a health officer. Our attention has been directed many times to the fact that practicing physicians have not administered public health programs successfully. What, therefore, are the requisites for a health officer?

He should have academic and scientific training, which equips him to appreciate the manifold health problems of a given community. To determine the magnitude of the task of tuberculosis control, he must have mortality, morbidity, economic, industrial and social statistics covering his district. He should be qualified to evaluate these data with precision in order to map out intelligently the various and sundry methods of performing the necessary work. He should have an apperception of modern scientific methods in research and practice, so that his efforts will be guided wisely and in the most effective manner. He should have the ability to prepare and present tables, graphs, maps, and similar data in a manner which clearly sets forth their significant features and the things which should be done. These are very valuable in discussion, especially in securing financial support for a project.

There is no more amenable, yet at the same time insidious, enemy to public health than the tubercle bacillus. This organism is usually able, or is forced by what we term resistance, to abide within our bodies for years, without causing any appreciable disturbance to our bodily functions. Small and intermittent doses of tubercle bacilli may even afford a good future protection, but we know that massive doses usually lead to tuberculous disease, adding other foci of infection to those with which we must deal.

What can the health officer do to combat present foci of infection and prevent the occurrence of future ones? From the academic side of administration must come the statistical data which have been compiled. The reporting of every tuberculosis case is the very essence of the general application of a prophylactic program and not by any stretch of the imagination has it assumed, the proportions it deserves in this State. Of all the statistical data necessary for the proper evaluation of a tuberculosis problem none are more important than those pertaining to morbidity and mortality.

Every community should report three new cases per one death each year and the health officer should have a record of at least six existent cases per one death in a given year. Although the law does not require the recording of contacts, the health officer should maintain an active file of all sputum-positive contacts.

The home of every reported case should be visited, studied, and classified. When a case is reported the health officer should lend his efforts toward assisting the attending physician in the elements of prophylaxis. He should appreciate the value of sanatorium treatment, and advocate it from the standpoint of therapeutics, prophylaxis and education. He should assist in giving hygienic advice to reduce to a minimum the spread of infection. He should promote constantly repeated examinations of sputum from suspected cases, a procedure which is badly neglected at present.

He should also obtain the periodic examination of contacts, and offer diagnostic facilities to those who cannot afford a private physician. Through the agency of his public health nurses he should carry on a continuous campaign of education in the homes of patients, and lend his good offices in securing and maintaining proper standards of operation of the sanatoria to which he sends patients.

In addition, he should study each case, not as such, but as a home and a family, with its possible social and economic effect upon the community. He should sincerely appraise the economic handicaps of the families of patients. Greater use should be made of the law which makes provision for financial help to mothers while the father is under treatment in a sanatorium, or after his discharge until he is able to return to work. The health officer can, and should, assume responsibility in promoting such subsidies.

At times I have heard so much concerning standards of work and charts of classic organization that I wonder if we ever think of a case except as such. There is a type of qualification for a health officer or any public official, aside from scientific training, which cannot be measured by charts or statistics. This I shall term the emotional, or humane quality, of health administration. A health officer should apply the same compassionate consideration to a family in which there is a case of pulmonary tuberculosis, as a surgeon does in determining whether a

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patient should or should not have a serious operation.

Should a health officer become exercised when he has a case of smallpox in the community, and be relatively unconcerned about the ravages made by a sputum-positive case in a home where there are four or five child contacts? Is this reaction due to traditional fear of one disease and ignorance of the other, or is it due to discouragement with the prolonged and unspectacular vigilance necessary to prevent the latter disease? If the health officer feels his responsibility in this human problem, I am sure his reward will be golden and his success certain.

In closing let me summarize: The nucleus of factual data consists of reported cases, the cytoplasm consists of household contacts, the cell as a whole is the home, and the surrounding tissue is the community. Study and analyze the data; evaluate their significance, with true scientific spirit. Leave no stone unturned in securing sanatorium treatment, for a time at least, for every positive case. Encourage and advocate dietetic and hygienic measures for contacts to increase their resistance, and minimize chances of future breakdown. Advise periodic examination of these contacts.

From the emotional standpoint, study each cell with the microscope of fervor, its nucleus, its cytoplasm, and the surrounding tissue. Put yourself in the position of the patient, and of his family, and remember that the disease may result in more than the death of one patient. It will, by virtue of its etiology, become transmitted from one to others, unless we apply ourselves to education, both of the physicians and the public, in ways and means by which the disease can be controlled. Awaken your social consciousness. Appreciate the consequences to the patient, the family, and the community, unless your scientific and humane knowledge be applied in an understanding manner.

If public health is purchasable, tuberculosis prevention is a bargain, for, unlike many communicable diseases, we know its cause, its means of transmission, and methods of prevention. A case of tuberculosis, therefore, which is reported in the face of all our data and knowledge, is a confession of ignorance, or neglect, or both. In our efforts at success, however, may we never become so efficient in our administration that we become indifferent toward our patients, and forget that a case is a human being, a house is a home, and the hope of the community lies in healthy, happy families.

THE DIAGNOSIS OF INTRA-PERITONEAL HEMORRHAGE FOLLOWING TRAUMA*

By A. B. SULLIVAN, M.D., NEW YORK, N. Y.

IN surgical practice hemorrhage is met with in two phases—External or visible bleeding which, regardless of how profuse or from whence its source, can be promptly and adequately dealt with insuring its arrest. The other is internal or, I might say, invisible bleeding such as occurs into the large cavities of the body, particularly the abdomen. No one will deny the statement that the latter phase of hemorrhage constitutes a serious condition for the patient and confronts the surgeon very often in an uncertain way, causing him no little anxiety and a difficult problem in diagnosis. Hence I present the subject of intra-peritoneal hemorrhage, in so far as it relates to a patient whose peritoneal cavity has been the seat of a sudden inundation by blood as a sequence of trauma.

On the service of a large general hospital every year one sees a relatively large number of patients admitted in a state of shock, with a history of trauma, whose symptoms are referable to the abdomen. Excluding those cases of penetrating stab and gunshot wounds, what means have we in determining quickly and positively whether or not a patient, following a fall or a blow upon the abdomen, is suffering with a concealed hemorrhage into the peritoneum? If the lesion be that of free bleeding, it is most essential that it be recognized as quickly as possible and exploratory laparotomy performed at once, since intra-abdominal hemorrhage is usually profuse and, if temporized with, too often fatal. But on the other hand, in a patient whose apparent shock is not caused by or accompained with intra-peritoneal hemorrhage, error in judgment and exploratory operation in many cases is all that is required to insure a fatal outcome.

By analyzing the condition, I believe that certain points may be brought out which definitely indicate its presence and should thereby lead to early diagnosis and the prompt institution of the proper treatment.

Regardless of any primary violence sustained giving rise to intra-abdominal bleeding, the sudden flooding, with blood of the vast surface area of the peritoneum, which is so sensitive to invasion by foreign matter, constitutes trauma of no little moment. Here we have three factors—the initial trauma, the loss of blood from the general circulation and the

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peritoneal irritation by this blood, resulting in and quickly ensued by a fourth factor, namely, that of the so-called condition of shock. Hence in the rapid succession of these factors we are confronted with a multiplicity of conditions combining to create a constitutional emergency, graver and more serious than which I believe there is none.

In any discussion of hemorrhage, shock must be given a foremost place and dealt with, with frank consideration because of its constant presence in all cases of profuse or massive bleeding. Shock is a term used rather loosely to designate a bodily state seen in many conditions and in various degrees. Numerous theories there are, which by analysis of the known phenomena of this complex condition, endeavor to explain it, but lacking substantiation fall short of their purpose. In the literature it is universally conceded that there is no clear definition of the condition. Hence our knowledge of shock is limited to the facts learned by clinical observation, therefore our conception of it is best described by an account of these facts.

The following is an account given by Fischer[1]: The patient described by him was that of a young man who was forcibly struck in the abdomen by a heavy pole. The grave symptoms and alarming look which the patient presents made their appearance immediately after the accident. He continues: the man lies perfectly quiet and pays no attention to things about him. The pupils are dilated and react slowly to light. He stares purposely and straight before him. His skin and such parts of the mucous membranes as are visible are pale. Large drops of sweat hang on his forehead and his whole body feels cold to the hand. A thermometer indicates 1 deg. centigrade below normal by rectum. Sensibility is much blunted over the whole body and only when a very painful impression is made on him does he fretfully pull a wry face and make a languid defensive movement. The pulse is almost imperceptible and very rapid. The arteries are small and the tension low. The patient is conscious but replies slowly and only when importunely questioned. His respiration is characterized by long, deep sighing inspirations, alternating with very superficial ones which are scarcely visible or audible.

Cowell[2], who has had extensive opportunity to observe shock in wounded soldiers; has divided shock into two groups: Primary and Secondary.

Primary shock is seen, he claims, when the damage sustained by the body is so great that death must supervene unless surgical intervention is soon available. The blood pressure falls rapidly and all the symptoms of shock are observed as soon as the patient is seen. It is Cowell's judgment that such a state rarely occurs except when associated with hemorrhage. This I believe to be true and it is the factor, in which we are particularly interested, in intra-abdominal bleeding.

Secondary shock, Cowell says, is the type which follows several hours after injury and is partly attendant upon certain factors superimposed upon the initial trauma, such as exposure; anesthesia; surgical manipulation or continuous loss of blood. It may or may not have been preceded by a state of primary shock. Primary shock may be recovered from, at least partially, but, however, it is likely to develop into the secondary form. This period of recovery is called reaction.

In studying Cowell's analysis of shock and associating it with my own observation, I shall divide internal hemorrhage into four stages: First, there is the stage of hemorrhage. This is quickly followed by the second stage, that of primary shock. With the second stage there is without doubt a cessation or a marked diminution of the bleeding. At this point the patient reaches a crisis and, either death intervenes or the patient passes on into the stage of reaction, in which we have a resumption of the bleeding, leading into the fourth stage, secondary shock ending in ultimate and certain death. Thus it is clear that the sooner hemorrhage is recognized and arrested, the better are the patient's chances of recovery, primary shock, under the circumstances, being no contraindication to immediate operation.

Very often we are confronted with the problem of differentiating shock, which is the direct result of trauma without hemorrhage and shock, which is the result of trauma with concealed intra-abdominal hemorrhage. The symptoms of hemorrhage as enumerated in surgical texts differ none whatever from those enumerated in Fischer's description of a patient in profound shock. Thus it would seem to follow that the dictum uttered by the older generation of surgeons, that shock is hemorrhage and hemorrhage is shock, receives a striking confirmation.

It has appeared to me that the striking and essential difference between traumatic shock without loss of blood and shock due to hemorrhage is one of intensity. In this connection, I have observed and recognized a condition, simulating shock, which I believe is brought about by violent afferent nerve impulses causing a general vital depression, the direct sequence of trauma, without loss of blood. This state of depression I call collapse, preferring to associate the term shock with a most alarming condition directly related to the loss of blood. This depression, which I designate

Collapse, may be seen with many conditions, none of which, however, being accompanied with loss of blood. Perforation of hollow abdominal viscera with peritoneal invasion by foreign and contaminated material, sudden occurrence of pneumothorax; pulmonary embolus; fractures of the long bones; fractures of the vertebrae; acute pancreatitis; spinal anesthesia; are some of the conditions accompanied by collapse.

I do not contend, however, that there is always a distinguishable difference clinically between Shock and Collapse, but on the other hand, I readily agree that the general depression associated with the state of Collapse may and often does closely simulate Shock. But if one can make a differential diagnosis between Collapse and Shock, then it is possible to distinguish between trauma without hemorrhage and trauma with hemorrhage. This difference, I believe, is the difference between pallor and restlessness in Shock and hemorrhage and lividity of the skin and general apathy in the Collapsed state; these factors plus the other commonly observed symptoms and signs seen in both Shock and Collapse.

A patient might suffer visceral injury without hemorrhage and, even if we concede the perforation of a hollow organ with peritoneal contamination, still the individual is spared that which is denied the patient with hemorrhage; the loss of blood from the general circulation, the latter factor constituting an immediate and most serious complication superimposed upon an already existing serious lesion.

A factor which has stood out in my observation is in the elicitation of the physical signs. Tenderness and rigidity may be very slight even in the presence of considerable hemorrhage. This is due to the sluggish response of a shocked patient to painful stimuli; and since the degree of an abdominal emergency is often determined by the intensity of the tenderness and rigidity present, the absence of marked signs must not lead to temporizing, but rather on the contrary, should point very strongly to a suspicion of bleeding.

Pain in one or both shoulders and scapula regions is, in my opinion, a very significant symptom of blood in the peritoneal cavity. The phenomena is explained by the irritation of the diaphragm by blood clots in the perisplenic and subphrenic spaces. It is essential here to rule out injuries to the thorax and its contents. This is not difficult, as a rule, by simple physical examination. I was greatly impressed by the importance of this symptom very recently, when over a short period of time, I observed this complaint as a most outstanding feature in four cases of intra-abdominal bleeding. Two cases of ruptured spleen, one with spontaneous rupture operated on by me; the other case that of latent hemorrhage from the spleen following trauma, operated upon by Dr. Cunniffe Splenectomy was performed in both cases and both patients recovered uneventfully. The other two cases presenting this symptom were patients with ruptured tubal pregnancies; both being in the right fallopian tube. These two women complained of intense pain over the lower right side of the thorax, the pain radiating to the right shoulder and scapula regions.

The blood picture immediately following hemorrhage is essentially a prompt increase in the polymorphonuclear white cells, a leucocytosis of 20,000 being a common finding after sudden and profuse bleeding. The red cell count at first is almost entirely unchanged, showing very little, if any, variation from the normal. The hemoglobin likewise shows little or no change, the color index remaining "one." This is due to the fact that the loss of blood is primarily a loss of volume rather than a loss of blood elements, any given cubic millimeter of remaining blood showing a normal red cell and hemoglobin content. Later, however, when the body tissue fluids are called upon to replenish the lost volume, the dilution is then manifested by a decrease in both red cells and hemoglobin. In the process of regeneration the production of red cells exceeds the production of hemoglobin, and the bone marrow turns out red cells with a lower hemoglobin content than normal. In other words, the color index becomes less than one and the picture is that of a secondary anemia.

Other symptoms and signs of intra-abdominal hemorrhage which do not, however, warrant elaboration, are restlessness, air hunger, thirst and dullness in the flanks.

CONCLUSION

(1) Intra-peritoneal hemorrhage very often presents a difficult problem in diagnosis.

(2) Shock indicates hemorrhage. Shock is Collapse plus something else. That something is loss of blood.

(3) Experience and judgment are the best aids to diagnosis. With both, cases still escape early recognition.

(4) Delay in diagnosis means the delay of that which is the patient's only hope of recovery—Immediate operation.

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ESSENTIALS IN FRACTURES*

By JOHN J. MOORHEAD, M.D., NEW YORK, N. Y.

IN this day when accidents are so frequent, it may be profitable to review our knowledge as to the essential treatment of some of the more important fractures. We recognize that there is a widespread interest in the management of the injured because hospitals everywhere are now acting as service stations for the treatment of the traumata.

In the not too distant past, any hospital beyond a railway or industrial zone was rarely called upon to treat severe injuries. But with automobile transport, with aviation, with miles of new territory opened up by modern highways, the situation has changed, and today we are confronted by what in effect is an epidemic in injuries. This demand is by no means limited to the larger cities, but on the contrary, any town or hamlet contiguous to a good road, may be called upon to render a very specialized type of service to a group of patients capable of commanding and demanding the best grade of attention. This same type of patient stricken with appendicitis could perhaps with safety be transported to the nearest large hospital, but if the surgical emergency is traumatic, the treatment must be given at the nearest available hospital, and to be effective it must be prompt and it should be skillful. The problem is thus one of imminent necessity, and the profession everywhere are becoming alert because the demands are insistent and the supply of material increasing. To meet this law of supply and demand it is pertinent to state in some detail methods of treatment that have been tried out often enough to fulfill requirements.

What is a fracture? To me it means essentially a lacerated wound of bone, and if we will thus regard fractures, much of the confusion in treatment will disappear. Further, let us regard these bone wounds as being in the same class as soft part wounds. We are all familiar with incised and with lacerated wounds of the soft parts. Accordingly let us classify fractures in the same way, and thus we divide broken bones into two general Types. Type I is that group in which the bone ends are not in contact, they overlap or are otherwise displaced. This is like the lacerated wound class. Type II is that group in which the bone ends are in contact, they are not overlapped and they are not displaced. This is like the incised wound class. Either Type I or Type II may be simple (closed) or compound (open) fracture. Now the essential thing in the treatment of every fracture is to restore alignment, to convert the Type I into the Type II class. In other words we convert a side-to-side anastomosis into an end-to-end anastomosis. And in order to do this we know that in the reduction, traction of some sort is necessary. There are only two kinds of traction, namely, manual and mechanical traction. Manual traction is manipulative, and here let me urge the value of anesthesia in the setting of any Type I fracture. Nitrous oxide, drop ether or Ethyl Chloride are the inhalants of choice.

In certain joint fractures, as of the wrist, local anesthesia has a distinct field. In lower extremity fractures, spinal anesthesia is of value. Intravenous anesthesia as yet is not sufficiently standardized to be recommended. Now, obviously, the treatment required for a Type I or overlapping fracture differs from the treatment required for a Type II or non-overlapping fracture. The treatment of one is as different from the treatment of the other as is the treatment of a catarrhal appendicitis by comparison with a ruptured gangrenous appendicitis.

Hence treatment is summated in the four R's in the fracture lexicon—and these four R's are (1) Recognition; (2) Reduction; (3) Retention; (4) Rehabilitation.

(1) *Recognition.* What are the means of diagnosis? At the outset let us remember some clinical precepts, some of the laws of averages, some of the lessons of experience. Let me narrate some of these:

(a) If the violence has been adequate, suspect and expect adequate effects. This applies especially to injury by direct violence.

(b) Every joint injury associated with deformity and disability is a fracture and not a dislocation in about 75% of the cases, the shoulder joint excepted.

(c) In any person aged 50 or over, diagnose fracture of the neck of the femur before consigning that hip or that patient into the contusion-sprain class.

(d) Every wound not made with surgical intent is already infected and should be so regarded and treated. Hence all compound fractures are in that group.

(e) Be especially on guard in respect to injuries of the back and region of the pelvis, for fracture of the spine and fracture of the pelvis are exceedingly common in the absence of classical signs.

(f) Beware also of head injuries, for skull fracture is vastly more frequent than we realize.

(g) Finally, if in doubt, suspect fracture, treat for fracture, prognosticate fracture, until clinically or by *x*-ray all doubt is removed.

(2) *Reduction.* This is the keynote of fracture treatment, this the essential step in management. As has been indicated, there are two Types; namely, Type I with fragments displaced, and Type II with fragments not displaced. Now in this latter, the non-displaced type, we need no

* Read October 7, 1930, before First District Branch of the Medical Society of the State of New York.

reduction at all if the general alignment is maintained. Hence we let these alone and merely apply a suitable splint. But what is the index of general alignment? In the upper extremity, the anterior line runs from the acromion to the midspace of the elbow, thence to the mid space of the wrist, thence to the middle knuckle The *lateral* line starts at the acromion, thence to the external condyle of the humerus, thence to the radial styloid.

In both instances the position of the extremity is full supination, or palm up. In the lower extremity, the *anterior* line begins at the spine of the ilium, thence to the middle of the patella, thence to the mid-ankle and thence to the interspace between the first and second toes. The lateral line begins at the spine of the ilium, thence to the external condyle, thence to the external malleolus. In both instances, the limb is flat and the ankle at a right angle. However in the Type I or displaced group, the process of converting an overlapped into a non-overlapped fracture is the first act of treatment. Hence traction and manipulation are employed. If manual traction methods are attempted we should have full relaxation, and hence anesthesia is necessary, as already indicated. If however manual methods are *ineffective* or are *likely to prove unavailing*, we resort to mechanical traction methods. The simplest form of mechanical traction is by the use of adhesive plaster so arranged that the pull is *in the axis of the upper fragment*. We so arrange our apparatus that counter-traction is obtained, and we apply the maximum of weight at the outset. Right here it is pertinent to say that some sort of *provisional traction* should be applied to every case just as soon as the diagnosis is made. A towel or sheet around the ankle or wrist is often enough, and if this simple expedient is used, we will have the satisfaction often of finding our fracture reduced after a few hours This applies especially to cases seen when for a variety of reasons the patient is not ready or we are not ready for the application of definitive splintage. Do not wait for the *x*-ray confirmation, nor for more perfect paraphernalia If we reduce now, we avoid complications; if we reduce later, we invite complications. Adhesive traction reduction is most applicable in the humerus, and to a lesser extent in the upper leg. In the forearm, femur and lower leg it has so often proved unsatisfactory that other methods are necessary. For overlapping fractures of the forearm that do not yield to manual traction, my practice is to perform open reduction, and then self-notch the fragments, suturing by chromic gut if necessary.

If the fragments are not serrated, then they are deliberately notched by a rongeur. If there is a long prong on one fragment, this is reshaped so that it will fit into the medulla of the other fragment. The first plan we call "bone notching"; the second plan is "bone steepling." This same practice is used in certain other long bones also, and since we have employed it, bone plating has not been necessary. Here let it be said that the use of non-absorbable material in bone surgery is now almost as much out of fashion as is the use of non-absorbable buried suture material in soft part surgery. In the long ago, silver wire was used by some gynecologists and by some herniotomists; but the procedure is *now* in the limbo of wooden-handled instruments.

Hence metallic plates, screws, nails, clamps or wire are very rarely necessary. Personally I have *not plated a fracture in more than a decade*, and in that interval have used wire sutures only three times, and in each case the humerus was involved.

In the femur shaft group we believe skeletal traction to be the most efficient method when:

(a) The fracture has remained unreduced 24 hours or more, or has resisted the usual methods of reduction
(b) The fracture is in a muscular patient.
(c) The fracture is in the supra-condylar region.

Under these circumstances our experience is that a choice has to be made as between skeletal traction and open operation, and of these we regard the former as by far the safer.

We prefer the nail to the tongs or the stirrup as a *means of traction, and always employ the* one-piece rather than the two-piece nail.

We attach a very heavy weight from the outset in our femur group, often starting with a *weight of 40 pounds. After 48 hours, this* can gradually be reduced and at the expiration of 7-10 days, the nail usually can be withdrawn and plaster of Paris substituted. In order that the *whole procedure may be a one-stage affair*, we introduce the nail and leave free a space of about six inches above and below, covering the rest of the thigh and leg in plaster just as in any other spica When our reduction is found satisfactory, we fill in this window with plaster, let it harden, *x*-ray again, and if all is well, withdraw the nail through the plaster. All this secondary part can be done with the patient in bed and thus there will be no chance of upsetting the correction.

After union is solid (usually in 6-8 weeks) we apply walking callipers and make the patient ambulatory.

Skeletal traction in this group has rendered a great service and has simplified the management of what has hitherto been regarded as one of the serious problems in fracture surgery. To me the most difficult and potentially crippling fracture of all relates to the supracondylar group, and it is in this zone that skeletal traction has rendered signal service

In passing, let me extol the merits of preliminary aspiration of the knee in fracture of the shaft of the femur, for we know the frequency of the associated hemorrhagic synovitis and the direful effects of a stiff knee.

Skeletal traction is also of great value in that

large group of fractures of the lower third of the leg in which we have hitherto resorted to open operation. This area is notorious for the frequency of compounding and for the frequency of non-union. In my experience there is more non-union in this zone than in all other zones combined. The skeletal traction for this area is introduced through the os calcis in preference to over this bone or into the malleoli. Here again the principle is used of introducing the nail and applying the plaster at the same session, a window around the nail being left open to be subsequently filled when reduction is attained.

In certain fractures of the lower humerus, a nail or wire passed across the olecranon fossa makes an excellent traction device, using due care to avoid the two main nerves at the joint margins.

All in all then, we are partisan to skeletal traction believing that we are thereby relieved of the trials and dangers of open operation. Another point: as a preliminary to open operation, we often use skeletal traction in ancient cases where we know muscular contraction will be hard to overcome. Likewise in that old group of union with deformity, we introduce the nail below the fracture site and then do an osteotomy through the fracture line in preference to a step-down or other type of bone plastic.

What cases do best when operated upon? In our experience, fracture of the patella and olecranon are subjected to suture in the vast majority of cases. Next, as stated, we rely mainly on open operation in many overlapping fractures of the forearm.

Recently we have been using a motor driven device for reducing certain fractures not amenable to ordinary or skeletal traction, nor yet regarded as being wholly suitable for open operation. This contrivance we call the Repositor and in essence it motorizes the fracture table. We attach straps to the limb and fasten these to the Repositor and so arrange the traction that we can exert a pull from zero to 100 pounds. It is on the pull and let-go principle, a systole and diastole so to speak, in that the elasticity of the muscles will not be compromised.

It is on the principle of labor pains, and we can regulate the extent of the pull in pounds, the speed of the pull in five stages, and the length of the pull from zero to 7 inches.

We are quite certain that in some joint fractures and in some shaft fractures there is a field for this device. Of course, for stiff joints it makes a most efficient arthromotor, and in fractures of the spine it has rendered good service.

(3) *Retention or Splintage.* We believe in making the splint fit the patient rather than trying to make the patient fit the splint.

Hence moulded plaster of Paris is our favorite form of splintage. We rarely use a circular plaster of Paris casing in fresh fractures.

Our plan is to remove half the splintage when union is *firm,* usually between the second and third week. The rest of the splint is removed when union is *solid.* We like walking splints in certain leg fractures, and these are made by a U-shape of strap iron fastened to the plaster with one inch of it protruding beyond the sole so that the patient walks on this as if on stilts. Walking callipers are great aids in thigh and leg fractures because the crutch-bearing period is thereby much shortened.

(4) *Reconstruction or Functioning.* When can the part be used? The answer is when there is no reaction after certain test motions. We pound the fracture site, we push on the hand or nearest joint, we press against the foot, and then if there is no undue reaction in terms of redness or pain or swelling, then we proceed to allow moderate usage.

We try to gauge this ready-for-use stage not by the calendar but by the condition of repair, realizing that in some patients callus is abundant and in others sadly lacking or wholly deficient.

Skull fractures are not operated upon except for definite evidences of pressure and thus only two main groups are regarded as suitable for trephining; namely, the depressed group and the meningeal hemorrhage group. In the others, we relieve pressure by spinal tap, by glucose intravenously, by rectal drip.

Spine fractures are reduced by traction, by posture, by manipulation, by the Repositor. We believe that any case not relieved of intraspinal pressure by reduction can rarely be benefited by laminectomy.

Compound fractures are rarely subjected to primary suture, but on the contrary are carefully débrided, the stitches are placed but not tied until the 2nd or 3rd day. This is the War principle of primo-secondary or delayed suture and it is very earnestly recommended as a safety measure.

Here then are some of the essentials in fractures and some details of our own practice as to management.

Conclusions

(1) Reduction is the key to success.

(2) Early reduction means easy reduction, and provisional reduction should have wide application because fracture treatment is essentially of the emergency type and every hospital should be so staffed that traumatic cases will obtain immediate and not deferred treatment.

(3) Skeletal traction is of supreme value and often supersedes open operation.

(4) Splintage should be safe and it should be simple.

(5) Early usage is an element of after care that often makes physiotherapy unnecessary.

(6) Compound fractures should be treated by delayed suture rather than by primary suture.

UNDULANT FEVER*

By BYRON E. CHAPMAN, M.D., BROADALBIN, N. Y.

FROM the time Keefer first reported his case of infection with Brucella abortus in America, much interest and much research have been done with the disease, which here in America is branded as undulant fever. It bears a striking similarity to Malta fever and by many authorities is supposed to be the same disease. Whether Malta fever which was first observed in the Islands of Malta and has been proved to be produced in individuals who drink the milk of goats, which have been infected by Brucella abortus, interests us not so much today as the fact that we have among us the disease of undulant fever, which is contracted by drinking raw milk of cattle infected with Brucella abortus, or by contact with infected cattle and swine, or among laboratory workers who handle cultures and fresh pathological specimens from infected animals. The disease becomes all the more interesting because we have a definite means of laboratory diagnosis early in the disease and throughout the acute disease. It is possible by growing a culture in a carbon dioxide atmosphere to get a positive blood culture. The other means of definite laboratory diagnosis, and this has stood the test, is the blood agglutination test. Clinically the disease is variable, but the general symptoms are malaise, profuse sweating, chilliness, headache, and at times severe joint pains, and obscure gastro-intestinal symptoms. The disease will also produce abortion in the human as it does in the animal kingdom. The fever is intermittent and lasts from two to six weeks and usually the temperature is from 99-101 in the morning and from 101-105 in the afternoon. The pulse is noticeably slow. It ranges from 60-74 when the temperature is running from 100-105. The pulse and temperature curves very closely resemble a moderately severe type of typhoid fever. In other words, when a patient with a temperature and a pulse closely resembling typhoid and a lack of gastro-intestinal symptoms is seen and there is no other definite cause for the rise in temperature, one should do a blood culture and have a blood agglutiniation test done for Brucella abortus infection.

As physicians interested in public health, it seems appropriate to give a brief description of the disease in the cow which in the great majority of our cases is and will be our source of infection. The infected pregnant cow will lose her calf as a rule three to eight months after conception. She may or may not expel the placenta normally. Retained placenta in the cow with full term calving is always suspicious of a Brucella abortus infection. Cattle which are infected with Brucella abortus very commonly have mastitis and this is the source of our infection in our milk supply. Carpenter and others have shown that a high percentage of cows in herds infected with the Brucella abortus eliminate Brucella abortus organisms in the milk for a long time. Animals may continue to bear calves but persist in giving off abortus organisms. Veternarians claim the positive cows may give off the organism in the vaginal discharges from three to five weeks after calving normally or aborting. Since the cow contracts the disease through the digestive tract by drinking water or eating its rations which have been infected with these organisms, you can see how difficult it is for a herdsman to keep contaminating material from dairy utensils and his feet. Hence the rapid spread of the disease in cattle.

A brief description of nine of my own cases with some observations by other individuals will, I hope, give a picture of this disease:—

The blood agglutination titre in these cases was 1 to 80 and higher.

Case No. 1—Mr. W. G. Age 71 years, seen in 1926.

I was called to see this patient who complained of chilliness, weakness and generalized pains. His temperature was 101, pulse 68. He had marked tenderness in both wrists and knee joints with no redness or swelling present. The abdomen was moderately tympanitic and distended. He had no diarrhea, the examination was otherwise practically negative. Blood cultures and Widals taken several times over a period of three weeks were negative as were also two stool examinations for typhoid infection. The blood was negative for malaria. The white and red blood counts showed nothing particularly abnormal. This patient ran a temperature over a period of five weeks and then gradually recovered. No diagnosis was made at this time.

Case No. 2—Mrs. W. G. Age 72 years. (Wife of Case No. 1.)

Seven months after the first case I was called to attend this patient who complained of practically the same symptoms as her husband. The course of the disease was limited to three weeks. Since the occurrence of the first case, I had, as a breeder of cattle, become interested in abortus infection in cattle and on studying the literature had found that the disease occurs in man. Being on the alert for this disease, I immediately suspected it in this individual. Both these patients told me that for several years their evening meal had been bread and milk. Upon questioning the husband concerning his herd of cattle, I learned that during the two years previous they had had 7 cows give birth to premature calves. The blood samples were collected from the now ill

* Read at the Annual Meeting of the Medical Society of the State of New York, at Rochester, N. Y., June 4, 1920.

individual and the husband who had been ill 7 months previous and were sent to the laboratory and tested. An agglutination test was done for Brucella abortus infection and a Widal for typhoid. The Widals were both negative and the blood was positive for Brucella abortus infection in both cases.

Case No. 3—D. P. School boy, age 11 years.

He complained when I first visited him of chilliness, weakness and pains in his ankles, knees, elbows and wrists. His temperature was 101.6. His pulse was 74. He gave a history of constipation. The next morning when I visited him his symptoms were practically the same, and again in the late afternoon when I saw him he was drenching wet with perspiration. Blood counts were taken which were practically normal, except for a slight secondary anemia. The Widal was negative as was also the blood culture. A few days later we received a positive agglutination test for Brucella abortus. The acute course of this boy's disease was practically three weeks. The joint pains were present for a period of eight days. He made an uneventful recovery and has never had a relapse. His father stated that during the last year he had slaughtered four cows which had given birth to premature calves. This is about as young as this disease is seen and fortunately does not often attack children in the first decade of life when milk plays a big part in their diet.

Case No. 4—Mrs. J. K. Age 34 years.

This patient three years previously had normally given birth to a full-term, healthy baby. I did not see her until I was called to attend her on the day that she aborted. She gave a history of being five months' pregnant and had felt perfectly well up until four weeks previous. During these four weeks she stated she had tired out easily, felt very weak, had run a slight temperature in the evening and instead of progressively taking on weight, she had lost several pounds. Later this day she expelled in toto a macerated placenta and fetus. Her temperature was 100.8, pulse 70. The Wasserman was negative and the blood agglutination was positive for Brucella abortus. This patient was the wife of an owner of a farm and they received their milk supply from this farm. Later a blood test of the cattle on this farm showed that 16 out of 39 were positive for Brucella abortus. Incidentally, it is interesting to know that I delivered this same woman 20 months later of a perfectly normal baby and she experienced no difficulty during the time she was pregnant. This has been the experience of other men. It has also been found with the experience of others that women with no known reason who have repeatedly aborted have given a positive blood agglutination test for Brucella abortus.

Case No. 5—Mrs. E. P. Age 36 years.

Six months after the previous case aborted, I was called to attend the wife of the tenant farmer of the farm mentioned in the previous case. She gave a history of being three months pregnant and having felt perfectly well up to this day when she had a bloody show from the vagina and was having intermittent uterine pains. She aborted several hours later a normal-looking fetus and placenta. She gave no history which might have been suspicious of abortus infection in any way or might have been responsible for an abortion. On account of the experience with the previous case blood was collected. The blood culture was negative, the Wasserman was negative but she gave a positive agglutination test for Brucella abortus. This case varies from the preceding one in that an apparently normal pregnant female aborted, who on examination of her blood showed that she was positive for the Brucella abortus infection.

Case No. 6—W. D. Age 74 years.

This patient complained of generalized pain, weakness and pain in the epigastrium. His temperature was 102.4 on the first visit and his pulse was 68. On physical examination nothing definite was found which might have accounted for his symptoms except slight tenderness on pressure in the epigastric region and over the gall bladder area. There was slight tenderness over the upper left abdominal quadrant but not so tender as over the gall bladder region. This case was treated as an acute cholecystitis. After remaining in bed for a period of two weeks his temperature subsided and his abdominal symptoms disappeared. He remained in bed 10 days more and we were about to let him up when he had a rise in temperature with no abdominal symptoms. This temperature persisted for a week when we collected blood samples for a culture, Widal and agglutination test. The Widal and blood culture were negative. The agglutination test for Brucella abortus was positive. This time the temperature ran over a period of four weeks and finally subsided. He has since totally recovered, never having had another relapse. This patient drank milk from a herd which was definitely infected with Brucella abortus.

Case No. 7—H. D. Age 45 years.

This patient complained of headache, pains in several joints, chilliness and fever. He was seen during a mild epidemic of influenza and was first considered as such a case. After his temperature had run over a period of ten days and the marked disparity between the temperature and pulse was noted, his blood was collected for blood culture, Widal and agglutination test. His test was positive for Brucella abortus infection. He ran a temperature for five weeks when it finally subsided and he made an uneventful recovery with no relapse. This patient owned a herd of cattle and stated that two cows which he had bought several months before had aborted their calves. It might be interesting also to men-

tion here that this same man kept sheep, a number of which in the following early spring also lost their lambs prematurely.

Case No. 8—Mr. L. C. Instructor in a New York State Agricultural School.

This patient first complained of weakness, headache and generalized grippy pains. Upon examination he was found to have a temperature of 104 and a pulse of 70. This temperature ran over a period of five days with morning remissions before blood samples were collected. At the time of collecting these samples, he stated that the Agricultural School, with which he was associated had destroyed their whole herd of Holstein cattle because it was disastrously infected with Brucella abortus. He had drunk milk in the school which had come from this herd. The Widal and blood culture were negative but was positive in high dilutions for Brucella abortus infection.

Case No. 9—W. S. Age 29 years

This patient complained of weakness, generalized grippy pains and profuse sweating at bed time. He stated that he had previously been ill two different times the same as he was this day and had each time been confined to his home about one month. The interval between these attacks had been approximately six weeks. He stated that he had had several different diagnoses made on himself. At the time that I saw him his temperature was 102 and his pulse 70. He showed a marked secondary anemia, otherwise his physical examination was negative. This same day a blood sample was collected and the following day a report of a positive agglutination for Brucella abortus was given by the laboratory. The Widal, Wasserman, and blood culture reports which were later received were negative. This attack lasted for a period of four weeks. Six weeks later I saw him with a similar attack which lasted two weeks. It has now been four months and he has not had another wave.

You may note that blood cultures were negative in all of my cases but this was due to lack of a CO_2 atmosphere in incubating. Laboratory men inform me cultures should be incubated for at least three weeks before being discarded as negative growths.

This disease presents a milk health problem which I believe can be handled in one of two ways, one is to allow the sale of raw milk regardless of tuberculosis accreditation or other certification only from herds which are entirely abortion free (and the agglutination test applies to animals the same as the human) and which continue to be abortion free as shown by repeated tests of all cattle in the herd at 3-6 months intervals. I appreciate that there are now few herds which can at present stand this test and the blow it might be to many herds, particularly certified herds which have been formed at great expense. The other means is by effective pasteurization which has many times proven its worth, not only in combating this particular infection but in many other milk-born diseases. In summarizing, we may say that undulent fever is caused by Brucella abortus which is present in milk of cattle infected with Brucella abortus, second that the disease can be definitely diagnosed by blood culture and by the blood agglutination test, third that the disease apparently does not attack individuals in the first decade of life but appears at all others, fourth that the disease is an economic loss to the dairy industry and a tragedy to the individual who has repeated relapses and to the female who is unable to bear children, fifth the disease can be controlled by proper supervision of herds tested abortion-free and kept so, or more particularly by the pasteurization of all our milk supply and milk products.

MUCOCELE OF THE APPENDIX*

By CHARLES D. SQUIRES, M.D., BINGHAMTON, N. Y.

THE objects of this paper are to review the literature of a comparatively rare condition involving a rather obscure pathological process and to present a recent case.

Verchow first described this condition in 1863, since which time 168 cases have been reported. Elbe compiled the cases that were published up to 1909 and found 150. Dodge in 1916 reported 142 cases in the literature, and Davidson in 1922 was able to add 18 more, making a total of 160 cases reported up to and including 1922.

Of the etiological factors of this condition, little is known. However Elbe believes the following underlying conditions are essential:

(1) A slowly stenosing process at one or more points in the lumen, as a rapid stenosis would produce gangrene.
(2) A sterile lumen must be present either distal to or between the point of stenosis.
(3) There must be an actively secreting mucosa or at least one in which the secretion is more rapid than the absorption. Also some change in the mucosa whereby mucin is transformed into pseudomucin.

Certain types of mucocele are considered potentially malignant, because of the fact that rupture may result in a reactionary peritonitis of the progressive type known as pseudo-myxomata peritonei. Mucocele of the appendix is the only known cause of the phenomena to occur in the male. It is one of the two causes in the female. The other is ruptured ovarian cyst.

* Read before the Binghamton Academy of Medicine on May 20, 1930.

The simple, uncomplicated, unruptured mucocele is a benign tumor in structure. That pseudomucin from a ruptured mucocele or from contamination during operative procedure, produces a generalized carcinomatous condition of the peritonium is a fact. The pathological process of this phenomenon remains an unsolved problem.

The symptoms of this condition are many and varied. They may conform to the text-book type of appendicitis, others present symptoms not unlike those attributed to volvulus intussusception or obstruction of the bowel. Still others present no symptoms whatsoever and are first made known on the post-mortem table or during laparotomy for some abdominal condition.

The pathology of the condition seems the most interesting. An appendix may contain two or more cysts, connected with each other in cord-like fashion, with the remnants of a stenosed appendix, the whole structure resembling a section of a string of beads. Others present a solitary tumor at the tip, supported by a pedicle, there again the result of a stenosed appendix. If the occlusion is at the base, the whole appendix becomes transformed, assuming the shape of a sausage, the largest ones taking the shape and size of a football. The external appearance of the cysts varies with the size, the amount of fluid they contain and the tension which the walls are under. The smaller the tumor the thicker the walls. As the tumor increases in size, however, the walls become thin, translucent, present a dull glistening surface, and due to the pressure are almost avascular in appearance. On palpation they feel like an inflated toy balloon; when pressure is exerted on one part of the tumor there is an even compensatory bulging of the remaining part, only to return to its normal size when pressure is released.

Histologically the appendix shows changes of a chronic inflammation in those areas not occupied by the cyst. At the site of the cyst, the condition varies with the size. The thick wall of the smaller tumor conforms more to the normal gut wall; however as they enlarge, the mucosa becomes thinned out, the muscle coat becomes obliterated, and a replacement of fibrous tissue takes place. The contents of these cysts present rather a uniform appearance, consisting of partially congealed jelly, sticky and tenacious and giving a positive test for pseudomucin.

The cases in which the contents are serous and not mucoid are not true mucoceles, but are of the more rare type, that is hydrops of the appendix.

Case Report

Female; age, 56.

Past History: No unusual sickness, one child living and well. No miscarriages, no digestive disturbances, bowels regular, appetite good.

Present Complaint: On Nov. 10, 1929, taken with abdominal cramps and diarrhea. At this time there was no elevation in temperature, or acceleration in pulse rate. These symptoms subsided in 12 to 15 hours and the patient was as well as usual. On Nov. 15, the symptoms occurred again with increased severity, the stool was light brown and watery in appearance. At no time was there any macroscopic blood. At this time patient took a mild laxative, accompanied by an enema which gave her complete relief in a day's time. On the evening of Nov. 20th I was called to see her in her home. She was complaining of severe abdominal pain, periodic in character, accompanied with the usual loose stool. Pulse 84, temperature 98.4. Abdomen slightly tympanitic, no localized, but slight general tenderness, contour normal, no rigidity, nausea or vomiting.

The patient was seen early on the morning of the 21st, she had vomited once during the night, still having some pain and slightly increased tenderness in right lower quadrant. Hospitalization was advised.

Physical Examination: Well nourished, well developed female. Head, neck, and chest normal. Abdomen tympanitic, no rigidity, increased tenderness over appendicial area. No palpable tumor. Some varicosity of lower limbs. Vaginal examination was of no diagnostic value. On admission pulse was 84. Temperature 98.2. Blood count 17,500 white, 92% polys., 8% lymphocytes. Urine negative.

Operation advised—abdomen opened through a right rectus incision. On exploration a mass was felt in region of the hepatic flexure, freely movable and with little care delivered into operative field. This mass consisted of an enlarged appendix invaginated into the cecum. The only visible part of the appendix was its tip. The intussusception was of a sufficient degree to obstruct the ileo-cecal valve. In the two previous attacks the active peristalsis of the gut was sufficient to release the obstruction.

By careful manipulation the appendix was delivered from the cecum, and the appendix removed by partial resection of the cecum. The appendix was about 4 in. long and 2 in. in diameter at its base. The mucosa of the appendix protruded well into the cecum. The contents of the appendix were mucoid in appearance, gelatinous and sticky. In this instance the occlusion occurred at the base of the appendix and was complete.

In conclusion:

(1) Mucoceles of the vermiform appendix are comparatively rare.
(2) They are true retention cysts probably caused by chronic inflammatory changes.
(3) They are potentially malignant. The metastasis, however, does not occur until after rupture of the cyst.

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Office at 15 Park Place, New York. Telephone BArclay 7-5550

Counsel—LORENZ J. BROSNAN, ESQ. *Attorney*—THOMAS H. CLEARWATER, ESQ

Executive Officer—JOSEPH S. LAWRENCE, M.D., 100 State St., Albany. Telephone Main 4-4214

For list of officers of County Medical Societies, see this issue, advertising page xxxii.

Next Annual Meeting, Hotel Syracuse, Syracuse, N. Y., June 1, 2, 3, 1931.

DR. E. ELIOT HARRIS

The progress of the Medical Society of the State of New York is a reflection of the life work of Dr. E. Eliot Harris, who died in his home at 33 West 93rd Street, New York, on the morning of last Wednesday, February twenty-fifth. His fifty years of medical life were passed in the service of the profession as well as of the public. Graduating from the New York University Medical School in 1880, he at once began that leadership in organized medicine which he retained for half a century. His name was prominent in every annual list of committeemen and officers of the State Society. As speaker of the House of Delegates, his was a delightful exhibition of the science and art of parliamentary practice which was as pleasing as it was effective. Every member of the State Society accorded him that love and respect which he showed to them.

PRESIDENTIAL COMMENTS ON CURRENT EVENTS—NO. 17

It seems like a journalistic achievement to give to the physicians of the state in their own journal as prompt news as the press of the state gave of the report of the investigations of the Special Health Commission appointed by the Governor last May.

The problem of publicity of medical news so as to arouse the interest of the profession is considerable. When bulletins of the committees on Economics, Legislation, and Public Relations are sent out to key-men in the counties, there is a definite response although these same reports have been published in the Journal. Organized medicine should carefully think out the value of close contact reporting of activities as a basic essential for better medical organization for the purpose of advancing the solution of the problems confronting the medical profession.

The rising tide of interest all over the state this year indicates that there is a beginning understanding that the day of isolation in medicine is over.

The individual relation of doctor and patient only, no longer suffices. A doctor has in addition a relationship to public affairs and to the problems of the distribution of health and sickness service. These must be left for real solution to the medical profession, itself. If done by laymen without the leadership of medicine, it will tend to make of the practice of medicine a business instead of a profession.

The profession in this state is undertaking to meet public need in health service. In many counties the medical society is solving important problems. It often happens that this is not known beyond the county. To spread information to other counties of whatever is being done well in any county would be of very great value. The increasing contacts, year by year, of the officers of the State Society with the County Society meetings are a great factor in the steadily increasing medical interest in the public service obligation of medicine.

I have heard many County Societies discuss the problems of medicine this year in a different way from even last year. There is today more constructive thinking on the problems of medicine and its human relationships than ever before. There is an increasing understanding of the essential re'ationship between the doctor and the public. This is a most favorable attitude. It indicates that careful consideration is being given by the profession of medicine to public medical needs.

Last week I heard a discussion in the Ulster County Medical Society of how the medical profession might be able to establish a diagnostic cancer clinic and provide for the employment of an expert pathologist.

In Livingston County the medical society has established a sufficient standard fee for school hygiene work—a fee that will permit the doctor to give time enough to make a good examination. Boards of Education are cooperating in this effort to do better work. It was originated, however, by the County Medical Society. It has behind it common sense and the public now views it in the same way.

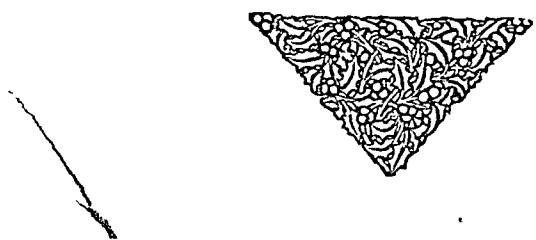
Just as much as self government depends upon majority rule, medical organization should have unanimous support of its own members when it has reached conclusions by conference of its component parts.

The profession of medicine is properly, relatively independent and individualistic in scientific medicine and in the individual application of it in practice. In all other respects it should act by unanimous opinion after it has taken pains to carefully form that opinion. It is necessary to have medical organization for long understood reasons. In recent times it has become necessary in order to have a means of self-expression. Medicine is the only competent body to solve the technical problems of health and sickness service, rising from the rapid social evolution going on throughout the world.

The moment that responsibility for meeting social medical problems is shifted entirely from the medical profession, bureaucracy begins with its lack of understanding and its lack of human sympathy. It is, of course, not expected that the profession of medicine can assume the function of government in supplying administrative equipment for the distribution of health service or material provision for adequate modern medical care; but the technical direction of this service and the distribution of it to individuals can only be done by the profession of medicine.

While civic health effort may create sentiment that results in the enactment of laws to improve health and sickness service, such as, the Public Welfare Law of 1930 in New York State, its satisfactory operation is due to the interest and cooperation of organized medicine. Every county of New York State in which this beneficent law is now functioning bears out this observation.

WILLIAM H. ROSS



A SOUND PROGRAM OF PARENT-TEACHER ASSOCIATIONS

Among the social agencies today endeavoring to do their part in the betterment of child health, none have greater potential value than Parent-Teacher Associations. New York State is well organized. There are more than eight hundred associations. They have a sound program. They understand that the entire responsibility for the child's physical preparedness for school rests with the parent, and that parents can make no greater contribution to the future of their children than to have existing physical defects corrected in advance of entering school. The Parent-Teacher recognition that the family physician is essential for the physical examination, because of his knowledge of other pertinent facts bearing on the health and environment of the child, is sound

The follow-up after a few months to see if existing defects have been corrected is the third essential. All school examinations are futile if they do not result in correction of defects found

Organized medicine should cooperate with the effort of the Parent-Teacher Associations. Their organization is a valuable addition to public health education. Their program is sound. Their recognition of the vitally important relationship of the family physician to the whole program of preschool physical examination and correction of defects found is a real contribution to the advancement of preventive medicine.

The Parent-Teacher Association is essentially a social organization for education and administration. The medical profession is willing to advise the program and to be responsible for the technical work, and in the same way that private practice is carried on This plan maintains the friendly and sympathetic interest of doctor and patient which should never be willingly disturbed.

WILLIAM H. ROSS.

DR. W. E. FORD

Dr. Willis Ellard Ford, one of the prominent physicians of Utica, died in his home on January 30, aged 81 years. Dr. Ford began his medical career as a member of the staff of the Utica State Hospital from 1873 to 1878. He was made medical director of St. Luke's Hospital, Utica, in 1882, and was instrumental in making it a home-like institution, to which the people of Utica gladly came. He also established the school for nurses in the hospital He was widely known as a gynecologist and as a teacher in electro-therapeutics. He was a medical leader and active in social and civic affairs, and was universally respected.

LOOKING BACKWARD

This Journal Twenty-Five Years Ago.

Recognition of Cults.—The first annual meeting after the reorganization of the Medical Society of the State of New York, was held in Albany, N. Y., January 30 and 31, and February 1, 1906. This Journal for March, 1906, contains the addresses commemorating the reorganization, including one by Grover Cleveland.

St. Clair McKelway, Chancellor of the Regents of the University of the State of New York, discussed the recognition of cultists and said:

"The whole situation grows out of the State's assumption of the conditions to determine both preliminary and final educational tests in medicine and in surgery, in lieu of leaving, as in the past, the determination of them to the different, and to the differing, medical schools themselves, which were unable to agree upon them. It is natural for those benefited by present conditions to wish to retain them and to prevent others from sharing with them. It is natural for those who would also share them, but who do not, to try to obtain them. The Board of Regents is thus beset both by the privileged and by the unprivileged. It is made very conscious of the existence of both and of its own bombardment by both. We shall never presume the State will reduce its preliminary educational tests. As already frankly stated, we do not believe the State should, nor can we presume the State will, reduce its final professional educational tests. It should require everyone to know the how and the why and the effect and the purpose of what he proposes to do, and should then allow him medically to do nothing else, under State auspices. Frankly, should the State do less than that, the Board of Regents could well ask the Legislature to relieve it from all the medical work delegated to it, and unasked by it. Like work, however, has been delegated to us in the case of other learned professions. The improbability that the State will lower its standard is as plain to us as the fact that the State should not do so."

MEDICAL PROGRESS

A Method of Inciting Incipient Movement in Weakened and Paralyzed Muscles.—Arthur E. Porrit and O. F. Guthrie-Smith describe a method which they have used successfully in cases of anterior poliomyelitis and spastic paralysis, and in the restitution of movements in a fractured limb. The method aims to eliminate all checks to the activity of the weakened muscles by counterbalancing the weight of the limb, inducing relaxation of the opponent muscles, and finally counteracting almost entirely inertia, friction, and gravity. This allows the feeble minimal efforts of the affected muscles to act, not in the stationary limb, but in association with pendulum movements, maintained by the operator at first and later by the patient. The apparatus necessary for this purpose is an overhead bar with ball-bearing pulleys, through which run adjustable ropes and slings. By this means the faintest return of power is allowed free play, the activity of the muscle contributes to its more rapid recovery, and the patient, persuaded by the wide range of movement into thinking that he is accomplishing more than is actually the case, is encouraged to exert every effort without the usual fear of pain. The limb is hung from the bar by adjustable slings, and is then gently swayed up and down, from side to side, or back and forward as the particular case demands, all opposing forces being counterbalanced as exactly as possible. The relaxation treatment encourages a mental and a local physical condition conducive to the restoration of normal function in the affected part by instilling into the patient the necessity and ability to rest the cerebral processes and to develop a "plastic mind." The possibility of producing a maximal movement with a minimal muscle effort lessens the risk of fatigue in a weakened muscle group. — *British Medical Journal,* January 10, 1931, i, 3653.

The Pursuit of Health.—Robert Hutchison agrees with G. K. Chesterton that "of all things human the search for health is the most unhealthy." The reason is that fussiness about health increases fear and impairs the serenity which is the basis both of health and happiness. Over-anxiety concerning health may show itself as individual hypochondriasis, as vicarious hypochondriasis — when a normal person is over-anxious in regard to the health of those near and dear to him, or it may assume an epidemic form, involving whole communities—national hypochondriasis. Individual hypochondriasis is shown in its most typical form by the man who has a conviction that he suffers from some disease. In its extreme manifestation the condition may lead to fixed delusions and even end in insanity. Other types of the individual hypochondriac are the diet faddist, the man with an undue fear of disease or of microbes and the exercise crank. The scientific truth about diet put briefly is: eat moderately, taking an ordinary mixed diet, and don't worry about anything else. Likes and dislikes, however, should be listened to; they are nature's indication of what probably agrees or disagrees. It may be doubted whether a maximum degree of physical development—the sergeant's ideal—is good for health, and there is certainly no reason to believe that athletes are particularly healthy or long-lived persons.

Examples of vicarious hypochondriasis are parents who are overanxious about the health of their children and children in regard to the health of aged parents. The morbid dread of infection and the morbid care that is taken to shield children from having the usual infectious diseases of childhood at the proper time, from 5 to 10 years of age, is having a bad effect. At that time they are less dangerous than if they are postponed to late childhood or adolescence. Do not worry too much about the health of your children. Give them happy homes, the companionship of other children, plenty of plain, simple food; do not take too much notice of them, thereby creating in them vanity and self-consciousness, send them early to bed and leave the rest to chance.

Hutchison, discussing national hypochondriasis, scores health propaganda. There is, he says, a good deal of nonsense talked about detecting the beginnings of disease. Most diseases cannot be detected early, or, if they are, little can be done to stop them unless one is prepared to give up for life all that makes life worth living. Health propaganda is based on two fallacies, one that health is difficult to attain and keep and the other that it can be gotten by following certain rules. Moderation is the universal secret of health, but an occasional departure from the strict rule of moderation is probably beneficial as regards health. What we want for the attainment of health is a change of heart. Catch phrases such as "A nation's health is a nation's wealth" are cant. A nation's greatest asset is character.—*Canadian Medical Association Journal,* January, 1931, xxiv, 1.

Treatment of Erysipelas by Subcutaneous Injections of Milk.—J. Chalier reports in the *Journal de Médecine de Lyon* of December 5, 1930, that for over 7 years he has been using subcutaneous injections of milk in his erysipelas cases, more than 1,000 of which have been subjected to this treatment. The results have on the whole been quite favorable, the temperature as a rule dropping 1 or even 2 degrees on the morning following the first evening injection, with complete apyrexia by the fifth day if the injections are begun early, that is, within 12 to 24 hours of onset of the disease. Other general symptoms, such as nervous phenomena and delirium, disappear rapidly in the majority of cases. Local effects are still more striking, the erysipelatous plaque frequently changing its appearance from the time of the very first injection, becoming less tense, losing its puffiness and its dark color, with pain on pressure considerably diminished. It ceases to spread and retrogression may set in at once, but oftener this occurs after the second injection. Three or at most four injections are given, of 10 c.c. each in adults and 2-5 c.c. in children. Usually the first injection is the most active, and if it proves of doubtful efficacy, subsequent ones are likely to be futile. Typical cases have been observed in which cure was complete in 2 to 4 days, but the average course of the disease is 6 days after the injection. Treatment begun after the fourth day is useless. Relapses are observed in not over 2 to 3 per cent of cases. Suppurations are favorably influenced and their duration is shortened. The milk is filtered and boiled 20 minutes, after which the injection, preferably subcutaneous though it may be intramuscular, is made on the abdomen or the outer surface of the thigh. Local and general reactions occur, but no abscess or anaphylactic shock has ever been observed. Treatment is contra-indicated in tuberculosis, in uncompensated cardiac cases, and in hepatic alcoholics. Chalier has obained three cures in new-born infants—a remarkable record in view of the known fatality of this type.

Chronic Tonsillitis and Its Sequels.—Among the so-called "sequels" of tonsillitic foci, says O. Bruns, belong particularly the rheumatic diseases, in which class may be counted such conditions as polyarthritis rheumatica, chorea, infectious cardiac diseases, nephritis, and the so-called infectious arthritides. But every internist knows that chronic tonsillitis may be closely related causally to a whole series of disorders of the internal organs in which patients suffer with slow fever of unknown origin, with chronic septic conditions or endocarditides, subacute joint rheumatism, and recurrent attacks of nephritis which defy every kind of treatment until the removal of quite innocent-looking tonsils puts an end to their symptoms. It is difficult to produce statistics to show the extent to which tonsils are responsible for these various conditions, since all of them may result from other foci of infection. The failure of a patient to recover from disease of an internal organ after tonsillectomy is no proof that there was not a causal relation between the tonsils and the condition of the organ, for a metastasis may have taken place before the tonsils were removed, and this may have taken over the role of the excised primary focus; or irreparable anatomical injury may have already occurred before the tonsillectomy. However, all internists are of one mind that the mere diagnosis of chronic tonsillitis does not of itself justify tonsillectomy. A real and not merely hypothetical connection must be shown between the tonsillitis and the secondary disease. Operative intervention is always to be advised when there is a special tendency of the tonsils themselves to disease with ever-recurring attacks. Similarly a tendency to relapse of internal diseases suggests the desirability of removal of the tonsils. The temporary lighting up of secondary diseases upon squeezing out of the tonsils, and markedly upon operative procedure, can as a rule be noted, but these phenomena cease in most cases after a short time. With most other internists Bruns takes the view that tonsillectomy should not be carried out until from 4 to 6 weeks have elapsed since acute symptoms of disease have abated. It cannot be denied that too early operation has resulted in exacerbations of arthritis, sciatica, nephritis, and the like, which were very serious in their duration and extent.—*Deutsche medizinische Wochenschrift*, December 19, 1930.

Experimental Cancer Research.—Reviewing cancer research during the past thirty years, William H. Woglom finds the situation grave, yet not hopeless. This period of time represents one per cent. of the three thousand years during which cancer has been under observation; certainly the information gained during the thirty years represents more than one per cent. of our knowledge of cancer. Though no cure for cancer has been found, a surprisingly large amount of information has been gathered. Soil, climate and diet have been eliminated as causes of cancer, and civilization as a cause may now be disregarded. The one possible cause that has withstood critical examination is chronic irritation. During the first ten years of the thirty year period the limits within which malignant tumors can be transplanted had been mapped out, a method of protecting against their inoculation found, the resistance

of the cancer cell to various agents compared, its cultivation *in vitro* begun, the hereditary nature of cancer in mice foreshadowed, and a curiously interesting transmissible sarcoma of the fowl discovered. In the second decade the growth of the cancer cell was assessed, and two methods of producing tumors in animals were discovered—painting with tar and infestation of rats with *Cysticercus fasciolaris,* although it had been said that this would never be accomplished. In the third decade, still another means of inciting malignant growth was reported. Fibiger found that the stomach and tongue of rats respond to the presence of *Spiroptera neoplastica* by producing carcinoma, whereas the esophagus, invested by the same type of epithelium is exempt. Likewise in aniline dye workers the kidney and ureter escape, while the bladder suffers. These are simply examples of the many problems that cause progress in research to move slowly. A good start has been made in the study of the chemical nature of the carcinogenic agent in tar, the intensity and duration of irritation required to initiate neoplasia, the relation of age to the development of cancer, and so on, while the positions gained during the first two decades have been consolidated and extended. We are beginning to appreciate the marvellous delicacy of the adaptation between the etiological agent and the cell which is to become ultimately a cancer cell, and to realize not only that the irritation must be of a certain kind, and perhaps of a certain degree, but also that there may be more factors involved than simply chronic irritation. While it appears that the cure of Jensen rat sarcoma may be brought about by the development of immunity, there is no sign at present that immunity will ever be of any practical help. The very similarity of the cancer cell to the normal cell delays the discovery of a specific cure.—*American Journal of the Medical Sciences,* February, 1931, clxxxi, 2.

Treatment of Cancer of the Tongue.—Pierre Sebileau says in the *Bulletin médical* of December 27, 1930, that if cancer of the tongue were always topographically pure it would be one of the least evil of surgical cancers. Its tendency to spread to neighboring regions is what constitutes the gravity with which it is rightly regarded. Every cancer of the tongue which, by reason of its early stage, small size, favorable site, and autochthonous character, permits the surgeon to be certain that he can remove it by wide excision well beyond the limits of infiltrations, should be extirpated by surgical means rather than subjected to treatment with irradiation. Cancers susceptible of surgical removal are those of the apex, the anterior dorsal surface, the under surface between the apex and the beginning of the frenum, and those of the middle of the border, provided they are autochthonous. Cancers that should not be treated by surgical measures are (1) marginal cancer of the retro-uvular segment of the tongue which attack the wall of the pharynx, and which cannot be removed except by suppression of the angulo-mandibular wall; (2) dorso-basilar cancer which has reached the lateral wall of the pharynx, or widely extended cancer of the dorsum itself; (3) cancer which has invaded the floor of the mouth and penetrated the maxilla. In all these cases operation is not only excessively mutilating but also useless owing to its diffusion of the cancer. In the first case the x-ray is better than radium because it is difficult to place the needles and also because of the superior power of diffusion of the rays. Sometimes owing to the obstruction offered by the mandible to the rays, it is necessary to do a hemi-resection of the jaw to permit their application. In the second case the cancer, frequently diagnosed only at a late period, is best treated by external radium therapy or penetrating cervical radiotherapy. Radium puncture and radium tubulation are impossible without the help of mutilating surgery, which is inadvisable. In the third case no form of treatment is of any avail, since the cancer has penetrated the bone. Where the lymph nodes are affected, every suspected node should be widely removed by a sort of continuous exeresis in series that shall include the entire lymphatic group involved.

Concealed Cancer of the Tongue.—William F. MacFee, writing in the *Annals of Surgery,* February, 1931, xciii, 2, calls attention to an impressive number of failures to recognize cancer of the tongue for which the medical profession is responsible. In about 20 per cent. of cases the lesion is anatomically situated in such a way that it escapes early detection. Cancer may be overlooked because of its situation far back on the tongue, at the angulation of the lingual mucous membrane as it merges into the mucosa of adjacent structures, at the base of the pharyngeal tonsil or of the tonsillar sinus, at the lingual attachment of the glossopalatine arch, in the valleculae, or at the epiglottic fold. Again, it may escape detection because it is almost completely buried in the substance of the tongue. This type is nearly always in the posterior half or two-thirds of the tongue. With cancer in this location three early and important symptoms are: (1) pain in and about the ear; (2) Motor disturbances, such as disability in swallowing, in dislodging particles of food, and clumsiness in speech, and (3) painless sensory disturbances. Other hints of the presence of cancer are the following:

(1) When the patient protrudes the tongue far out it tends to deviate slightly toward the side of the lesion. (2) Often a slight dimpling, furrowing, flattening, or other evidence of retraction of the surface mucous membrane may be seen. (3) Occasionally it may be possible to detect a slight defect in the patient's speech. (4) Inspection may reveal a minute ulcer at the most superficial point of an infiltrating cancer. (5) Palpation properly carried out will nearly always reveal an area of induration, and should not be omitted in making an examination of the tongue. If an indurated area is discovered, the possibility of cancer should be seriously considered.

Primary Cancer of the Thymus.—L. D'Antona and G. Buonamini, writing in the *Riforma medica* of November 17, 1930, say that primary cancer of the thymus is seldom diagnosed during the life of the patient. In a personal case which they report their diagnosis was metastatic cancer of the liver probably from a primary tumor of the stomach. There was no indication of any lesion of thymus or mediastinum, nor had the patient suffered with cough, pains, or sense of oppression in the retrosternal region. On the other hand there had been symptoms in the digestive organs, notably an absence of hydrochloric acid secretion by the stomach and the fact of two serious intestinal hemorrhages. At autopsy a tumor the size of a hen's egg was found on the internal surface of the apex of the left lung, strongly projecting, of a hard consistency, even bony in spots. Scattered throughout the liver parenchyma were neoplastic nodules. The mediastinal tumor was composed of large, irregular fibrous cords anastomosing with one another, made up of a tissue abounding in cells and containing necrotic areas here and there, in course of hyaline transformation and calcification. This was evidently the neoplastic parenchyma. In some places, toward the center of the cords, there were large masses of uniformly granular detritus with formations strongly resembling Hassall's corpuscles. While the cells composing the cords contained neither secretory products nor drops of fat or lipoid substances, the latter appeared in great abundance in the necrotic masses at the center of the largest cords. Where the cords showed a tendency to infiltrate into the pulmonary tissue there was less differentiation between an external zone abounding in lymphocytes and a central zone of epithelioid character. The enlarged retroperitoneal glands were infiltrated with a tissue very similar to that of the intrapulmonary neoplastic cords. The nodules of the liver were composed of irregular cellular cords at the center of which were granular necrotic masses abounding in fat and lipoids. There was no question that the neoplastic growth here was a secondary invasion from that in the apex of the left lung. The small size, the consistency, and the localization of the primary growth differ somewhat from the classic descriptions in the literature.

Nerve Hyperplasia in Chronic Inflammation.—M. Favre and J. Dechaume point out that the changes undergone by the nervous system of an organ altered by chronic inflammation have not received enough attention from investigators. They have recently been studied by a number of authors in neurogenous appendicitis, in chronic ulcers of the stomach and in sclerocystic ovaries. Favre and Dechaume are now able to demonstrate that such changes exist also in glandular parenchyma. In the course of chronic pancreatitis and hepatitis they observed that sclerosis existing side by side with epithelial reconstruction of an adenomatous course, and with muscular regeneration of myomatous appearance, was accompanied by an indisputable nerve hyperplasia. The abnormal number of nerve fibers, their irregular size, the variety of their direction and, most of all, the topographic anarchy of the neurites visible on certain slides, could be due only to a proliferation whose expansion was bridled—*i.e.*, only to an abnormal regeneration. These observations justify the assertion that nerve hypergenesis is a reality in certain chronic inflammations of glandular parenchyma. A large proportion of these hyperplasias must be regarded as regeneration neuromata, which may be likened to amputation neuromata of the peripheral nerves or to postoperative cicatricial neuromata. Some neurites are centainly sectioned, whether in the course of acute inflammation, or by sclerosis and by the muscular hyperplasias which develop in the vascular wall. The view that the central end of the neurite is capable of proliferating into vascular adventitia altered by perivascularitis is well justified by the facts, for in several cases veritable ischemic sequestra were found with "shadows" of necrotic nerve fibers side by side with vestiges of vessel walls, their underlying central end only awaiting the development of replacement sclerosis to proliferate. The question arises as to how far this anarchic change of the nervous system plays a part in the mysterious process that links chronic inflammation to cancer. On the other hand, these neuromata constitute in the organs local irritative spines which may modify the functioning of the parenchyma that has been spared by the inflammation and may later create painful disorders and functional reflexes.—*Journal de médecine de Lyon,* December 20, 1930.

LEGAL

THIS YEAR'S CHIROPRACTIC BILL

By LORENZ J. BROSNAN, ESQ.
Counsel, Medical Society of the State of New York

The perennial chiropractic bill has made its appearance before the Legislature. Once again the Legislature of the State of New York is asked to put its stamp of approval upon a bill which seeks to legalize and sanction a cult of quacks. Once again the chiropractors, whose practices have time and again been declared by our courts to be a violation of the law, are seeking legal sanction for their unfounded and unscientific practices. A brief statement of some of the provisions of the bill in question (Senate Introductory No. 361, Assembly Introductory No. 636) is sufficient to demonstrate its objectionable features.

The bill defines the practice of chiropractic as "diagnosis, the palpating and adjusting by hand of the vertebral column and tissues. This shall not include the use of operative surgery or obstetrics or the administering or prescribing of drugs or medicine included in the pharmacopœia or materia medica." Of course this is a clear attempt to change the statutory definition of the practice of medicine which has been in force upon our statute books for twenty-four years. The practice of medicine is defined in Section 1250, subdivision 7 of the Education Law as follows:

"A person practices medicine within the meaning of this article, except as hereinafter stated, who holds himself out as being able to diagnose, treat, operate or prescribe for any human disease, pain, injury, deformity or physical condition, and who shall either offer or undertake, by any means or method, to diagnose, treat, operate or prescribe for any human disease, pain, injury, deformity or physical condition."

This definition expresses what both the laity and the medical profession understand as the practice of medicine. Our present statute further provides that a person who unlawfully practices medicine is guilty of a misdemeanor. It has been repeatedly held by our courts that a so-called chiropractor who plies his calling, but who has not been admitted to practice medicine, is guilty of a crime and many such chiropractors have been prosecuted and convicted.

In People v. Ellis, 162 App. Div. 288, the defendant was a graduate of the Davenport University of Chiropractics. He had a sign, with regular office hours, and treated about two hundred persons for ailments of the stomach, chest or spine as well as for nervousness, hysteria and diseases coming from pressure on the nerves. It was established by the prosecution that the defendant had examined the complaining witness and pronounced her arch to have fallen, massaged the foot and advised a different shoe; and that on a further occasion he manipulated the patient's spine which, speaking as a "spinologist," he pronounced out of alignment in several places. He said that he could restore it, but it "probably would not stay the first time." He further gave his opinion that "the nerves leading to the ankle might be impinged so as to cut off the circulation." The defendant was convicted of the crime of practicing medicine without a license. In its opinion the court, among other things, said:

"Appellant's office sign, his circular and professional card, as well as his own frank admissions as a witness, all show that he holds himself out as able to diagnose, treat and prescribe for pain, disease and injury. Rubbing and pressure on the human joints are old therapeutic agents. When accompanied by such attempts at diagnosis as the statement that a patient's pains in the ankle were from the spine having come out of alignment through displaced vertebrae, appellant's acts come within the statutory definition of the practice of medicine."

The increasing vigilance of those to whom is entrusted the task of prosecuting these violators, and the opinions of our courts which have time and again held the chiropractors to be violating the law, make apparent the reasons which prompt the chiropractors to seek to legalize the practice of chiropractic and to declare without the definition of the practice of medicine "diagnosis, the palpating and adjusting by hand of the vertebral column and tissues."

The bill further provides that within thirty days after this article takes effect, the regents shall appoint a board of examiners consisting of three members all of whom shall be chiropractors, and that no medical doctor or osteopath shall be eligible for appointment on the board at any time.

The bill also provides as follows with respect to present practitioners:

"The regents shall issue a license to such persons who are certified by the board to be twenty-one years of age, citizens of the United States or who have declared intention of becoming such citizen, of good moral choracter, and to have passed a special examination before the board, in

anatomy, physiology, symptomatology, including diagnosis of communicable diseases; hygiene and the theory and practice of chiropractic, such examination being to determine whether the applicant has a general knowledge of the practical application of such subjects in the practice of his profession and who within six months after the appointment of the board by the regents made application to the board in writing accompanied by a fee of twenty dollars, and to be otherwise qualified in any one of the following:

"(a) Graduates after a resident course of four or more school years of six months each, or twenty-four months altogether in a school teaching chiropractic, who during the period of one year immediately preceding and at the time of taking effect of this article shall have been actually engaged in the practice of chiropractic in this state.

"(b) Graduates after a resident course of three or more school years of six months each, or eighteen months altogether, in a school teaching chiropractic, who, during the period of three years immediately preceding and at the time of taking effect of this article, shall have been actually engaged in the practice of chiropractic in this state.

"(c) Graduates after a resident course of two or more school years of six months each or twelve months altogether in a school teaching chiropractic, who, during the period of nine years immediately preceding and at the time of taking effect of this article, shall have been actually engaged in the practice of chiropractic in this state.

"The board may in its discretion, accept as the equivalent for not more than one-half of the educational requirements of subdivisions (b) or (c) of this section evidence of fifteen or more years of reputable practice.***"

But, how could the board in its discretion accept as the equivalent for not more than one-half of the educational requirements of subdivisions (b) or (c) of the section above referred to, fifteen or more years of "reputable practice"? By what process of construction fifteen years of lawbreaking can be transformed into fifteen years of "reputable practice" is not explained in this bill. For twenty-four years a person engaged in the practice of chiropractic in this state has been guilty of a crime, but according to the provisions of this bill the chiropractors are changed from lawbreakers into reputable practitioners.

The bill further provides that the regents may, if approved by the board, waive the examination of any applicant for license who presents satisfactory proof that he has been duly licensed by examination as a practitioner of chiropractic in any other state of the United States having licensing requirements equal to New York State; upon such waiver and the payment of the fee of twenty-five dollars the regents may issue to him a license to practice chiropractic.

It is further provided by the terms of the bill that "Each duly licensed practitioner who shall have complied with the provisions of this article shall have the right within this state to practice chiropractic as defined in this article, and shall be subject to all disabilities, limitations and restrictions and entitled to the same rights, privileges and immunities imposed upon and granted to all professional persons by the civil practice act and judiciary law."

Among other things, the bill provides under the heading "Present Practitioners" that "Evidence of the course of study, the name and location of the school or college, the subjects required in the resident course at the time for graduation, that the applicant completed said course, age and *period of practice of each applicant*" under the subdivisions of this article relating to the practice of chiropractic in this state "shall be given by the affidavit of the applicant filed with the board"; and *"proof of the good moral character of such applicant shall be made by the affidavit of two reputable citizens."* How any reputable citizen could make an affidavit that a person who openly and wilfully has been violating our statute which defines the practice of medicine, is of good moral character, this bill does not say.

Of course the educational requirements in this bill are meagre indeed, and it is interesting to contrast the educational requirements for chiropractors in this bill with the requirements for those seeking a license to practice medicine.

When bills of this character make their appearance in the Legislature, we feel that it is particularly pertinent to quote the language of the United States Supreme Court, the highest court in the land, in the case of Dent v. West Virginia (129 U. S. 114):

"Few professions require more careful preparation by one who seeks to enter it than that of medicine. It has to deal with all those subtle and mysterious influences upon which health and life depend, and requires not only a knowledge of the properties of vegetable and mineral substances, but of the human body in all its complicated parts, and their relation to each other, as well as their influence upon the mind. The physician must be able to detect readily the presence of disease, and prescribe appropriate remedies for its removal. Every one may have occasion to consult him, but comparatively few can judge of the qualifications of learning and skill which he possesses. Reliance must be placed upon the assurance given by his license, issued by an authority competent to judge in that respect, that he possesses the requisite qualifications. Due consideration, therefore, for the protection of society may well induce the State to exclude from practice those who have not such a license, or who are found upon examination not to be fully qualified."

This bill, and others of similar character which

may be introduced in the present session of the Legislature, should and will be vigorously opposed not only by physicians but by every citizen of our State who is interested in maintaining and preserving the wise and salutary restrictions which the law has imposed upon the quacks, cultists and those who seek to prey upon the public health and to menace the lives and limbs of the credulous and the unwary. What was said in this column a year ago with respect to the chiropractic bills which were then before the Legislature, is worthy of repetition at this time: "It would seem that the Legislature, which has so often set its face against these preposterous licensing measures, should not again be troubled with the insolent demands set forth in this bill."

CLAIMED NEGLIGENCE IN TREATING TUMOR DURING PREGNANCY

In this case a woman consulted the defendant doctor complaining of irregular menstruation, stating however that she was not pregnant as it would be impossible for the reason that she had used contraceptive precautions. An examination by the doctor revealed a uterine fibroid tumor about the size of a small orange. The physician advised *x*-ray treatments, and the patient was told that such treatments given for fibroid uterus might produce artificial menopause, but she consented to undergo the treatments and received eleven *x*-ray applications over a period of three months.

About six weeks later a radiographic examination of her abdomen showed a fœtus which appeared to be normal and about six weeks of age. Two months later the patient was delivered prematurely of a poorly developed child weighing about three and a half pounds. The delivery was unusual only in the fact that the time of labor was extended about forty hours, which was due to a rupture of the water-bag, resulting in a dry birth. After the childbirth, the patient suffered from high temperature, chills and pains in the stomach other than after-pains. At birth the child was not deformed, but a few days thereafter developed marked hydrocephalus. Five months after the birth of the child, the patient resumed menstruation and thereafter was apparently in normal condition.

Suit was subsequently instituted against the physician, in which it was claimed that he had negligently failed to discover the plaintiff's condition of pregnancy and improperly undertook to treat her for a fibroid tumor, and that the administering to the plaintiff of *x*-ray treatment permanently impaired her health. It was also claimed by the plaintiff in her bill of particulars that the *x*-ray treatments had made her sterile and had caused an abnormal birth and infection in the intestines and an acid or unhealthy condition of the uterus. The case was duly brought on for trial and just as the defendant was ready to proceed, the plaintiff's attorney announced that he was not ready to go ahead with his case. The court thereupon granted the defendant's motion to dismiss the complaint, thus terminating the matter in favor of the doctor.

CLAIMED NEGLIGENT USE OF X-RAY

In this case a young lady while working in a textile mill swallowed a piece of machine needle accidentally. Not until a week later did she complain to her employer and he sent her to the defendant doctor for treatment as a compensation patient.

The doctor was very doubtful as to the possibility of determining the location of the needle. The patient informed the doctor that a few days after swallowing the needle she had had pain in her chest. The doctor took an *x*-ray picture at the spot indicated by the patient where the pain had existed. No foreign body appeared on said *x*-ray picture and therefore others were taken at points higher and lower, which showed nothing. The technique used in taking said *x*-ray pictures was in all respects in accordance with customary practice.

Subsequently the patient complained that a burn developed on her chest at the point where the *x*-rays were taken and that a bad condition of ulceration had developed at that point. She complained that the burn was very painful and it caused her to be lame in her arms and sides.

Thereafter the doctor was sued for damages sustained, on the ground that he had been negligent in operating the *x*-ray machine.

On the eve of trial the plaintiff's attorney expressed his inability to proceed with the case and therefore voluntarily discontinued the action against the doctor.

NEWS NOTES

COMMITTEE ON PUBLIC RELATIONS

The regular monthly meeting of the Committee on Public Relations was held in the New York Academy of Medicine, with all the members present, and also Dr. Joseph S. Lawrence, Executive Secretary of the Committee, and Dr. Frank Overton, Executive Editor of the NEW YORK STATE JOURNAL OF MEDICINE. Several members of the executive committee of the Council dropped in at the Committee's Luncheon, which was served at one o'clock.

The Committee first discussed ways for developing leaders in the county medical societies. The societies which are most successful are those which have outstanding leaders who continue active year after year. Leadership in forming contacts with official boards and lay organizations is a question of temperament largely Some doctors delight in making the public contacts, and it is these who are valuable as leaders of the public relations movement in the counties.

It is the aim of the State Committee on Public Relations to discover the local doctors who have a natural aptitude for making contacts with health organizations. The State Committee will instruct the chairman and members of local committees, and will inform them what the leaders in other counties are doing to secure the cooperation of all organizations and committees in the counties.

The State Committee has been handicapped by a change of chairmen and personnel of the county committees in the new year; and it voted to get out a blank form to be sent to each county so as to record the chairman and members of its public relations committees. Better still, of course, would be to discover the best men and then to retain them in their positions year after year.

Methods of informing and instructing the chairmen and members of the local committees were also discussed. While the reports of the activities of the State Committee have been published regularly in the Journal, yet some members and even chairmen have said that they are not familiar with the reports. The committee has therefore prepared seven special bulletins during the past year and has sent them to the chairmen of the county committees and the officers of the societies,—a list of about 250 names. The bulletins have sometimes been reprints of articles and editorials which have appeared in the Journal, and sometimes they have been on special subjects not previously reported. It is the intention of the State Committee to stimulate the local committeemen to read every issue of the Journal, with care, paying special attention to the items relating to public relations.

The surgical service of the new hospital of Lewis County was discussed. Two plans had been suggested. One was that the doctors of the county should secure surgical consultants and operators from Watertown or Syracuse, or other center, as occasion might arise; and also to appoint several surgeons on a consulting staff whose members would be available on call.

The other proposition was that a surgeon be invited to open an office in the hospital, rent free, on condition that he should be available for all emergency service, but should be permitted to do private practice.

The decision between these two plans is of importance, since the State of New York will pay half the cost of maintaining the hospital, and the rules regarding its conduct must be approved by the State Commissioner of Health. The consensus of opinion of the Committee on Public Relations was that the local doctors of Lewis County should get together and decide for themselves between the two plans; but with the understanding that they can always secure the advice and assistance of the Committee.

The administration of the County Welfare Law was next discussed. Dr. W. H. Ross, President of the State Medical Society, told of the excellent operation of the law in every county in which a representative committee of the County Medical Society had conferred with the County Welfare Commissioners. Dr. Ross himself was chairman of a committee of the Suffolk County Medical Society which had gone to the Welfare Commissioner and presented the point of view of the doctors. The Commissioner said that the doctors had been demanding conflicting methods and charging various prices; and he promised that if the doctors themselves would decide on standard plans and fees, he would adopt them. The Commissioner agreed that when an emergency occurred, he would approve the bill of the doctor for treating the case for forty-eight hours; but that the doctor should report the facts to him within that period, and secure his authorization for further treatment.

The Suffolk County Committee also secured the consent of the five county hospitals to make a uniform charge of $3.50 per day for ward cases.

Many other agreements and standards will have to be developed in Suffolk County, but the progress so far has been exceedingly pleasing to the Commissioner and to the physicians.

The variation in the charges made by the hospitals in a County have led to misunderstandings, as in an up-State County, in which there are five

hospitals, one charging $4.50 per day, another $3.00 and the third, $2.29 per day in the public ward, thus leading to embarrassment as to which hospital to patronize. The evident remedy would be that the hospital managers agree on a uniform scale of charges.

Such conditions as these are those with which the local committees are best fitted to deal.

Dr. O. W. H. Mitchell reported that a national conference on college health will be held in Syracuse from May 4 to 9, at which three hundred delegates were expected. Dr. Mitchell invited the members of the Committee to attend the conference and take part in its deliberations.

The Committee also considered several questions of a somewhat confidential nature, such as threatened disputes, in which the assistance of the members is desired. One of the most gratifying features of the work of the State Committee is the spirit of goodwill with which its offers of help are accepted by the county societies and other local organizations.

LEGISLATION

LEGISLATION BULLETIN NO. 3, FEBRUARY 4, 1931

No action has been taken on any of the bills which we have already reported, except the transfer of the Hastings liquor bill to the Committee on Finance.

A hearing has been announced for the anti-vivisection bill before the Assembly Committee on Codes, on Tuesday, February 24th, at 2:00 P. M.

A few bills were not reported in the last bulletin that should have been. They will be named below in connection with others which have been introduced during the week:

Senate Int. No. 53-Downing (Assembly Int. No. 344-Livingston), amends the Compensation Law by providing that only the state fund, a county, city, village or other political sub-division shall be insurance carriers under the law, stock corporations and mutual associations being eliminated. This bill was before the legislature last year and has the strong support of labor. It is our impression, however, that physicians have frequently found settlement with the state fund more difficult than with other insurance companies. This condition is particularly true in upstate sections. Is our impression correct? Is it, in your opinion, desirable that the state fund should supplant other insurance companies in compensation work?

Senate Int. No. 178-Love. (Assembly Int. No. 236-Esquirol), amends the Workmen's Compensation Law by providing compensation shall be payable for disabilities or death of an employee resulting from any occupational disease. There are now four bills to this point before the legislature.

Senate Int. No. 211-Mastick, amends the Workmen's Compensation Law by providing compensation for all diseases arising out of employment. This bill was before the Senate last year. The committee has considered the bill and has decided that it will not place opposition to it this year.

Senate Int. No. 345-Cilano (Assembly Int. No. 441-Esmond), amends the Criminal Code authorizing the court to appoint psychiatrists or mental experts to examine certain defendants. This bill was before the legislature last year and is a companion bill to Senate Int. No. 344-Cilano (Assembly Int. No. 442-Esmond), which provides for certification of qualified psychiatrists.

Assembly Int. No. 227-Doyle, amends the Penal Law by prohibiting the sale or giving away of bichloride of mercury, mercuric chloride or corrosive sublimate, except on written prescription of a physician. The committee respects the spirit back of the bill, but believes that if the object is to prevent or make it more difficult for people to commit suicide, many other poisons should be included, and is of the opinion that regardless of this law, these preparations would be available without securing them from a physician.

Assembly Int. No. 276-Sheldrick would amend the Public Welfare Law by providing old age relief shall be given at age 65 instead of 70 as at present. This notice is given for its informational value and not because the amendment would have any effect upon the practice of medicine.

* * * * *

Senate Int. No. 377-Campbell (Assembly Int. No. 531-Hewitt), would amend the County Law by giving the coroner a fee of $1.00 for reporting to motor vehicles commissioner concerning a death found to have been the result of a motor vehicle accident. Referred to Internal Affairs Committee.

Senate Int. No. 385-Love, would amend the Public Health Law by providing every certificate of birth shall contain photograph of finger prints of mother and foot prints of child. Referred to the Health Committee.

Senate Int. No. 441-Hickey, would amend the Education Law to permit employment of optometrists and oculists for examining children in public schools. Referred to the Education Committee.

Senate Int. No. 447-Love, would amend the Workmen's Compensation Law by adding to list of occupational diseases for which compensation

is payable all disabling diseases and disabling illnesses. Referred to Labor Committee.

Assembly Int. No. 573-Dickey, would amend the Health Law, making it a violation of article to possess pipes, lamps and other apparatus for the use of opium. Referred to the Health Committee.

Assembly Int. No. 574-Dickey, adds new section to the Health Law, making it a violation of article to obtain habit-forming drugs from one physician while receiving treatment from another without disclosing the fact. Referred to the Health Committee.

Assembly Int. No 584-Moffat, would amend the Workmen's Compensation Law by providing for compensation for all occupational diseases arising out of employment. Referred to the Labor Committee.

Assembly Int. No 605-Swartz, would amend the Judiciary Law so as to exempt from jury duty registered physiotherapists. Referred to the Judiciary Committee

Assembly Int. No. 636-F. L. Porter has introduced the chiropractic bill which was reported before as introduced in the Senate—Int. No. 361-McNaboe. Referred to the Education Committee.

LEGISLATION BULLETIN NO. 4, FEBRUARY 11, 1931

For the benefit of those who could not attend the conference of Chairmen of Legislative Chairmen of the County Societies yesterday, let us report that the following thirty-three counties were represented:

Albany	Greene	St. Lawrence
Allegany	Monroe	Schoharie
Bronx	New York	Seneca
Chautauqua	Oneida	Steuben
Clinton	Onondaga	Suffolk
Cortland	Ontario	Tompkins
Erie	Orange	Warren
Essex	Orleans	Washington
Franklin	Queens	Wayne
Fulton	Rensselaer	Westchester
Genesee	Richmond	Yates

In addition to these, there were present, also, Drs. Aranow and Rainey of the State Committee; Drs. Ross, Johnson, Shaw, James N. Vander Veer, Overton; Dr. Sweet, chairman of the Medical Research Committee, and Mr. Clearwater, our attorney. The guests were Commissioner Parran and Deputy Commissioner Brooks, from the Department of Health.

The bills which you have received from time to time were considered, with the following results:

Approved

Senate Int., No. 594-Love, providing a threefold damage for injuries caused by the unlawful furnishing, supplying or administering of dangerous drugs or medicines.

Assembly Int. No. 52-Horn (Late Print No. 514), to amend the Workmen's Compensation Law in relation to the allowance of claims for medical and surgical treatment.

Assembly Int. No. 574-Dickey, to amend the Public Health Law in relation to obtaining drugs from one physician while receiving treatment from another without disclosing the fact.

Opposed

All Workmen's Compensation bills providing for the unlimited extension of compensable diseases. Not opposed to the specific increase in the list of compensable diseases.

Senate Int. No. 86-Love, amending the Penal Law in relation to mixing babies.

Senate Int. No. 361-McNaboe, to amend the Education Law in relation to the practice of chiropractic.

Senate Int. No. 385-Love, to amend the Public Health Law in relation to contents of certificate of birth.

Senate Int. No. 441-Hickey, to amend the Education Law in relation to employment of optometrists and oculists for the examination of children in public schools.

Assembly Int. No. 5-Cuvillier, compulsory health insurance.

Assembly Int. No. 227-Doyle, to amend the Penal Law in relation to preventing accidental poisoning by bichloride of mercury and compounds thereof and regulating the sale and manufacture thereof.

Assembly Int. No. 143-Vaughan, anti-vivisection bill.

Assembly Int. No. 817-Story, to amend the Penal Law in relation to clinics in hospitals supported wholly or partly at public expense.

* * * * *

In view of the fact that we have been informed there is a great demand upon the printers of legislative bills for copies of the Cuvillier health insurance bill and compensation bills which increase the number of compensable diseases and conditions, particularly the Mastick bill, a good deal of time was spent in discussing them. It was brought out during the discussion that the particular step the medical men should take is to secure a medical advisory council in the Department of Labor, in order that medical men may discuss directly with the Commissioner of Labor the problems that are arising at present and will be many times multiplied if the contemplated legislation is enacted into law. Dr. Flynn, from the

Bronx, correctly characterized such an advisory board as a "grievance board," and in his opinion it should be compensated for the services it will be obliged to render. The conference unanimously endorsed the idea of the creation of a medical advisory council in the Department of Labor and asked that either last year's bill be reintroduced or modified as Dr. Flynn might suggest.

The hospital licensure bill was also discussed and there was a unanimous request that the bill as finally revised be reintroduced this year.

Since our last bulletin the following bills have been introduced:

Senate Int. No. 580-Love, amends the Penal Law to make penalty for having narcotics in possession, imprisonment for not less than five nor more than ten years, instead of not more than ten years as at present. Referred to the Codes Committee.

Senate Int. No. 594-Love, provides for threefold damage for injuries caused by unlawful furnishing, supplying or administering dangerous drugs or medicine. Referred to Codes Committee.

Dr. Love has had these two bills before the legislature in other years.

Senate Int. No. 648-Baxter, amends the Public Health Law by providing for excluding from school, children not vaccinated, whenever smallpox exists in a school district, for a period of 14 days, such period to be extended for another 14 days if new cases of smallpox continue to develop. Referred to the Health Committee. This is a new form of the anti-vaccination bill.

Assembly Int. No. 786-Coughlin, amends the Workmen's Compensation Law to permit injured employee to recover reasonable amounts expended for medical or other attendance.

Assembly Int. No. 817-Story, amends the Penal Law providing no hospital supported wholly or partly at public expense shall charge for medical services given while operating a clinic to which public is invited. Referred to the Codes Committee.

Assembly Int. No. 980-Story, amends the Workmen's Compensation Law by striking out list of occupational diseases and providing compensation shall be payable for any occupational disease or illness which it shall be established by medical testimony was directly due to or caused by any employment enumerated in sub-division one. Referred to the Labor Committee.

* * * * *

Now is the time to make an appointment with your Senator and Assemblymen to discuss these bills. The Commissioner of Health told us yesterday that the Governor expects to hand the legislature a report of the commission he has had studying public health activities in the state, next week. Some legislation will arise from that report, undoubtedly.

February 18, 1931

Senate Int. No. 648-Baxter, would amend the Public Health Law so as to abolish compulsory vaccination of school children. Vaccination would only be required of school children when the Commissioner of Health would certify that smallpox exists in that school district and then only of those children who wished to continue attendance at school. If the parents do not wish to have their children vaccinated they can exclude them from school for a period of 14 days, but if other cases appear at the end of that time they would be obliged to remain away another period or more of 14 days. It would seem to us that the author has missed the point that vaccination is intended as a protection of the public, and to disbar children from school and not vaccinate them would contribute but very little toward the prevention of the spread of the disease.

Senate Int. No. 741-Hastings, would create a temporary state commission to make a study and investigation of the economic effect of sickness, etc. The spirit of the bill is probably commendatory, but an appropriation of $15,000 will not carry the investigation far.

Assembly Int. No. 980-Story, would amend the Workmen's Compensation Law in relation to occupational diseases by deleting from the law all reference to individual diseases and introducing a blanket provision. This is along the line of some other bills that you have received and the conference, in studying bills of this character, agreed that every disability —not only injuries—which the employee suffers because of his occupation, should be compensated; but a blanket provision such as this is sure to produce difficulties for the examining physician.

Assembly Int. No. 991-Coughlin, would amend the General Municipal Law in relation to supervision of the treatment of the indigent ill. In our opinion there is no need for this bill; everything that it advocates can be done under the existing law.

HARRY ARANOW,
WALTER A. CALIHAN,
JOHN J. RAINEY,
Committee on Legislation.

THE COMMITTEE ON HEALTH EXAMNATIONS

THE CHAIRMAN'S MESSAGE

Our purpose is to get the citizens of the State to report to the physicians' offices for health examinations.

We are beginning with the women. We have the official endorsement of the greatest two organizations, the General Federation of Women's Clubs and the Parent-Teacher Association.

In the General Federation of Women's Clubs there are six hundred local clubs of women Their attention is concentrated, this year, on three health matters,

1. The County Health Unit.
2. Measles.
3. The Health Examination

The General Federation asks us to give them authoritative pamphlets on Health Examinations to send to their clubs and to provide competent and interesting medical speakers before their clubs. This is a magnificent opportunity to bring to the women of the State, sound doctrine and ethical medical guidance.

They will do their part. We must do ours We ask the physicians of the State if they want the women to come to them for examinations, to do the following:

1. Prepare yourselves to give good examinations. Ask for post-graduate instruction and articles in the medical journals; read, talk and do health examinations.

2. Send your names in to your county chairman or the state chairman to be listed to receive special aid, assistance or information.

3. Make your wishes known to your county organization and the state committee. If we broadcast on a national hookup, what would you want your patients and your prospective patients to hear? If we syndicate these talks for the newspapers, what do you want your patients and prospective patients to read?

It is estimated that over three quarters of the health examinations already done in the State are done by physicians employed by industries, organizations of various kinds and the State itself. If we are prepared to have *health examinations done in the future by the* State and the industries and not in our own offices, all we need to do is to remain apathetic and do nothing. This is the broad and easy road to professional and economic poverty.

If you want the medical profession to do this medical work in their capacity as private practising physicians,—because it is better done by us and we want to do it,—we, each one of us, must energetically go to work.

Preventive medicine will be practised. The service of preventive medicine will be given to the public increasingly every year. By whom?

C. WARD CRAMPTON, M.D.
Chairman.

MINUTES OF MEETING

A meeting of the Committee on Periodic Health Examination was held at the Society Rooms at the Academy of Medicine, New York on February 13th, 1931 at 11 A.M.

Present: Dr. C. Ward Crampton, Chairman; Dr. Nellis B. Foster; Dr. Marion C. Potter; Dr. Walter D. Ludlum; Dr. Guy H. Turrell. Dr. Thomas P. Farmer, Chairman of the Committee on Medical Education also met with the Committee on invitation of the Chairman.

The minutes of the previous meeting having been published in the Journal were dispensed with.

The chairman reported that the plan for the registration by the County Societies of physicians prepared to give health examinations proposed at the last meeting of the Committee had not been approved by the Council of the Society.

In accordance with suggestions made at the previous meeting, it was voted that an effort be made to arrange with one or more of the radio stations for a short period each week for broadcasting on the subject of periodic health examinations. All material is to be carefully prepared by various authors and then carefully correlated, censored and approved by a subcommittee before broadcasting. Dr. Potter described the successful methods being used in Rochester, and it was decided that these might well be used as a model.

It was voted to include in the letter to each county society a request for information as to the opportunities for broadcasting in the several counties, and what, if anything, was being done at present.

A sub-committee on broadcasting was appointed, consisting of Doctors Foster, Chairman, Ludlum and Crampton.

Dr. Potter recommended that the information given in each broadcasting talk be printed

and made available for distribution to those who were interested and who might apply for it. This was approved and formally adopted.

The Chairman offered the suggestion that skeleton outlines of one or more addresses on periodic health examination be prepared by the Committee—addresses suitable for use by busy doctors before women's clubs, schools, etc.

After discussion, this suggestion was adopted and the Chairman appointed a committee of one to prepare such an outline address. Dr. Potter suggested that these addresses might be supplemented and popularized by the use of a film in connection with the addresses. She suggested such films as "Working for Dear Life" and "Don't be a Goose." Dr. Turrell was appointed a committee to investigate and report on the availability of such films, their cost and how they may be obtained.

A letter was read from Mrs. Maude Burgess of the Parent-Teachers and Women's Clubs Bureau of the Metropolitan Life Insurance Company asking the following specific questions:

1. Will the State or the County Medical Societies furnish health speakers for meetings of the General Federation of Women's Clubs? To this the Committee would answer "yes," so long as the subject matter of the desired address comes within their province.

2. How may such speakers be obtained? Answer: "Through Dr. Crampton, Chairman of this Committee."

3. What literature is recommended? This question could not be answered at this meeting. The Chairman was appointed a committee to look the matter up and report.

The Chairman then presented Dr. Farmer, stating that he had asked him to meet with the Committee and that he especially wished his advice on these points.

1. The sponsoring and scope of articles on health examination to be published in the State Journal of Medicine for the information of the medical profession.

2. What committee should prepare courses of instruction in health examination for classes in the county societies.

3. The program under the auspices of the Committee at the Syracuse meeting in June.

Dr. Farmer replied that in his opinion the prosposed articles for the Journal should be prepared by or under the auspices of both Committees. He believed that the articles should be of a practical nature. He suggested as one possible subject the examination of a patient consulting a doctor for a minor ailment so as to discover significant related conditions or those of prophylactic value.

In regard to the second question, Dr. Farmer thought it was within the scope of the Committee to determine the content of the courses in periodic health examinations, and stated that after this had been done, both Committees on Medical Education would arrange the meetings and foot the bills. There was considerable discussion of the subject matter desirable for such courses and of the difficulty of making such courses attractive to the average medical practitioner. It seemed to be agreed that the courses should not invade the domain of ordinary physical diagnosis any more than absolutely necessary, but might include a simple story of what to do and how to do it with special reference to practical methods of examining a part or system and to the commonest findings in comparative health.

Dr. Potter and Dr. Calihan were appointed a committee to submit a program of subjects and methods for such courses.

With regard to the Syracuse meeting, Dr. Farmer stated that the National Tuberculosis Association was to meet in Syracuse in May, 1931, and the Association of Health Services of American Colleges and the Alumni Association of Syracuse University were to meet there early in June.

Dr. Crampton suggested that the Federation of Women's Clubs be asked to cooperate with the Committee at the Syracuse meeting.

Further discussion of the Syracuse meeting was postponed until the next meeting, which was fixed for March 13, 1931.

The meeting adjourned at 2 P.M.

GEO. H. TURRELL,
Secretary.

NEW YORK PHYSICIANS ART CLUB

Among the two hundred thousand physicians in the United States there may be found representatives who show high ability in every kind of culture and art. The recognition of the outstanding work of physicians in the graphic and plastic arts is the object of the New York Physicians Art Club, which has brought together for the fifth time the art productions of members of the medical profession. The Club is exhibiting over two hundred and fifty examples of paintings, drawings, photographs, statuary, wood carving, and metal work, in the exhibition room on the ground floor of the building of the New York Academy of Medicine, and will continue the exhibition for one month from February fourteenth, during the afternoon and evening.

In judging the exhibits, one must remember that a work is exhibited only once, and that the productions of several of the doctor-artists have already been shown in the previous four exhibits. However, a view of the present exhibit will make the visiting physician glad to see his professional brethren alert in art expression.

To judge the art works of the exhibit from the viewpoint of an artist is as difficult as it would be for the artist to judge the professional technique of the surgeon. It will therefore suffice to quote from the catalogue the words of Stephen Bourgeois, who writes as an artist:

"With a few exceptions most of the doctor-artists are in fact more interested in technic, in skill, in methods of composition or color arrangement, etc., than in actual expression, although they probably believe the contrary. Curiously enough most of them are inveterate optimists, whereas the doctor's profession would make one expect differently. With the exception of the work of one painter one cannot believe himself face to face with work done by physicians I leave it to the doctors themselves to make their own diagnosis of the case.

"The majority seems to have a marvelous time in escaping to the country, enjoying fresh air, standing their easel before a lovely corner and going to it with the use of standardized methods borrowed of some other artist. Others assemble carefully optical facts into forms in the happy hope that they assemble themselves into a concept. Unfortunately or rather fortunately art does not happen like that. It is not so complicated. It comes more simply when tackled simply As one can see from a small number of real creative pictures in the present exhibition, technic comes by itself, when the mind knows beforehand what it wants.

"There are innumerable ways of looking at things Every brain imagines differently. Since we have no more general beliefs, no general style can exist. This means the individual must express himself, and not derive from teachers. Otherwise the best talent goes wrong. The question is therefore how to release the images from the mind. For most people it is impossible to paint directly from nature without losing grip on the whole. Few see through the veil of nature the essential action behind appearances. It is much easier to paint from memory because in memory action crystallized itself with ease. There are a few crystallized ideas in painting and sculpture in this exhibition. They constitute the backbone of the show.

"The medical profession trains its members to use exclusively detached, objective observations and experiences. The same principles underlie all real results in art. If therefore the doctors apply the principles of their craft to painting and sculpture, they will be all artists and show the professionals how it is done."

PHYSICAL THERAPY IN HOSPITALS IN NEW YORK STATE

The Special Committee on Physical Therapy has issued a summary of its report on a survey of the attitude of the hospitals of New York State toward physical therapy under the date of February first. This report may be compared with the report on "Physical Therapy in Ulster County" published on page 165 of the February first issue of this Journal. The summary of the State Survey is as follows:

Number of questionnaires sent out	250	
Number of replies received	173	70%

Question No. 1. Do you possess a physical therapy department?	*Yes*	*No*
Hospitals from all over the State.	57%	43%
Hospitals in metropolitan zone..	65%	35%
Hospitals outside of metropolitan zone	53%	47%
Question No. 2. Is it under the control of a qualified physician? ..	84%	16%
Question No. 3. Do you intend organizing such a department?..	34%	
Question No. 4. Can we be of assistance to you in this respect? —Number replying "Yes"	34	
Question No. 5. Would you want one of your physicians trained in order to be able to direct your physical therapy department?— Number replying "Yes"	11	

RICHARD KOVACS.
Chairman.

THE DAILY PRESS

OLD MAN WINTER



From the New York Herald Tribune, February 3, 1931. By J. N. Ding.

Old Man Winter has dealt kindly with New York State, especially the southeastern section in which the editorial office of the Journal is located. Whenever the Western Blizzard has threatened Eastern New York, the genial influence of the Atlantic Ocean and the Gulf Stream has tempered its rage and tamed its fury, so that the worst that is said about the weather is that it is changeable and so is unhealthful.

Any weather is "healthy" so long as humans prepare themselves for it. Mark Twain said that everybody grumbles about the weather, but no one does anything about it. The fact is that people expend more effort on the weather than on almost any other condition. Most comforts of modern civilization are the result of man's control of weather conditions. He heats his houses, arrays himself in clothing that is warm and waterproof, and travels warm and dry amid slush and mud. No matter what may be the outside weather, the man-made weather in his home, his office and his parlor car is that of a balmy day of May or September. Man's triumph over the weather is nearly complete.

There is little excuse for blaming the weather for sickness or epidemics. The greatest epidemic of modern civilization,—that of influenza in 1918,—occurred when unusually balmy weather prevailed. Man himself is the source of most human ills and infections.

THE STATE HEALTH COMMISSION

The recommendations of the New York State Health Commission which were abstracted on page 230 of the February fifteenth issue of this Journal, were the subject of editorial comment in the New York *Times* of February seventeenth. The point of view of the paper will be approved by physicians as the editor says:

"The investigation made by Dr. Farrand's commission somewhat resembles a survey on behalf of a successful concern with the object of turning out a larger and better product. The organization in charge of public health in the State of New York, in accordance with the proposals of the Biggs Commission seventeen years ago, has done well, but with certain changes it can do still better. Some of these changes cannot be brought about from within. They have to be provided for by the Legislature.

"Administrative methods can be made more efficient. Except in large cities, the local health unit should be the county, instead of the village or town, with full-time officers in charge of the executive work in place of part-time men continually changing. This plan is the outcome of recent experience in various States and is strongly endorsed by philanthropic foundations specializing in the health field.

"All the leading recommendations of the report are based on established precedent. Tested procedures exist for eradicating many diseases, and it is upon these that the program is founded. Elimination of diphtheria, typhoid fever and other infections offers little difficulty today except from the standpoint of administration. There is no question what should be done: the only point is how to carry the necessary measures into effect. The report recognizes that intelligent and active cooperation by the public must be secured."

HOSPITALS AND WORKMEN'S COMPENSATION

The *New York Times* of January 16 has the following editorial comment entitled "Fair Play for the Hospitals":

"Beekman Street Hospital is located in an industrial section of the city. That accounts for the fact, that, it handles more compensation cases than any other private institution. President Cullman thinks that they deserve the best of care, but that industry should assume the full cost of that care.

"There is no doubt that the intent of the workmen's compensation law, as originally written, was that industry should bear the full burden of the proper professional care and hospitalization of patients injured in industry," Mr. Cullman remarked at the annual meeting of his board. "At the present time Beekman Street Hospital receives slightly over 60 per cent of the actual cost of the hospitalization of patients coming under the workmen's compensation law.

"The difference between what it costs the institution and the amount received from the insurance companies is borne by the general public and by the trustees. It seems erroneous in principle that the patient be pauperized and that contributions be made for the benefit of insurance company stockholders.

"If the hospitals were more liberally remunerated for the care of these industrial cases, they could devote a larger part of their funds to needy patients outside the protection of the compensation law."

OLD-AGE INSURANCE

Governor Roosevelt, in his annual message, approved the Old-Age Security law, as was reported in this Journal of January, 15, page 109 The same Journal, page 113, quoted an editorial on the subject taken from the *New York Times*. Ex-President Coolidge comments on old-age pensions in his daily letter in the New York *Herald-Tribune* of January 26, as follows:

"Considerable investigation is being made of the problem of old-age pensions. Some governments and some industries have adopted such a system, and it appeals to our sympathies. Only the experimental state has been reached, so that its soundness has not been demonstrated. We are constantly trying to adopt reforms of some artificial nature so as to save ourselves from suffering from the defects of human nature as it is now constituted. No doubt some of our efforts are helpful, and the fact that we realize our deficiencies and are intent on remedying them is most encouraging. Our failures lie in attempting to reach the goal by some short cut without really removing the cause of the difficulty. We try to reform ourselves on the outside when the only effective remedy is reform on the inside.

"What a self-respecting people really needs is not a system of old-age pensions, but a population made sufficiently skilled by education and sufficiently self-controlled and well disposed by the help of religion so that old-age pensions would be a superfluity. Unless real reform comes from within, the problem will never be solved."

LOST: MIDDLE AGE

The life of a modern woman is divided into three parts—babyhood, girlhood, and old age—at least this seems to be the burden of the following editorial in the *New York Herald-Tribune* of January 28:

"The average normal middle-aged woman," says Miss Frances Perkins, State Commissioner of Labor, "has little use for the artificial creations of the stylists." Miss Perkins thinks that if the manufacturers of women's clothing would listen to the middle-aged women instead of heeding the flippant fancies of the flappers they could keep their employees at work twelve months in the year, and iron out seasonal unemployment.

"Strange doctrine this in 1931! Miss Perkins seems to have lost her usual salty realism. Where are the middle-aged ladies who create styles of their own? Time was when a woman was middle-aged when she crossed the fatal line of thirty years. Her skirts began to settle, indeed, before she passed twenty-five. Youth was short and distinctive. It is one of the crowning glories of our age that it has prolonged youth for Miss Perkins's sex and abolished the tedious interval of middle age. There still is such a thing as old age and we respect it. But middle age is gone. Miss Perkins, appealing to middle-aged women to look middle-aged and to insist upon middle-aged styles is like King Canute bidding the waves be still."

OUR NEIGHBORS

TREATING THE POOR IN NEBRASKA

The Law of the State of Nebraska goes farther than that of most other States in recognizing the right of a physician to compensation for treating the poor. The *Nebraska State Medical Journal* for February contains an excellent editorial quoting the law and decisions in regard to the pay of physicians for their care of the indigent. The following editorial is entitled "Poor Man Without Funds, Property, or Credit, Ward of County, Not of Doctor."

"As early as 1884 the courts of Nebraska were invoked to decide the rights of physicians and to state the obligations of counties with reference to the poor and indigent who may become ill or injured and require the services of a physician.

"Section 5153 of the Compiled Statutes provides 'that whenever any non-resident, or any other person not coming within the definition of a pauper, shall fall sick in any county of this state, not having money or property to pay his or her board, nursing, or medical aid, it shall be the duty of the overseers of the poor, of the precinct where such person shall be, to furnish such assistance to such poor person as they shall deem necessary, etc.,

"In the case of Gage County vs. Fulton (N. W. Reporter, Vol. 19, p. 781), decided in 1884, the supreme court said: 'It will be seen that the duty of maintaining paupers, and persons not coming within the definition of paupers, who shall fall sick in any county of this state, and not having any money or property to pay his or her board, nursing, and medical aid, devolves upon the counties; in other words, the statute makes the counties legally liable for the same.'

"More recent decisions of the supreme court in somewhat related cases are cumulative. (See Plumb vs. York County (N. W. Reporter, Vol. 46, p. 938); Shidler vs. York County (N. W. Reporter, Vol. 146, p. 949).) The case of Anderson vs. Pawnee County also bears out the earlier decisions. The most recent case bearing on and clarifying the rights of physicians and the duty of county authorities is that of Neslund vs. Dawson County, decided by the supreme court commission about two years ago and referred to in this *Journal* editorially, July, 1929, part of which we again quote:

" 'This does not mean that the board may arbitrarily avoid liability by a heartless disregard of the most obvious necessities of suffering humanity.

" 'The service of a surgeon or physician cannot be required as a matter of charity.

" 'In case of emergency the physician may hold the district liable although he acted without the request or consent of the person designated as overseer of the poor.

" 'In a proper case the physician may hold the district liable even in the face of the refusal of consent, if lawfully or arbitrarily withheld.

" 'Neither the county commissioners nor the town supervisors can turn their backs upon the proper claims of a poor person.

" 'Nor can it be said that the unfortunate pauper, who has met with an accident requiring instant succor is to be remediless; the county or town must provide for him as soon as they may.'

"The Neslund vs. Dawson County case, it seems, hinged largely on the definition of the term 'indigent.' It was shown that the father of the injured boy was working at the time of the accident, but was without ready money and was without credit in town. Webster defines 'Indigent: Destitute of property or means of comfortable subsistence.'

"All this points clearly to the proposition that the county is liable not only for paupers, but for emergencies occurring to indigent persons within their jurisdiction.

"Medical men have had much difficulty with county authorities taking the proper viewpoint and it is possible that lack of diplomacy in presenting the cases was at the bottom of at least some of them. The above references indicate that the courts have passed upon the question a sufficient number of times to clarify the matter and nothing but absolute stubbornness on the part of the board can account for refusal to accept obligation in these cases.

"A recent case settled by the county board may be of interest in this connection: A married man, father of four children, a fifth child expected, ranch laborer at prevailing wages, suffered a violent attack of appendicitis. The physician consulted diagnosing imminent rupture, at once took the patient to a hospital and he was operated upon without delay. The patient had stated that he was without money and that he usually drew advances on his wage account. The physician, immediately after the operation, notified the county commissioners of the case and facts pertinent thereto, and stated that under the circumstances the county board would be asked to assume the financial obligation. In due time bills were rendered by the hospital and by the physician and surgeons and the supreme court decision in the

(*Continued on page 308—adv. xii*)

A DUAL ATTACK



N THE treatment of rheumatism outanding authorities emphasize the alue of associating salicylate mediation with alkalis. By means of this ombined attack the acid toxins of ie bacteria of rheumatism are neuralized, and at the same time it ecomes possible to bring about a essening of the cardiac dilation ssociated with rheumatic disorders.

'o insure safe and effective alkalizaion, the Wm. S. Merrell Company – pioneers in salicylate medication – have combined Merrell's Natural alicylate with a *balanced alkali* in ne formula—

ALYCIN

Alycin enables the physician to push he dosage of salicylates at the outset of treatment, without the danger of setting up untoward side-effects.

Alycin is indicated in the treatment of rheumatism, arthritis, colds, influenza, the neuralgias, and all conditions wherein the salicylates are used.

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CINCINNATI, U. S. A.

CROOKES' COLLOSOLS

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For boils, acne, and all suppurative affections

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Stainless, non-irritating colloidal silver, for eye, ear, nose, throat and genito-urinary affections.

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IN PNEUMONIA

(TYPES I and II)

Give ample Antipneumococcic Serum (Refined and Concentrated) within the first twenty-four hours. Clinical improvement occurs soon after treatment.

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1 syringe containing 20,000 units each of Types I and II.

LEDERLE LABORATORIES

INCORPORATED

NEW YORK

Send for Booklet

(*Continued from page* 306)

Neslund vs. Dawson County case was cited for authority. Later the board asked the physician to appear before them and in a quiet, dignified manner the matter was fully explained and the decision of the supreme court read, whereupon the county attorney, being asked for his opinion, stated that, assuming that the emergency claimed, existed, the county was liable. The bills were allowed.

"The facts above given and citations made should make it easy for physicians throughout the state to show to the county authorities the law and decisions appertaining thereto, and to convince them of the rights and duties of the respective parties in cases coming under Section 5153, Compiled Statutes relating to paupers and indigents."

ADVERTISING BY COUNTY SOCIETIES IN WISCONSIN

The proposition is frequently made that County Medical Societies advertise in the daily newspapers, emphasizing the slogan "Pay Your Doctor" and calling attention to the services rendered by family physicians. The idea is opposed in an editorial in the *Wisconsin Medical Journal,* which says:

"From time to time there comes to the profession proposals that group advertising will solve the economic ills to which the medical profession seems to be heir. On this general subject we presented our conclusions editorially, April, 1930, declaring our belief that advertising would solve none of our problems and would ill serve the public.

"More recently, however, it was proposed to members of the Dane County Medical Society that they finance a program of insertion of twenty-six, full-page, syndicated advertisements which had as its desideratum educating the public to a greater appreciation of the services of the profession with the thought that they should pay their doctor 'first.' Wisely, we believe, the Dane County Society voted unanimously, after a full and frank discussion, not to approve such an advertising campaign.

"The physician maintains no credit bureau upon which he decides whether the patient is a good 'risk' as an installment purchaser of health. So long as he is a good physician, be he in country or city, his first concern is with his adversary—death. Being human, the physician wants to get ahead financially. We know of no great physician (and there are many, many such in our State today) who has made money his only standard of values.

"At this particular time of economic stress among the laboring classes, when the profession

(*Continued on page* 310—*adv. xiv*)

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Clinically tested and proved all over the world

REMINERALIZATION
VITALITY
ENERGY

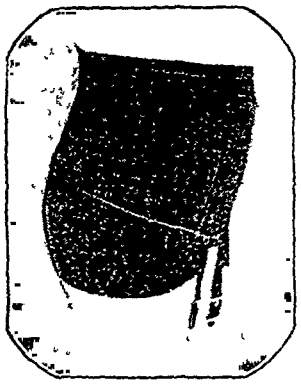
DEMINERALIZATION
CONVALESCENCE
NEURASTHENIA



SODIUM
CALCIUM
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MANGANESE AND IRON
STRYCHNINE AND QUININE

FELLOWS MEDICAL MANUFACTURING COMPANY, Inc.
26 Christopher Street, New York City.

"STORM" The New "Type N" STORM Supporter



One of three distinct types and there are many variations of each. "STORM" belts are being worn in every civilized land. For Ptosis, Hernia, Obesity, Pregnancy, Relaxed Sacroiliac Articulations. High and Low operations, etc.

Each Belt Made to Order

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THE ABDOMINAL SUPPORTER CO.

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Digitalis
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Physiologically tested leaves made into physiologically tested pills.



Pil. Digitalis (*Davies, Rose*) insure dependability in digitalis administration. Convenient in size—0.1 gram (1½ grains), being the average daily maintenance dose.

Sample and literature upon request.

DAVIES, ROSE & CO., Ltd.
Pharmaceutical Manufacturers, Boston, Mass.

(*Continued from page 308—xii*)

of Wisconsin should be the first to extend charity by free treatment or extension of time for payment and is so doing,—we would bring proper condemnation upon ourselves by asking our patients to please pay us first,—cash in advance preferable. Even if we were concerned only with cash in our pockets, this particular scheme would serve us ill.

"We will never be more perfect than other human beings. We have our commendable points. We have our lamentable failings. As an organization our State Society is properly primarily interested in securing the highest type of service for the people of the State. It is properly interested in securing for the physician such financial position as is eminently just and as will attract to a great profession those who have the greatest capabilities. And we believe that the officers of the Society are far-sighted when they say that in perfections of our services lies our proper pecuniary reward."

WOMAN'S AUXILIARY IN THE EASTERN STATES

The February issue of the *Kentucky Medical Journal* has an outline of what the Eastern States are doing in the Woman's Auxiliary, and says:

"New Hampshire stands alone as the only New England state 100 per cent organized and cooperating with the National Organization. Last year the State Auxiliary had misgivings as to its necessity and usefulness but an urgent request from the medical society that the women remain organized, dispelled all doubts.

"The New Jersey Auxiliary made pilgrimages to state institutions, set apart one meeting when the mothers of physicians were entertained, and sponsored various health meetings. The Essex County Auxiliary, assisted by the physicians, succeeded in establishing a course of health talks, in cooperation with the Y.W.C.A. of Newark, emphasizing especially pre-natal care and information which would aid the mothers of babies and young children.

"Virginia is active in spots. The doctors encourage the auxiliaries as they believe that through them education with regard to the menace of state medicine can be spread.

"Ohio for several years has been sending representatives from a few organized counties to the national meetings but as yet there is no state organization. As our friend and adviser, Dr. Upham, lives in Ohio, it is felt that he will advise the National Auxiliary when the auspicious time arrives for the establishment of a State Auxiliary.

(*Continued on page 312—xvi*)

WHETHER THE PATIENT IS

aged  and feeble  or so young  that his digestive system works less energetically than his limbs  or is an adult business man  healthy but deskbound  – *prescribe AGAROL with confidence for the relief of constipation* and to aid in restoring regular bowel function.

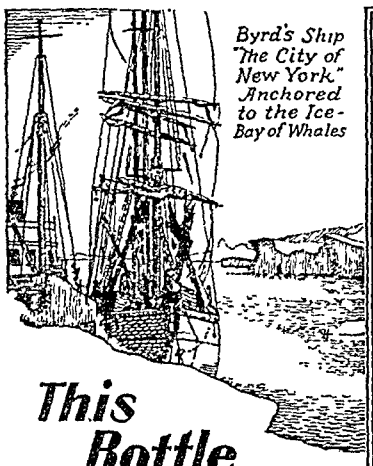
AGAROL is the original mineral oil and agar-agar emulsion with phenolphthalein It softens the intestinal contents and gently stimulates peristalsis

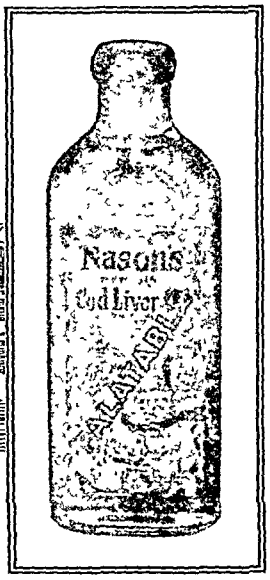
Gentle enough for little patients; active enough for the chronic state of the adult and aged patient.

A supply gladly sent for trial.

AGAROL *for Constipation*

WILLIAM R. WARNER & COMPANY, Inc 113 West 18th Street, New York City





This Bottle went with Byrd to the Antarctic

THIS much traveled bottle could tell an exciting and romantic story. Its contents originated in the selected livers of fine cod-fish, harvested in the Lofoten Island Waters of Norway, far within the Arctic Circle. Extracted and refined in the Nason Plants in that romantic land of the Midnight Sun, biologically tested and bottled at the Tailby-Nason Laboratories in Boston, a quantity of this potent, palatable Cod Liver Oil went with the Byrd Antarctic Expedition to the South Polar Regions.

The bottle illustrated was brought back and given by Admiral Byrd to the Tailby-Nason Company as a souvenir of the Expedition, its contents unaffected by the long sojourn in the icy wastes of "Little America."

Nason's
Palatable Norwegian
Cod Liver Oil
The Better Tasting Kind

Accepted by Council on Pharmacy and Chemistry A.M.A.

TAILBY-NASON COMPANY
Kendall Square Station, Boston, Mass.
Pharmaceutical Manufacturers to the Professions of Medicine and Pharmacy since 1905.

Gentlemen:—You may send me (without charge) sample bottle of Nason's Palatable Cod Liver Oil.

Name .....

Address .....

My Druggist's Name ....(N.Y.J. 3-31)

(*Continued from page 310—adv. xvii*)

"The District of Columbia seems so completely diverted with Washington affairs that the Auxiliary which so capably cared for the A. M. A. meetings some years back seems to have gone into retirement.

"Delaware in a breathless, better-late-than-never manner, has completely caught up and is most interested and active and has entered upon serious work by assisting the men of the profession in establishing a medical library in Wilmington. They will cooperate with Philadelphia at the time of A. M. A. and the eastern section will introduce them with pride to the National Organization.

"West Virginia is up and doing and you may expect still better things from that state this year.

"Maine, Massachusetts, Rhode Island, Vermont and Maryland have reported the interest of individuals but no organized effort. Queries from different localities in New York as to why there is no auxiliary have been answered with the statement that several years ago the House of Delegates voted unanimously in favor of the auxiliary and authorized its organization. The same year Connecticut voted favorably but no definite steps have been taken.

"Pennsylvania has surely discovered the rhythm in which its auxiliary work is best done, for concrete accomplishments have been turned out regularly, year by year. Of the three thousand dollars contributed last year to the Medical Benevolence Fund more than two-thirds was contributed by the Auxiliary. A definite trend toward educational meetings is felt all over the state and socially it is hoped that the carefully formed Philadelphia plans for the next meeting will bring honor and glory to the Keystone State. Not only are the adult members of the Auxiliary meeting but a group of the most charming and good-looking daughters of doctors are working together in order that they may know each other and work in unison for the comfort and pleasure of the A. M. A. guests when they come to Philadelphia in May. Verily, who can question the wisdom of the Auxiliary, when it brings about so much willing work in behalf of the medical men of the country?"

FINANCES OF THE COLORADO STATE SOCIETY

The following table from the December number of *Colorado Medicine* describes the finances of the State Society, as set forth in the annual report of the Committee on Appropriations:

"Your Committee on Appropriations begs leave

(*Continued on page 313—adv. xvii*)

(*Continued from page 312—adv. xvii*)

to submit the following budget for the fiscal year of Sept. 1, 1930, to Aug. 31, 1931:

"Estimated Receipts:

Resident Dues		$10,750
Non-resident Dues		150
Space Rentals		500
Interest		350
Publications, exclusive of dues		11,500
		$23,250

"Estimated Expense:

General Fund		
Salaries (part of Ex. Secy.)	$ 3 000	
Rent	600	
Telephone & Telegraph	200	
Taxes	35	
Insurance	15	
Audits and bonds	175	
Travel	1,000	
Mailing & Supplies	450	
Permanent Equipment	200	
Scientific work & Exhibits	350	
House of Delegates	225	
Guests	200	
		$ 6,450

"Publication Fund:

Salaries (Ex. Secy.)	$ 600	
Stenographer	1.800	
(Sc. Editor)	720	
Extra help	600	
	$ 3,720	
Printing and Mailing	8,500	
Supplies	500	
		$12,720
"Medical Defense Fund	$ 500	
"Library Fund	500	
"Education Fund (Ex. Sec. salary)	600	
Committee on Pub. Pol.	400	
	$ 1,000	$21,170
		$ 2,080"

UNETHICAL PRATICE IN IOWA

The January issue of the Journal of the Iowa State Medical Society has an editorial unfolding in almost incredible chain of unethical medical practice. Concerning a physician, B., the proprietor of a healing institute, the editorial says:

"Many readers of the Journal have more than passing interest in the activities of Norman Baker, of Muscatine, notorious for his vitriolic

(*Continued on page 314—adv. xviii*)

Here

is one of th advertisement of The Sugar Institut

THE advertisement reproduced here one of the series appearing in new papers throughout the country. In ord to keep the statements in accord wi modern medical practice, they have be submitted to and approved by some the leading authorities in the field human nutrition in the United State The Sugar Institute, 129 Front S New York.



(*Continued from page 313—adv. xvii*)

attacks upon the medical profession, the American Medical Association, his former partner one Harry Hoxsey, *The Muscatine Journal* and, in fact, anything or anybody who opposes him. His activities have carried him into many fields and given him widely diversified interests. He first received public notice when by means of Radio Station KTNT he advised the world that he had solved the mystery of cancer and invited patients to his institute for treatment. Modest, at first, in his claims he soon expanded until his advertising declared cures for goiter, varicose veins, and other maladies besides cancer.

"Harry Hoxsey, erstwhile of Illinois, was discovered by Baker, who invited him to join the personnel of the institute. Money rolled into the coffers of the institute, according to the testimony of Hoxsey, and then trouble began. The Attorney General's office began court action to restrain the five officers of the Baker Institute from the practice of medicine without license. On third trial an injunction was secured restraining the four associates of Baker from the practice of medicine but Baker himself escaped injunction. About this time Hoxsey left the employ of Baker and started his own cancer clinic in Muscatine in opposition to Baker. He further entered several suits against Baker for slander ($250,000) and for money due him under contract ($85,000). These suits are pending. The injunction instigated by the Attorney General has been appealed to the Supreme Court. The Federal Radio Commission having received voluminous complaints against his alleged misuse of his Radio Station KTNT suspended his license, but has extended his probation from time to time pending final disposition of the matter. This brings his story up to about the first of December.

"During the month of December we note that Baker has sought to secure approval of articles of incorporation for the Baker Institute from the Secretary of State. He has petitioned the radio commission for an extension of his temporary license to operate his radio station until January 31, 1931. This petition has been granted. Criminal action has been started by County Attorney Harold E. Wilson of Muscatine against Bruce Miller, formerly a member of the Baker Staff, for practicing medicine without a license. A civil suit was also filed in which the State seeks enjoin him from practicing medicine in Iowa. Most spectacular of his recent activities is the invitation which Baker extended to President

(*Continued on page 316—adv. xx*)

There Is No Specific For

Loss of Appetite

—just when food is most needed to build up strength after disease has made its inroads.

But let us send you two bottles of Guiatonic, and give it a chance to live up to its name as a "tonic."

The hypophosphites of iron, quinine, strychnine, manganese, calcium and potassium combine with creosote and guaiacol to stimulate appetite, to furnish an abundance of minerals (including phosphorus) and thereby promote cell reconstruction.



IN addition, after febrile diseases, the creosote and guaiacol tend to prevent secondary intestinal infection and intestinal fermentation.

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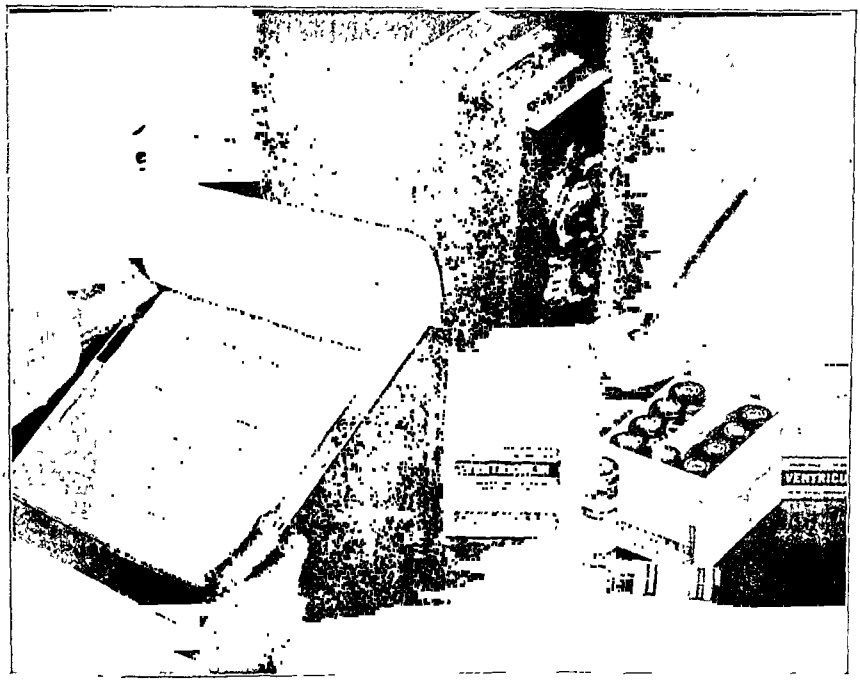
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THE RECONSTRUCTIVE TONIC

SEND FOR A TRIAL SUPPLY

Please mention the JOURNAL when writing to advertisers

VENTRICULIN (Desiccated, Defatted Hog Stomach)
SPECIFIC IN PERNICIOUS ANEMIA



Accepted for N. N. R. by the Council on Pharmacy and Chemistry of the A. M. A.

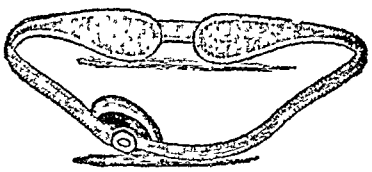
The remarkable potency of Ventriculin—a dry, granular palatable extract from fresh stomach tissue—has quickly made it an outstanding preparation for the treatment of primary anemia. . . . Its efficacy is assured by clinical trial, each lot being clinically tested and approved by the Simpson Memorial Institute for Medical Research of the University of Michigan. The material must be shown to contain the requisite degree of blood-regenerating activity before being released for general use. . . . The usual dose of Ventriculin is 10 grams daily for each 1 million reduction of the red blood cells below normal; maintenance dose, 1 vial daily. . . . You will be interested in the new booklet "*Ventriculin in the Treatment of Pernicious Anemia.*" It will be sent you promptly.

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The world's largest makers of pharmaceutical and biological products

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Each truss must hold comfortably and securely, and you and your patient shall be the judges. Each frame is carefully selected and accurately shaped to the body. Pads and covers are chosen to meet the varying conditions, and the hernia is retained by gentle support with no suggestion of pressure or strain.

You are safe in recommending a Pomeroy, for with us the welfare of your patient comes first—and this promise is backed by over sixty years of Pomeroy Service.

Insist upon Pomeroy Quality —It costs no more

Pomeroy Company

SURGICAL APPLIANCES

16 East 42nd Street, New York

400 E. Fordham Rd., Bronx

Brooklyn Boston Detroit
Newark Springfield Wilkes Barre

(*Continued from page 314—adv. xviii*)

Hoover to assist in the ceremony opening his new print shop which is now printing a daily paper under Baker's control. Judging from the editorial comment reaching our attention the Iowa Press feels that President Hoover's participation in this ceremony was untimely and ill-advised."

All this reminds one of the Brinkley case in Kansas, which was outlined in this Journal of December 1, 1930, page 1425.

CONVICTIONS FOR ILLEGAL PRACTICE IN NEW JERSEY

The January issue of the Journal of the Medical Society of the State of New Jersey contains a communication from Dr. J. J. McGuire, Secretary of the State Board of Medical Examiners, outlining the convictions of twenty-one persons practicing medicine illegally. These convictions were secured between September 8, 1930, and November 5. Five of those convicted were women, judging by their names, some of which were those of foreigners.

The classification of the defendants was as follows:

Plain practice of medicine	9
Physiotherapists	5
Druggists (one also a naturopath)	4
Naturopath	2
Psychoanalyst	1

This seems to be an excellent record for the New Jersey Board.

CHRISTIAN SCIENCE IN OHIO

The Christian Scientists of Ohio are planning to introduce a bill in the Legislature legalizing their practice of healing by prayer.

The *Ohio State Medical Journal* of January says:

"An unusually active and vigorous campaign has been waged in Ohio for many months by leaders of the Christian Science Church in an attempt to win support for the proposal which it expects to sponsor in the forthcoming session of the Legislature. This measure, it is understood, would supplement Section 1286 of the General Code with a section providing that the provisions of the act 'shall not affect nor interfere with the practice of the religious tenets of any church, provided that all sanitary laws and regulations of the state are complied with.'

"The fallacies of such a provision are many. They should be quite obvious to the members

(*Continued on page 317—adv. xxi*)

(*Continued from page 316—adv. xx*)

lhe Legislature upon whom the entire re nsibility in this matter rests.

If the only legal restriction placed on faith lers should be compliance with the sanitary s and regulation of the state, it would be t as consistent to permit attorneys, school chers, carpenters, plumbers, or whatnot, to it the sick (practice medicine) if they com- with the sanitary laws and regulations

Legislators may be reminded that a re- ous prayer is one thing; a commercialized yer quite another, especially when the er is offered as a complete substitute for science of medicine in the prevention and atment of disease."

GRIEVANCE COMMITTEE IN WISCONSIN

The *Wisconsin Medical Journal* for February the following note regarding the plan to form Grievance Committee in Wisconsin somewhat ilar to that in New York:

'In accordance with recommendation of the uncil of the State Medical Society of Wiscon- at its January meeting, Senator Walter Hunt River Falls has introduced bill number 58 S ablishing a state grievance committee.

'Under terms of the bill suggested by the State ciety, the committee will be composed of the torney General, or the Deputy Attorney Gen- l, the Secretary of the State Board of Medical aminers and the Secretary of the State Board Health. The Secretary of the State Board Health will act as chairman of the committee. ie committee will have the power to issue sub- enas and to investigate such practices as are mical to the public health.

"The medical grievance committee plan was st established in New York State and the Wis- nsin committee is modeled, in its thought, after e New York law. The senate committee on lucation and public welfare had a hearing on is plan on Tuesday, February 3rd."

COUNCIL OF THE WISCONSIN STATE SOCIETY

The Council of the State Medical Society of Visconsin met on January 3, and received re- orts which are full of information and interest. he minutes of the meeting are printed in the ebruary issue of the *Wisconsin State Journal*.

Medical extension is supported by an appropri- ion of $7,500 annually made by the State Leg- lature. The Journal says:

"The Joint Committee has recommended that e Legislature be asked to increase the budget

(*Continued on page 318—adv. xxii*)

RELIEF in HYPERTENSION

PROMPT and safe reduction of blood pressure, pending determination and treatment of the cause, has been effected in thousands of cases by the use of Pulvoids Natrico.

Pulvoids Natrico differs from the drugs classed as vasodilators in that it not only lowers blood pressure but keeps it down safely and surely.

Pulvoids Natrico is a synergistic combination of approved vasodilators (sodium nitrite, potassium nitrate and nitroglycerin) in combination with Crataegus Oxyacantha.

A physician writes: "Pulvoids Natrico seems to be ideal in all hypertension conditions. Has given me, and all patients to whom prescribed, genuine satisfaction and I do not believe there is another preparation, single or combined, which can in any wise approach its efficacy or efficiency. It is a meritorious remedy, and I can recommend it conscientiously to all my colleagues."

It is significant that physicians that have used Pulvoids Natrico in cases of hypertension invariably continue to place their dependence on it. Try Pulvoids Natrico for yourself and check its results on the sphygmomanometer.

PULVOIDS NATRICO

Enteric, Sugar Coated, Dark Green Color

The Drug Products Co., Inc.,
26-35 Skillman Avenue,
Long Island City, New York.

☐ Special One-Time Offer for March only, 200 Pulvoids for $1.00, cash with order.
☐ Send me free copy of "High Blood Pressure, Its Diagnostic Importance, Its Efficient Treatment."
☐ I use ampuls. Send your list of formulae.

Name .....

Street .....

City ..... State.....

(*Continued from page 317—adv. xxi*)

for Medical Extension by $4,500 a year to make the total $10,000 a year. The Committee has in mind the employment of a full-time director of activities at $3,000 and $1,500 additional for the free lecture services. While it was thought that securing any additional allowance was highly improbable, it has just been passed by the Budget Committee of the Regents and, after something of a fight, by the Regents as a whole. It now goes to the Legislature with the approval of the University regents. This would mean, if the grant is approved, that, beginning July 1st, next, there will be spent in Wisconsin $13,000 a year from State funds for the furthering of medical extension in this State. No other State has anything approaching this budget."

The State Society conducts a medical service, which is described as follows:

"This service, instituted upon request of the Secretary, is today possibly the Society's greatest scientific accomplishment. In addition to the financial grant from the Extension Division, an additional $3,000 is given by the Medical School. With this total from $5,500 to $6,500 the Library offers four services:

"(1) The loan of recent literature on any given subject by packets made up from a subscription list of over 300 leading medical journals. Cost to the physician is postage and wrapping both ways.

"(2) Loan for limited period of given journal or journals each month. Cost to physician is ten cents a month.

"(3) Compilation of bibliographies or list of references on a given subject. Cost to physician is 60 cents an hour; but inasmuch as such lists are now in readiness for all leading subjects, present cost is only for the time needed to bring the list to date.

"(4) Loan of books from the Extension Library, the Medical School Library, or securing them from one of the national institutions. Cost is postage and wrapping both ways."

District meetings are described as follows:

"3. The District Meetings. A few years ago but few districts had an annual district meeting. The Ninth District where Dr. Jos. F. Smith has long had four excellent meetings each year was a notable exception. For the past three years each district has had an excellent meeting and they now appear to be firmly established as a means of securing program material of a calibre that the average county society would be unable to have."

The financial report of the Journal for the year 1930 is as follows:

(*Continued on page 320—adv. xxiv*)

Tasteless, Odorless Valerian

All the disagreeable taste and odor of valerian have been removed, not merely disguised, by a special process. A palatable and effective prescription for producing mental tranquillity in functional nervous diseases.

Elixir Bromo-Valerianate "Gabail"

"Sample and Literature Upon Request"

Anglo-French Drug Co. (U.S.A.) Inc. **1270 Broadway, New York, N. Y.**



HAY-FEVER

1931

A New Pamphlet

discussing

MARCH-APRIL-MAY

HAY FEVER

and showing the chief causative trees as done

IN NATURAL COLORS

▽

Previous issues still available
1 Early Spring or Tree Hay Fever
2 May, June, July Hay Fever
3 August to Frost Hay Fever

Write for Bulletin No. 4

The Arlington Chemical Company

Yonkers, N. Y.

(Continued from page 318—adv. xvii)

"Income.

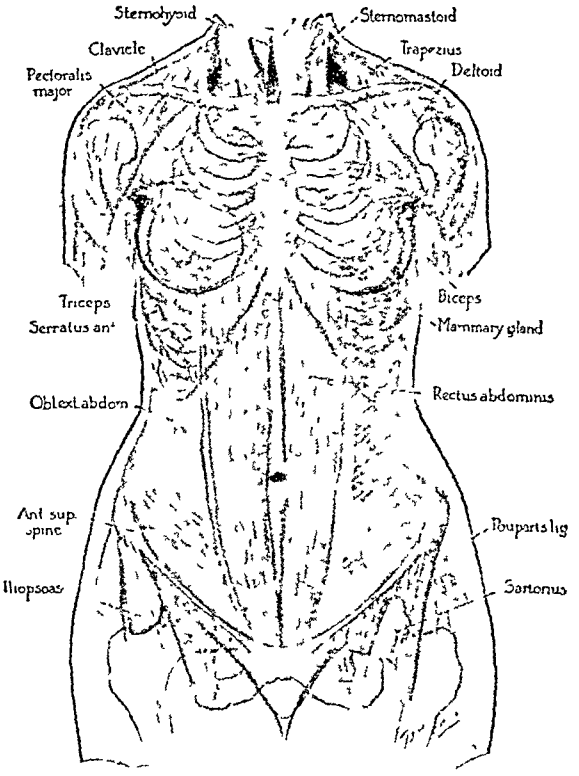
Advertising	$9,205.02	
Subscriptions	160 90	
Miscellaneous	6.00	
Interest	27.00	
Total Income		$9,398.92
Expense:		
Salaries	$1,571 21	
Printing	6,806 11	
Mailing	224 02	
Cuts	384.05	
Rent	300 00	
Miscellaneous Expense	45 00	
Accounting Service	195 00	
Discounts Allowed	45.30	
Depreciation	9 80	
Bad Accounts	25.00	
Total Expense		9,605.49
Net Operating Loss for Year		$ 206.57"

The Budget adopted for 1931 is as follows:

"1	Rent	$ 960
2.	Supplies, Phone, Telegraph, Postage, Printing, etc.	2,200
3.	Travel, Secretary	450
4.	Salary, Secretary	6,800
5.	Salary, Florence Ripley	1,680
6.	Salary, Ellinore Beck	1,650
7.	Salary, Travel, Asst. Secretary	3,000
8	Treasurer, Accountant	300
9.	Hygeia Presentations	450
10.	A.M.A. Delegates	300
11.	Secretaries' Conference	1,200
12.	Legal Services	500
13.	Committee on Public Policy	2,000
14.	Annual Meeting	1,800
15.	Council, Rail Fares	300
16.	Foundation Fund	600
17.	Committee on Cancer	500
18.	Editorial Board	2,500
19.	Press Service	2,750
Total		$29,940

Income: The income from 2,000 members is $30,000. The interest from surplus is $800 Free balance—$860."

ANATOMICAL STUDIES



SUPERFICIAL MUSCLES IN THE FEMALE
ANTERIOR VIEW

for the Practitioner

Sets of Anatomical Studies furnished to physicians upon request.

CAMP

Physiological Supports Scientifically Designed

S. H. CAMP & COMPANY
Manufacturers
JACKSON, MICHIGAN

Chicago Merchandise Mart
New York 330 Fifth Avenue
London 252 Regent St. W.

HOSPITAL ADVERTISING IN WEST VIRGINIA

The question of advertising hospitals through the channels of ordinary publicity is discussed in the January issue of the *West Virginia Medical Journal* as follows.

"The question of hospital advertising comes up from time to time. Just now there are two agencies in West Virginia that are endeavoring to secure advertising matter from hospitals. One is telephone directory advertising and the other is bus advertising. We do not know of any hospitals that have signed up for either of the above-mentioned forms, but we do know that various West Virginia hospitals have been solicited on this matter

"The question might easily be raised as to whether or not bus or directory advertising would be strictly ethical. If so, to what limit could a hospital go? If not, is there any other form of ethical hospital advertising? It seems to the Journal that this is a matter for the Hospital Association of West Virginia to thresh out. Dr. B. I. Golden, of Elkins, president of the Hospital Association, has suggested that all prospective hospital advertising campaigns be submitted to the Hospital Association for approval before any campaign is undertaken. The idea is to be commended If properly carried out, it could be the means of promoting a better spirit of undertaking and cooperation between the hospitals of this State."

SPEAKERS' BUREAU IN IOWA

The Iowa State Medical Society has a Speakers' Bureau which supplies lecturers for County Societies and lay health organizations The January issue of its Journal announces that the programs are available in the following subjects

Contract practice
Medical Economics
What cults have taught the members of the regular profession
Medical insurance, the points of view of (a) the agent (b) the medical examiner, and (c) the practitioner.
Thyroid
Peptic Ulcer.

In December lecturers were sent to five county societies, one dental society, and two fraternal clubs.

The February number of the Journal has the following account of the offer of the Speakers' Bureau of the State Society to make up the programs of county societies

"The energy of the Speakers' Bureau has been directed in still another direction Through co-

(*Continued on page 322—adv xxvi*)

Montague Hospital

for

Intestinal and Rectal Ailments



36th Street
Just East of
Lexington Avenue
New York City

Offering Special Facilities for:

1. *Radium Treatment for Cancer of Rectum*
2. *Non-Surgical Treatment of Selected Cases of Hemorrhoids*
3. *Conservative Treatment of Fistula-in-Ano*
4. *Thorough Rectoscopy*
5. *X-Ray Study of Colon*

•

DR. J. F. MONTAGUE
Medical Director

As a General Antiseptic

in place of

TINCTURE OF IODINE

Try

Mercurochrome-220 Soluble

(Dibrom-oxymercuri-fluorescein)
2% Solution

It stains, it penetrates, and it furnishes a deposit of the germicidal agent in the desired field.

It does not burn, irritate or injure tissue in any way.

Hynson, Westcott & Dunning

Baltimore, Maryland

PHILLIPS Milk of Magnesia

THE IDEAL
LAXATIVE-ANTACID

The name "PHILLIPS" identifies Genuine Milk of Magnesia. It should be remembered because it symbolizes unvarying excellence and uniformity in quality.

Supplied in 4 oz., 12 oz., and 3 pt. bottles.

THE CHAS. H. PHILLIPS CHEMICAL CO.

New York and London

(*Continued from page 321—adv. xxv*)

operation with the Iowa Tuberculosis Association, the Bureau is now in a position to schedule chest clinics as one of the regular program services offered to county medical societies. The Tuberculosis Association has consistently urged that these clinics be conducted as a regular county medical society program, and in taking over the task of making a clinic schedule, the Speakers' Bureau wishes to emphasize this point. The preferred procedure is to hold the clinic from 1 to 5 p. m. followed by 6 o'clock dinner and a scientific program on diseases of the heart and lungs. The Bureau will be very glad to plan the evening program.

"These clinics are given upon the invitation of the president or the secretary of the county society. After the date is definitely fixed, the preliminary arrangements for the clinic are made by a public health nurse, sent from the staff of the Iowa Tuberculosis Association a few days prior to the clinic. The clinic is held primarily for the benefit of the physicians, and should not be regarded as the usual diagnostic clinic, but as a demonstration of newer methods of examination and treatment. The patients are selected and referred by members of the county medical society. In order that the greatest benefits may be secured, physicians from adjoining counties should be invited to attend the entire day's program.

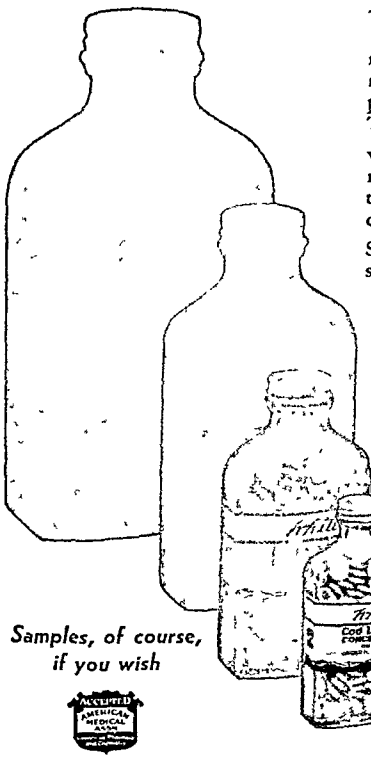
"The value of these clinics has become well known to the medical profession throughout the state. The schedule is rapidly becoming filled and further requests should be made as soon as possible. Plans are so made that Friday is the most convenient day to hold these clinics, but in the event that the county medical society meeting date cannot be changed adjustments can usually be made."

MEDICAL PUBLICITY IN KANSAS

The physicians of Kansas like those of several other states are seriously considering publicity methods directed to the people. The Journal of the *Kansas Medical Society* for February has the following record:

"Following the adjournment of the Council a meeting of the Board of the Bureau of Public Relations was held. There was considerable discussion concerning methods for giving greater publicity to scientific medicine. Several unsatisfactory features of newspaper advertising were mentioned. The results in some instances have not been all that was expected. A proposal by the executive secretary of the Bureau to publish a popular health magazine in connection with the Journal received some consideration but it was finally decided to leave the matter for final action at the annual meeting."

In Pregnancy and After



WHEN you have to provide for the increased metabolic requirements of the gravida—for her calcium needs—if she needs building up and protection (particularly if there are TBC contacts), *or* . . .

when you wish to afford her the added resistance to infection (particularly of the intestinal and respiratory tracts) conferred by Vitamin A—

She will keep on taking your prescription gladly and regularly, if it is

White's

Cod Liver Oil Concentrate

(ORIGINALLY COD-LIV-X)

Little wafers—as easy to take (swallowed or chewed) as fruit drops—each one containing 250 Vitamin A units—more than required for N N R—and 100 Vitamin D units—and you can control your dosage

During Lactation, Too—

White's Cod Liver Oil Concentrate has an excellent effect on both mother and infant without any of the "oiliness" taste or gastric objection.

Samples, of course, if you wish

ACCEPTED AMERICAN MEDICAL ASSN.

HEALTH PRODUCTS CORPORATION, NEWARK, N. J.

M-7

The most unpleasant manifestations of malaise have been frequently allayed by drinking

Poland Water

Physicians have commented favorably on its bland diuretic properties for over 60 years.

Literature free on request



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680 Fifth Avenue
New York

PSYCHIATRIC OBSERVATION CLINIC IN DELAWARE

The State of Delaware has the excellent plan of holding its psychiatric cases under observation for some time before committing them to a hospital for the insane. The January issue of the *Delaware State Medical Journal* comments editorially on the plan, as follows:—

"The Psychiatric Observation Clinic of the State of Delaware will be opened by the first of February. Other states have observation clinics in which patients who are suffering from mental and nervous diseases are studied and diagnosed before being committed to a state hospital, but Delaware is one of the few states which has a period of observation for all before they are regularly committed. It is fortunate that our state is small in area as well as in population, for only in such a situation can so comprehensive a plan be carried out. It is possible to produce an ideal situation under such favorable circumstances.

"A clinic which studies all types of mental and nervous diseases as well as those actually psychotic before commitment is a valued addition to any state institution. In many instances actual residence in a hospital for mental diseases may be avoided. This would be particularly true of patients suffering from certain types of toxic psychoses, mild depression, etc. The institution to be opened has facilities for forty patients —twenty male and twenty female. It is a complete hospital unit in itself, being fully equipped for all types of diagnoses and treatment. Among other factors there will be a portable x-ray unit, an individual dental unit, physio-and hydro-therapy, etc."

CELLU

Bran Wafers

are adaptable to your Diabetic and Ketogenic Diets



A Supplement to Bread
Cellu Bran Wafers are made chiefly of Cellu flour and washed bran, skillfully blended to make a cracker "wheat like" in flavor. Served with butter are a good substitute for bread.

Non-Nutritive
Cellu Bran Wafers are composed of such ingredients that the resulting wafer is practically without food value. This composition makes their use as a "filler", to increase the volume of the diet, very desirable.

Increase Bulk
Cellu Bran Wafers being composed almost entirely of Cellulose are a good source of indigestible residue in the diet.

Mail now for Free Sample
Send me a Free Sample of Cellu Bran Wafers:
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N.Y.M.J. 3-31

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NEW YORK STATE JOURNAL of MEDICINE

PUBLISHED BY THE MEDICAL SOCIETY OF THE STATE OF NEW YORK

Vol 31, No 6 NEW YORK, N Y March 15, 1931

THE ECONOMIC CONTRIBUTION OF PHYSICIANS TO THE COMMUNITY

By CHARLES GORDON HEYD M D, NEW YORK, N Y

An Abstract of the inaugural address of the President of the Medical Society of the County of New York delivered on January 26 1931

THE Medical Society of the County of New York is dedicated to the propositions that

I The fundamental object of medical practice is to provide and make available adequate, effective and efficient medical service at all times for every member of the community regardless of race, color or creed

II Medical service as provided today is in a large measure effective and efficient although not always adequate or available

III The payment to physicians for medical service is not a large item in the so called cost of medical care, as only about fifty per cent of patients hospitalized in general hospitals pay a doctor's fee

IV There is no logical reason for believing that the professional item for adequate and effective medical service in the cost of medical care can be materially lessened or reduced On the contrary, there are many reasons for believing that it will be increased as it must eventually have added to it a charge for professional services

V The doctor is a citizen and must discharge all of his obligations of citizenship the same as any other member of the community

VI The doctor is entitled to a monetary return for his labor that is fair and commensurate with his services, training and experience The fact that the practice of medicine is a profession does not mean that the doctor shall continue to work under a system that is ethically wrong and economically unsound The doctor must be paid for his services in order to function as a useful and contributing member of society

These postulates present the background for my remarks and serve as an introduction as to what is the economic contribution of physicians to the community

Physicians Annually Contribute to the Community 365 *Millions of Dollars in Free Medical Service* It is claimed by competent statisticians that physicians treat one eighth of the population of the United States free of charge Since at all times there are two per cent of the population incapacitated and about four per cent physically impaired, it follows that from 375 000 to 500,000 persons are daily treated without charge If only $2 00 per person were charged for a treatment, the sum total monetary equivalent for the contributions annually made by physicians in the form of free medical treatments would be $365 000,000

Physicians Largest Contributors to Medical Charity If all the medical and quasi-medical foundations were consolidated into one organization their entire contribution to society in dollars during the last twenty years is not equal to the annual donation of the physicians of the country The medical profession may, therefore, justly claim that under the present medico social system they stand without a rival in the entire field of medical charity and health philanthropy

Average Physician's Annual Income $3,000 This immense philanthropic enterprise is created by the labors and services of 150,000 physicians working for an average remuneration of $3,000 per annum

The Costs of Training a Physician $28,000 The doctor today is about twenty eight years of age before he begins practice What has it cost in actual dollars to produce this educated and trained product His pre-medical and medical education will certainly cost, with fees, maintenance and miscellaneous expenses, $16,000 His loss of earning capacity while being professionally educated may be estimated roughly for six years as $12,000

This young man then begins practice at twenty-eight years of age, with an estimated indebtedness of $28,000 upon which he should pay $1,400 a year as interest I seriously doubt, although I have no figures to verify it, whether eighty per cent of the doctors ever overcome this primary indebtedness of $28,000 In other words, more than four-fifths of our profession never repay

their capital investment by leaving an estate equal to $28,000 and never make up the carrying charges by annual savings of approximately $1,400. To just break even the doctor must logically pay interest of $1,400 per year and create a capital of $28,000 before he dies.

Middle Class Receiving Competent Medical Care: That the medical service provided by doctors in the last thirty years has on the whole been effective is indicated by a study of the mortality rate in 1900 as compared to the mortality rate in 1925. If the medical service given to the middle class (white collar) were ineffective or inadequate, then we should expect to find that as a class they suffered from such defects of medical service. This is not apparent because the decline in modern mortality is impressive.

Mr. Wolman has calculated that based on the death rate obtaining at the beginning of the century, in 1925 there would have died 1,962,999 persons, but actual deaths were only 1,389,673 persons, a saving of 573,326 lives.

In this connection it is interesting to note that only something over four million Americans submit any income tax reports at all, and in 1927, 1,600,000 of these paid no taxes because exemptions exceeded net income. As returns are expected when income reaches $2,500 for a married person, or $1,500 for a single person, these figures throw a powerful searchlight upon the phenomenon of our ability to pay for things.

Assuming twenty-seven million heads of families, less than ten per cent had income sufficient to warrant the preparation of a tax return with the expectation of making payment.

It follows that with only 43 per cent of the community gainfully employed and 87 per cent of the community receiving less than $2,000 a year, no matter how much the cost of medical service can be reduced, it cannot be reduced sufficiently low to allow this large group of the community to pay for their medical services within their income.

More Spent on Non-Essentials Than on Medical Care: On the other hand, a superficial survey of the aspects of some of our social activities will indicate the tremendous amount of money that is paid out for non-essential luxuries. The outlay for cosmetics, cigarettes, chewing gum, are expenditures that are in no sense necessities and are distinctly in the luxury class. These luxury expenditures total over five and a half times the total cost of all non-government health services. The amount spent for tobacco alone is three times as much as that spent for physicians and the American people spend more for candy than they do for doctors.

Public Makes No Provision for "Upkeep Costs" of Human Machine: One of the fundamental difficulties in the consideration of the high cost of illness is that the public have not been educated to realize that a certain sum of money must be expended to keep the human machine in a state of efficiency.

There are approximately 450,000 persons passing through the wards of the New York hospitals in a year; practically 1,500,000 other citizens avail themselves of the dispensaries. It is evident that this entire group of people, nearly 2,000,000, make no provision for paying a physician or for periodic visits to their doctor.

Deferred Payment Plan in Purchase of Health Care: A very important aspect of the problem is that when sickness appears the cost and expenditure under the present system of payment is an immediate one, forced and made under stress.

Out of every 100 who borrow from small loan companies, an average of 28 persons do so because of expenditures arising from illness or death. Interest rates on these loans vary from 12 to 42 per cent per annum, which materially increases the burden of the average wage earner with a family.

There is hardly a member of the community who is gainfully employed that would not be able to handle a reasonable professional charge, in keeping with his economic position, if the load or charge were spread over a sufficient period of time. It seems inevitable that we must come to some scheme whereby the cost of the professional attention, or even the hospital, might be spread over a sufficient number of months to enable the patient to liquidate his indebtedness and be a self-respecting, responsible member of the community.

Free Medical Service for Those Who Can Pay Against Public Interest: It is not for the best interests of society that such a large body of the population should be remiss in their rightful obligation and obtain their medical services free of charge. It is not good public policy to disburse money given or donated, or extracted from the public by taxation, for such widespread free hospital and medical services.

Undue Economic Duress on Medical Profession Liable to Lower Quality of Medical Service: There are other economic disabilities that are enforced on the doctor as against the other professions.

From tribal times of medical priestcraft, through various ages up to our present order the medical man has been expected to present to the community the services of his time and mind without remuneration. Clinics had their birth and flourished, hospitals grew from small beginnings to extensive centers, and brick by brick in the construction of these units there has always been free medical work by innumerable members of our profession.

Any system that concerns itself with medical care must bear in mind that the fundamental conception is the quality of medical care and not the

scheme of organization or its financial background

Any plan, whether devised by doctors themselves or imposed upon the medical profession from outside sources, that diminishes the incentives for competent medical attention upon the part of the physician in the care of his patient or that takes away from him the rewards that accrue to superior ability, energy and conscientious discharge of his duty, must in the long run prove detrimental to society (Rappleye)

The Relation of Physicians to Clinics It is a fact that I think can be fairly well substantiated that eighty per cent of the practice of medicine requires no great or elaborate study, that the conditions for which people commonly seek relief are functional and not organic, that these complaints can be comprehended under the loose designations of headache, insomnia, colds, sinus trouble, tonsillitis, constipation and other more or less functional disturbances

The primary function of the clinic is to provide the means of correct diagnosis and treatment for sick people

No matter how you argue the question, nor how much money may be behind the idea, without the doctor there is no clinic and no medical charity I often wonder just how much the donor of a large sum of money to a clinic personally knows as to how much medical service his dollar buys, is the donor having his dollar expended to produce the greatest amount of effective and efficient medical service or is the large percentage of his dollar going into the secondary functions of administration?

It seems to me that the present clinic practice is failing through defects of its own creation and that the present clinic system cannot go on and function on a charity basis either for the patient or the physician The best social asset in the solution of this problem is the conservation of the physician class and the utilization of the family doctor

The establishment of a free clinic by a philanthropist without the employment of paid physicians is a most unphilanthropic act Such an individual is forcing other sick people who are already burdened with debts and whose incomes have stopped, to hire and pay doctors who attend the patients in the free clinic No free clinic should be permitted to operate without reimbursing the attending physicians for their time

It would be a splendid move in social medical adjustment (1) to curtail the unrestricted system of gratuitous relief, by excluding those not entitled to gratuitous medical advice, (2) to insist on the payment of the medical staff engaged both in in- and out-patient work, and the payment of fees by patients in the pay ward and in the consultation departments of voluntary hospitals

If the doctor could be assured of, let us say, a minimal revenue from all the patients that he takes care of he could well afford to permit a reduction on some percentage of his work But what is attempted if one may judge from recent newspaper publications, is to oblige the doctor to continue his free medical service and at the same time accept a reduction in his charges to the patients that he takes care of and who are occupying certain types of rooms which are essentially private hospital accommodations

Medical Publicity At the outset of any discussion concerning the appearance of a doctor's name in the newspapers, with or without his photograph, it is well to distinguish the two forms in which health information is promulgated, one is publicity and the other advertising

Medical publicity has for its object the informing of the public as to what is desirable for the maintenance of health, and concerns itself with the broad objects of preventive medicine and as a means of elevating the general standard of personal and community hygiene, sanitation and health The efficacy of any program of medical publicity must be appraised under the following headings (1) it must be news, readable and interesting, (2) it must be constructive and worth while for the social welfare of the community, (3) it must be in good taste, and (4), most important of all, it must be scientifically and medically correct

There is a field wherein organized medicine and duly qualified physicians should give out or promulgate publicity for health purposes, publicity for preventive medicine, publicity for civic problems that contact with organized medicine but no member of this Society should use the broad conception of publicity for health purposes as a means of personal aggrandizement or for inviting attention to himself, or for advertising a particular proprietary preparation When a member of this Society recommends soap to keep the body clean he may be engaging in worthy publicity and spreading abroad useful health information When however, the same member recommends the soap of Mr X he is not engaging in helpful health propaganda or publicity, but is becoming an active agent in the advertising of a commercial product, manufactured by a particular firm and it is just at this point that we differ with the said member

The prohibition of advertising placed no physician at a disadvantage Medical groups—hospitals and clinics, and departments of public welfare should be bound by the same rule of ethics as individual physicians A hospital is not operated to make money and therefore should not advertise in lay magazines or newspapers

Your President recommends to the Medical Society of the County of New York

(1) Provision that any member of the Society associated or identified with any organization

medical or lay, resorting to direct advertising for business be dropped from membership.

(2) A provision that any member of a County Medical Society giving an address over the radio on medical subjects shall submit the subject matter in typewriting to the Committee on Publicity of the Medical Society of that County for editing and approval, at least two weeks prior to the giving of the address. The information must also include the purpose for which the address is being given, remuneration if any, and the objective sought.

(3) A provision that when industrial corporations desire a medical speaker the request shall be considered individually and on its merits and no member of the Society shall give a radio address under commercial auspices without the approval of the Committee on Publicity.

(4) A provision that the publication of a photograph and signature of a member of the Society endorsing either directly or by implication a commercial proprietary or advertised article, shall be deemed sufficient evidence to warrant expulsion from the Society.

(5) A provision that if a member of the Society is the author of a paper or subject of public interest and desires to have a copy or abstract released to the lay press simultaneously or after presentation the request must come with copies of the paper to the Publicity Committee before permission can be granted.

(6) A resolution to the effect that members of the Society should be warned that the giving of interviews to the lay press is often associated with undesirable results which may subject the member to a citation before the Censors. Furthermore, if any member considers such an interview desirable the press representative should be referred to the Medical Information Bureau.

Is Medical Ethics "Bunk"?: From time to time we hear a great deal derogatory to medical ethics and within recent times the code of medical ethics has been declared "bunk." Fate, political chance and accident elevate men of varying ability to high places whereby they speak with authority, but it does not always follow that the mere elevation of a particular man to a place of political prominence at the same time raises his intelligence or increases his capacity for clear thinking. History records innumerable instances where an individual has abrogated to himself all knowledge and set up a personal opinion as divine wisdom.

What is the so-called "Code of Ethics" that has been anathematized as "bunk," "archaic," etc.? On May 21, 1923, less than eight years ago, the Medical Society of the State of New York by its House of Delegates approved of a set of resolutions called "Principles of Professional Conduct of the Medical Society of the State of New York." These were prepared by a committee under the chairmanship of Dr. E. Eliot Harris and composed of Dr. Samuel A. Brown, Dr. Walter L. Niles, Dr. William Darrach, Dr. George David Stewart, Dr. Grant C. Madill and Dr. Henry Lyle Winter.

The Principles of Professional Conduct are binding upon the component societies of the Medical Society of the State of New York. They were designed primarily for the benefit of the community. They define the duties of a physician to his patients and their fundamental purpose is to protect the patient and to assure to him correct treatment, right conduct and personal responsibility upon the part of the physician. In their broad scope they define the relation of a physician to another physician, and demand of every member of the Society a high standard of honor, personal integrity and conduct of a gentleman.

The Code of Ethics is a simple collection of precepts for good conduct. It appeals to all physicians for honorable dealing, for goodwill, courtesy and instinctive honor. It is not archaic, and there is not a single statement in that Code of Ethics that is contrary to our conception of right conduct and good citizenship.

The Medical Society of the County of New York maintains that the Code of Ethics is an essential part of the practice of medicine and it cannot be lightly discarded and any program that has for its purpose the extinction of the code of ethical conduct between physician and patient is destructive and against social welfare.

A Program of Development: It would appear that the time is not far distant when the County Medical Society must decide whether as an organization it shall enter into what may be termed the business of medicine. It is apparent that with our nearly four thousand members we have a sufficient clientele to seriously consider the establishment of an insurance bureau, or even an insurance company. It might also suggest itself that there could be formed and managed under the auspices of the County Medical Society a credit and funding society, a collecting bureau, and we might even go so far as to organize the personnel for the management of clinics.

It might be considered the proper function of the Bureau on Publicity of the Medical Society of the County of New York to devise and draw up a list of zones within the City so that persons inquiring for competent medical service could be given a list of properly qualified physicians, members of the County Medical Society residing or practicing within the zone and to make available to the inquiring public the names of certified specialists residing or practicing in certain designated zones.

I believe the Medical Society of the County of New York should endorse as a matter of policy the following:

1. A central registry for dispensary patients.

If a patient is accepting free medical service as a right, privilege or gift, of a city institution or a privately endowed charity, the community has the right to demand that that patient shall be registered and thereby prevent medical shopping and reduplication of labor and laboratory work, that are time-consuming and expensive

2 Adequate supervision of all hospitals—private, proprietary, semi-public and public Furthermore, the examination of all human tissue removed at operation by a properly trained and certified pathologist

3 The designation of hospital and dispensary zones This will embrace the entirely new conception of the role of the doctor and his place in the community It will involve the establishment of regional hospitals confined to a geographical area of the city, which will be the radiating point of information, the curative zone for the community Every physician in this geographical area shall have access to the hospital for his patients, arrangements may be made for x-ray and laboratory work for the private patients of the physician in the area

4 That the worthy poor be treated free of all charges

5 That as a result of the recent decision of Judge Samuel R Blake of the Superior Court of the State of California in and for the County of Los Angeles, in a case of Granville Mac Gowan, plaintiff, vs Medical Service Corporation a Corporation defendant, the Comitia instruct its counsel to bring suit against one of the medical bureaus engaging, as a corporation, in the practice of medicine, that this suit be pressed for a decision upon two fundamental questions (a) Can a corporation practice medicine? (b) Is the manner and method of the defendant corporation such as to constitute the practice of medicine?

6 That a special committee of your Society be instructed to undertake an investigation and survey with the following objects in view (1) to canvass the entire situation of the medical and dispensary practice in the City of New York, (2) that they consider the possibilities of the application of the insurance principles to this problem (3) that if possible they report by specific resolutions how the condition can be met and solved and (4) that the problem they are to study is primarily not a question as to who can pay or who cannot pay for individual medical services, but the broad fundamental problem of how payment can be made That they shall consider as a fundamental fact that all doctors working in dispensaries—public, private or corporate —dealing with medical service, shall be paid a fair remuneration in keeping with their education, experience and services

That the Committee consider and make suitable resolutions in regard to the zoning of clinics, the zone hospital, the central bureau of registration for free clinic patients, etc This investigation would probably take a year to two years, would probably require the expenditure of $15,000 to $25,000 and your President is firmly convinced that this laudable study could and would be financed in ample measure

The medical problems presented herein are common to all of the societies and the interest of the doctors in the five boroughs will be best served by setting up a coordinating committee composed of two representatives from each borough The purpose of this committee will be to familiarize each County Society with the activities of their neighbors, to recommend a program of activities common to all of them and to suggest the organization whereby these objectives may be consummated

Conclusions

These are my views and for the present I shall *hold to them I shall be prepared to accept other* views when they are brought forward and prove to be true views I shall modify my official opinion when it can be demonstrated that in so doing I can advance the cause of medical practice

The problem of medical charity confronts us It is a challenge to society I have great faith *in the intelligence the understanding and the* brains of our social and medical leaders I believe this problem can be settled adequately, effectively and with justice to all There is no force in the spoken or written word the power lies in the ideals and the personality behind it If under a comprehensive plan we can bring to this problem ethical and moral leadership there is the hope that we can provide adequate medical service for all groups of our people at all times and that social medicine may continue with increasing years of usefulness

Throughout our community there is a spirit manifest and a willingness freely expressed to help solve this problem As individuals we can contribute the best of ourselves our loyalty and our thoughts to make this a living, advancing ideal The time is opportune and we must address ourselves seriously to the interrogation that presents itself—society and the doctor We stand at the parting of the ways from an old outworn system to a new and better type of social organization There are difficulties They can be solved

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I am under great obligation to the following for many of the facts and much of the statistical data presented in this abstract

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THE TREND IN THE CARE OF THE SICK

By THE RIGHT- REVEREND JOHN FRANCIS O'HERN, ROCHESTER, N. Y.

A paper read before the 125th annual meeting of the Cayuga County Medical Society on December 9, 1930, by the Bishop of the Roman Catholic Diocese of Rochester, N. Y.

As the regard for the welfare of others is an evidence of fine character, so thoughtfulness of the people of a community—each for all and all for each—may be considered as one of the great civic virtues. In no better way may this thoughtfulness be expressed than in the care of the ill, the injured and crippled; in kindness for the mentally and physically distressed; in watchfulness of the infant; and in the care of the aged. In primitive times the mother was undoubtedly the only physician, the only nurse of the ill. Her concern for the well-being of her offspring prompted her to study ways of making them comfortable and better, and restoring them to the family circle, well. Her sheltering arms were the first hospital. In ancient times, even in the days of Greece, the deformed and the diseased newly born were exposed to the elements, and to the wild beasts of the land and of the air, that they might die; and among the very poor, the aged, it has been said, were driven forth from the home and left to die.

As civilization progressed, there came into being the fore-runners of medicine. Aesculapius, the reputed son of Apollo, was the god of healing, and his disciples cared for the sick in his temples. The ill sometimes slept in the temples and as a curative measure were allowed to witness the services or rites, and to make appeal to the god for the restoration of their health. No person was allowed to die in the temple; nor within its walls was a child born. About the temples, buildings were erected for the ill, the injured and the wounded, and for the women in labor; and a shelter for the dying was provided. It is said that Hippocrates, the so-called father of medicine, was born 460 B. C., in a building near the temple in the Island of Cos, to which his mother had been assigned; and as he grew up and made bold to teach the natural laws of disease against the view that illness was due to anger of the gods, or maliciousness of demons, it was from the temple that he issued his great teachings of the care of the sick.

Although there is no great evidence of institutions for care of the ill in Roman history, yet we learn that sick slaves of Rome were removed to an island in the Tiber; that Caesar removed the sick and wounded to quarters in town before a battle, and that chariots followed his armies to transport the sick and wounded to places for treatment.

It remained for the teachings of Christ to instill in the hearts of people a kindly regard for the ill and aged. We learn in Holy Writ that they came to Him and they brought to Him the lame and the blind, the sick and the leprous; and about Him they lay on pallets and stretchers awaiting the healing touch of His divine hand. And curiously it was about the shrines of the new faith that the people gathered in their quest of restoration of health; and it was in the infirmaries of the monasteries that in thousands dotted the countries of Europe in the early centuries of the Church, that there gradually developed a separate branch of monastic endeavor, in time housed in a separate building, that early was called a hospice.

Men and women banded themselves to care for the insane,—the Crusaders were the first to establish an institution for their care—the sick, the crippled and the aged; and in the Middle Ages, institutions marked by economy in administration were founded for those purposes. France in the Thirteenth Century had over 2,000 such establishments, and in 1456 the Grand Hospital of Milan, yet in use, was built, where patients from their rooms might join the service of the church said daily in the central court. The word hospice meant not only a place of welcome, comfort, and attention to the ailing, but also an institution where the spiritual welfare of the patient might be cared for. What a beautiful thought actuated St. Landry, bishop of Paris, to call the hospital founded by him in the Seventh Century the Hotel Dieu, God's house. Early in the Eleventh Century Canterbury's archbishop founded two hospitals, and within two centuries some of the most celebrated establishments for the sick in England, notably the Five Royal Hospitals, were built.

What a wonderful army of men, under vows to perform the corporal works of mercy,—visit and care of the sick,—labored in the institutions, caring for the people in time of epidemic, in the distress of war, and giving tender care and sustenance to those so often ill because of poverty.

This is the day of the hospital. Millions and millions of dollars have been given freely by the over-rich to establish these institutions, especially in our country, and millions and millions more of dollars have been generously given by the people, often by those of little means, not only to help build hospitals but also to maintain them. Three hundred million dollars have been spent in building

hospitals in one recent year in the United States, and today in this country three hundred and sixty-five million dollars a million a day, is the cost of maintaining them With in ten years there has been an increase of 125 per cent in the number of hospitals in the United States

In medicine this is the day of the hospital Within its walls are gathered the sick the injured, and those needing surgical attention for the instruction of the students of the various medical colleges of the country At the bedside of its inmates, the beginner in medical study receives instruction and demonstration of medicine and surgery by visual and actual experience And by his residence with the sick, the newly graduated physician has opportunity to witness the wisdom and skill of the eminent men of his profession and is given charge in many instances under the direction of seniors, of the patient himself

In civic advancement this is the day of the hospital Without it no community can be considered as progressing to a better civilization, advancing to that humanitarianism of the loving Father which returns a mother and her newborn babe to the home which restores the usefulness of its citizens, which gives back to industry in all its forms its laborers, which protects all, the rich and the poor against the advance of epidemic communicable disease, which guards the community at large against the vagaries and outbreaks of the mentally ailing, which restores to such a large percent of those thus afflicted by rest and tender care, their reason and returns them to the enjoyment of life

In the changes in social life,—and by this I mean a more equitable and fair adjustment of the relation of man to man,—this is the day of the hospital Man's inhumanity to man is being lessened, that each to a certain extent is his brother's keeper is being more recognized that the state, that it may have strong and valiant defenders in time of war and well and sustaining citizens in times of peace, should assure their well being through life to the grave, is now conceded We have today clinics for the expectant mother to receive instructions as to the proper care of herself that her child may be born well, and to which come

> "Babes, neath the hearts of mothers,
> tomorrow,
> Babes out the arms of mothers of
> sorrow"

The ill are no longer cared for in the home children are no longer born under the roof of their parents or grandparents and under the humane sections of the public welfare law recently in effect the indigent and the near poor of the community are entitled to hospital care and skilled treatment

In industry with all its ramifications, this is the day of the hospital Our very large industries pride themselves upon maintaining finely equipped hospitals with each of their big plants caring not only for the maimed and injured but instructing their employees in proper modes of living, even extending their services into the homes of their workmen All this means an early return to work restoration of the injured or crippled, and better care of those ill of occupational diseases

At last the state recognizes the value of the life of each of its citizens and has even placed an average value of over $5 000 on the individual And it realizes in order that it may get the greatest return from this valuation this human machine must be kept in good condition must be protected against accident, must be repaired in case of injuries or illness, and be restored to usual labor as soon as possible Authorities claim that the time absent from labor of those hospital treated is but a fraction of that of those home cared for and point with pride to the fact that the average stay of patients in hospitals has been reduced in recent years from 23 days to 12 days In this great country of one hundred and twenty five million people what a great economic saving alone is thus effected!

All this means that civicly, socially industrially and economically, the hospital has become a very necessary part of our modern life

Now what is the duty of the community towards the hospital and what must the hospital offer to secure recognition of its worthiness? It should be maintained, I might say sustained for today it is recognized as not only a place for people to go to that they may become well or better, but it is the center of health activities People come to the hospital for medical advice, for periodical health examination or check up for diagnosis, for instruction in prevention of disease as well as for the cure or alleviation of established conditions People should patronize their own hospital, and should gladly and promptly, if possible, pay for the service rendered, ap even in this day of economic stress t should give of their means towards its port Because of this stress our hosp today showing a greatly lowered l pancy, 64 12 being the per cent of reported by 2717 hospitals the past the hospital cannot very well redu sonnel or lessen any activity n

RESULTS OF THE LIVER TREATMENT OF PERNICIOUS ANEMIA*

By JOSEPH E. CONNERY, M.D., NEW YORK, N. Y.

From the Department of Medicine, University and Bellevue Hospital Medical College, New York University, and the Third (New York University) Medical Division of Bellevue Hospital.

IN 1926 Minot and Murphy (1) published an account of their results of the treatment of pernicious anemia by a special diet rich in liver. Forty-five patients were included in the study. One year later these authors published a second article (2) giving the results of the use of this diet in one hundred and five patients. The striking and almost uniformly good results of the use of the diet were shortly confirmed by many other investigators and a voluminous literature rapidly accumulated.

An account of the results of the liver treatment of pernicious anemia readily lends itself to consideration under three headings; viz., Changes in the results of the laboratory data; Results of the treatment on the subjective findings; and Results of the treatment on the objective findings.

Changes in the Results of the Laboratory Data

The feeding of adequate amounts of whole liver is followed in the course of a few days by an increase in the number of reticulocytes above the normal. This effect is absent only in the exceptional case. The beginning increase occurs about five to seven days after treatment is started. The height of the peak of the reticulocyte curve is inversely proportional to the level of the red cells. The potency and dosage of the preparation used are other factors which determine the magnitude of the reticulocyte response. Occasionally a secondary peak may occur or the order may be reversed and the major peak be preceded by a minor peak. The phase of increased peripheral reticulocyte activity extends on an average over a period of about twenty-one days.

Later the curves of the red cells and the hemoglobin increase with the level of the former usually rising more rapidly than the latter so that the color index falls below unity. In the course of two to four months after beginning treatment the values for the red cells and hemoglobin are within the normal limits. Failure of these components to attain their normal levels may mean inadequate dosage, incomplete taking of the diet or the presence of an infection. Quite rarely a patient is seen in whom, apparently, none of the above-mentioned factors operates whose red count either cannot be raised to the normal level or kept there if it originally had reached a normal value.

The curve of the total number of leukocytes rises usually to normal and occasionally above the normal level temporarily. The polynuclear neutrophiles take on a less complex nuclear pattern. In one of our patients who was treated with large initial doses of a potent liver fraction the total leukocyte count reached a level of some thirty thousand and the neutrophilic leukocytes showed a distinct shift to the left.

Early in the course of treatment the eosinophiles increase temporarily in some patients. This effect seems to be more marked when whole liver is used but may also occur when a potent fraction is administered. The platelets increase early and usually attain normal values.

In patients whose initial red cell level is low, the stained blood smear shows a predominantly oval macrocytosis. As hemotological improvement progresses the macrocytes become, more of them, round and later all but disappear.

As a rule the icterus index is increased above the normal during the exacerbation. The values frequently fall within the zone of latent jaundice or they may attain the level of clinical jaundice. The qualitative Van den Bergh gives a negative immediate direct reaction and a positive indirect reaction with the values for the quantitative determination increased. When liver is effectively administered the icterus index returns to the normal zone or even to a low normal level and the quantitative Van den Bergh figure falls to normal.

The urinary output of urobilinogen in our series of patients was found to be increased above the normal in about fifty per cent of the cases. As a rule the output of urinary urobilinogen quickly returned to normal after liver therapy was instituted. Transfusion was almost always followed by a rapid and marked increase in the output of this chromogen.

With one exception, noted below, none of our patients showed a return of free hydrochloric acid in the gastric contents at any time during the period of relapse or induced remission. The exception showed a return of a slight amount of free hydrochloric acid after a remission had been well induced and sustained for some months. The amount has always been small. Shaw, quoted by Minot and Murphy (2) reported a similar finding, as did Heeres (3).

Effects of the Treatment on the Subjective Findings

In the course of a few days after liver therapy has been instituted, subjective changes become manifest. These changes may begin before the phase of increased reticulocyte activity is seen in the peripheral blood and well before there is any striking change in the level of the red cells or hemoglobin. The patient feels stronger and ex-

*Read at the Annual Meeting of the Medical Society of the State of New York, at Rochester, N. Y., June 4, 1930.

periences a sensation of increased warmth of the skin. The appetite improves rapidly and markedly, so much so that at times it may be said to be ravenous. Articles of food which were formerly purposely omitted from the diet, especially meat, are taken without discomfort and at times even with relish. Nausea and vomiting, especially the latter, are relieved early in the course of treatment. If diarrhea has been present the movements soon decrease in frequency and formed stools are passed in normal numbers. On the other hand, if their number and character have previously been normal, the stools may become loose after treatment is first instituted, but this effect is quite transient. Soreness of the tongue and rawness along the esophagus are relieved in the first few weeks of treatment. Occasionally evanescent attacks of soreness of the tongue may recur long after a remission has been induced even in the presence of normal hematological findings.

Symptoms directly referable to the anemia such as dizziness, headache, head noises, blurring of the vision, dyspnoea and palpitation, are relieved as the curves of the red cells and haemoglobin rise. Edema, frequently present in the dependent parts of the body, is usually relieved as the degree of the anemia lessens. Occasionally it may return in the ankles after the patient first gets up and about. In some few patients the edema may persist in the ankles and increase after the patient has been up during the day. Frequently varicose veins may be found in such patients.

Stiffness in the joints, especially hips and knees, or muscle soreness frequently in the muscles of the lower extremities or a feeling of tenseness of the skin may develop after the induction of a remission is well along, or all of these complaints may occur after the remission is well established.

Numbness and tingling of the fingers and toes, cramps in the calves, girdle sensations and paresthesias of the soles are usually relieved after liver therapy has been instituted. As a rule there is a restoration of manual dexterity so that fine movements can again be executed.

Many of our patients in the return follow-up blood clinic complain of attacks of numbness or tingling or both in the fingers or the toes even after months of normal hematological findings. As a rule, however, these attacks are almost never severe. Isaacs (4) has called attention to this recurrence of symptoms in patients with normal hematological findings and in those showing anemic changes.

Effects on the Objective Findings

In the course of a few days following the administration of adequate amounts of whole liver or a potent liver fraction, changes are noted in the color of the patients' skin; a faint but definite pale flush is seen. The lemon yellow color or bronzing, if present, soon fades. The visible mucous membranes become slightly pink. A skin formerly dry becomes moist. The eyes grow lustrous and the expression becomes alert.

Many of the patients exhibit a peculiar mental state in which either they do not comprehend what one is trying to do for them, or understanding, they are reluctant to cooperate. Coincident with the reticulocyte increase this mental state changes and, with few exceptions, a willingness and desire to cooperate ensue.

Occasionally a patient is seen whose tongue is red and clean but quite fissured after there has been a satisfactory response hematologically and subjectively. This condition has been seen in a few of our patients who showed no pronounced cord changes. Other observers however, have noted the occasional persistence of tongue changes in patients who showed moderate to marked cord involvement.

Practically all our patients exhibited a continued irregular temperature. Sudden and marked increase in the output of urinary urobilinogen was accompanied by a further rise in the temperature curve or by the appearance of fever if this was previously absent.

Murmurs of one kind or other heard over the precordium or the great vessels in the large majority disappear after the anemia has been relieved. This is the usual finding and is borne out in our series of patients.

In about twenty per cent of our patients the spleen was palpably enlarged. We could not demonstrate any apparent relationship between this finding and the height of the reticulocyte peak, or the icterus index, or the amount of urinary urobilinogen. In all our patients induction of a satisfactory remission was accompanied by a decrease in the size of the spleen so that this organ was no longer palpable.

The results of the feeding of adequate amounts of liver on the subjective and objective findings referable to the nervous system are summarized by Minot and Murphy (2) as follows: "Recently developed symptoms of injury to the nervous system have usually yielded more rapidly and satisfactorily than those due to long standing lesions. With few exceptions, patients have not developed neural symptoms, nor have they shown any extension or aggravation of such pre-existing lesions after they have been on the diet for a month." These authors noted four exceptions to this statement.

Isaacs, Sturgis and Smith (5) are quoted as follows: "The neurologic symptoms and evidences of degenerative changes in the nervous system seem to be benefited only secondarily when the blood count approaches normal, as there appears to be no direct action by the liver or liver extract on the diseased nerve tissue. Three patients in

our experience have developed neurologic changes after their red blood cell counts had increased to around five million per cubic millimeter."

Bubert (6) reported a patient with pernicious anemia and well marked subacute combined sclerosis who responded to liver therapy to such an extent that some of the deep reflexes returned.

Our experience regarding the effects of liver therapy on the objective neurological findings, in a smaller series of cases however, seemed to parallel that of Minot and Murphy as quoted above. In our patients who showed definite and even advanced evidences of subacute combined sclerosis there was no difficulty in raising the level of the red cells and hemoglobin to normal values. When this occurred no matter what the previous degree of physical disability, all the patients showed an increase in strength. Some, by means of diet, massage and muscular reeducation, were so improved that they could be up and about with or without the aid of a cane or other means of support. Others either remained bed-ridden or, at best, could be about only in a wheel chair. This occurred in spite of the fact that a comparable degree of hematological improvement was effected in both groups of patients. A point to be stressed is this—that the neurological status, when the patient first comes under observation no matter how advanced the involvement, does not necessarily furnish an index of the degree of restoration of function that can be effected when adequate amounts of liver are adminstrated, supplemented by massage and muscular reeducation.

The onset of the disease in one of our patients, a man in his late twenties, dated back about three mounths and was ushered in by findings almost entirely referable to involvement of the nervous system. On admission he showed only a mild degree of anemia. The neurological examination, however, revealed the presence of well advanced subacute combined sclerosis. Because of the apparent rapidity of the progress of the neurological involvement, large doses of a potent liver fraction were administered. The usual hematological response occurred and the red cells and hemoglobin were increased to normal values. The neurological involvement, however, continued to progress. Liver fraction medication was discontinued and massive doses of whole mammalian liver substituted. The progress of the neurological involvement was stayed. When the patient was first admitted to the hospital, walking was impossible. On discharge he was able to get about with the aid of a cane. Improvement has continued so that he is now able to walk with a facility and confidence that hardly seemed possible when he first came under observation.

In none of our patients have we been able to demonstrate a return of the deep reflexes. Impairment of position sense has been improved in some. A return of vibratory sense has never been completely effected in any instance, where this has previously been completely lost. Mild degrees of impairment of this sense have frequently been improved.

The results of liver treatment on the neurological involvement have been discussed at some length because it would seem that if criticism is to be leveled at the liver treatment of pernicious anemia, the attack would be at this point.

Results of the Treatment During the Stage of Induced Remission

Patients have been observed whose red cell counts and hemoglobin values have been maintained at normal levels for periods well over two years. In some instances after normal quantitative hematological values have been restored there is an unexplained fall of the red cells below the normal level. Such patients have been few. Mild infections as a head cold or a slight sore throat frequently reflect themselves by a definite fall in the number of red cells and the level of the hemoglobin. An attack of diarrhea may precede a decrease in the number of red cells or the numerical fall in red cells may usher in the attack of diarrhea.

Numbness and tingling in the fingers or toes, especially the former, recur rather frequently. The duration of such attacks is not long and the severity not marked. Patients sometimes complain of burning or rawness of the tongue, but again as a rule, not to such an extent as to be seriously annoying or incapacitating. A feeling of epigastric discomfort occurs occasionally.

Stiffness in the joints or soreness of the muscles coming on after a period of inactivity and relieved by exercise may first appear after a remission has been well established. These may occur whether the patients take a liver fraction or whole liver.

Conclusions

A return of normal quantitative haematological values may be expected in all but the exceptional case following the use of liver or a potent liver fraction.

Persistent absence of free hydrochloric acid continues to be the rule.

Subjective and objective findings directly dependent on the anemia are relieved as the blood findings approach normal.

In all but the most advanced degrees of neurological involvement some improvement may be expected and even in this group the outcome may not be so hopeless as first observations would seem to indicate.

In patients previously doing well, who show a fall in the level of the red cells and hemoglobin, laxity in taking the diet should first be suspected. If this factor can be eliminated the presence of an intercurrent infection is the next most probable explanation.

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X-RAY TUBERCULOSIS IN APPARENTLY HEALTHY INDIVIDUALS*

By ADA CHREE REID, M D, NEW YORK, N Y.

THE results reported here are based on experiences that we have encountered for the past three years in the course of examinations of applicants for employment at the Home Office of the Metropolitan Life Insurance Company in New York City

Since October, 1927, we have fluoroscoped the chests of all such applicants after a complete physical examination in order to detect, if possible, tuberculosis that had escaped the physical examination It had long been a source of chagrin that in many of these young people, advanced tuberculosis would become noticeable soon after they had had a physical examination and had entered the employ of the Company, so soon in fact that it was safe to assume that in many cases the disease was present at, but had not been detected by, physical examination It was first suggested that all pre employment and annual examinations should include a single roentgenogram of the chest but this was considered too expensive an experiment to be undertaken without trying other methods of examination first However, it was felt that a careful fluoroscopic examination would detect tuberculosis in the advanced stages and possibly also before it had become advanced It is not a new idea that pathology of the lungs may exist without giving abnormal physical signs, but so often when we advise our employees or applicants of their positive x-ray findings, we are told that their own physicians have just examined their chest, have heard nothing wrong, and therefore they do not have tuberculosis, that we feel obliged to stress the point We do not find it mentioned in the textbooks but in the current literature it is emphasized frequently

Lawrason Brown states that "tuberculosis occurs so often without any definite physical signs that I never exclude pulmonary tuberculosis until I see the *x*-ray plates" Austrian writes, "Roentgen-ray may disclose a causal focus of symptoms in patients in whom physical examination fails to discover it" The same opinion is expressed by Heise, McPhedran and Rathbun Physical signs of significance may be absent in the more advanced stages as well Dunham states, "Tuberculous caseous bronchopneumonia may exist in a large area without causing any signs" The same is true of cavities Bendove reviewed 145 cases with definite pulmonary cavitation and concluded that "50% were silent, of which about one third are absolutely mute"

Soon after we installed the fluoroscope we began to discover cases of tuberculosis without symptoms or abnormal signs The first slide I am showing is of a healthy young Polish woman applying for a position in the Commissary Department She passed the physical examination but the fluoroscope revealed a cavity in the right lung She was sent to the Tuberculosis Clinic at Bellevue re examined, and the absence of physical signs corroborated

The next slide is of a very attractive young girl of Irish parentage, with no physical signs but a moderately advanced tuberculosis on x-ray Again the absence of physical signs was confirmed at Bellevue

The next two slides are of two of our own employees, who were fluoroscoped at their annual examination In both of these cases we are certain that there were no symptoms and the absence of physical signs was checked by the examining physicians at our Sanatorium at Mount McGregor

We mentioned earlier that we hoped with the addition of the fluoroscope to detect advanced disease and possibly tuberculosis in its incipiency Soon after the inauguration of the experiment, we found that we were discovering many very early lesions as well The following slides are illustrative

Lantern slides showing early cases of tuberculosis

We feel that our success in the use of the fluoroscope is due to the fact that in each ex-

* Read at the Annual Meeting of the Medical Society of the State of New York, at Rochester N Y June 3 1930

amination we follow a definite routine, a description of which is appended.

It is our opinion that after a short period of instruction in the use of the fluoroscope, any physician with normal eyesight, will be able to detect lesions as early as those just shown. In the beginning of our experiment we had two trained fluoroscopists. Later we installed two more fluoroscopes in the examining rooms. Our staff of 16 physicians, after a short period of instruction in the use of the fluoroscope, began to fluoroscope routinely all applicants as well as to make a fluoroscopy of the chest of our own employees at their annual examination and the number of new cases of tuberculosis discovered in this way compared favorably with the period during which the trained fluoroscopists alone had made the examinations.

On the basis of the *x*-ray films just shown, we feel that we are justified in claiming that tuberculosis may be discovered in an early stage by means of the fluoroscope. One might question the propriety of rejecting apparently healthy applicants on *x*-ray evidence alone and in anticipation of this we have been able to re-examine about 50% of those in whom we recommended rejection, in order to determine the progress of the anatomical lesion. Of those re-examined, 58% showed progressive disease either by *x*-ray increase or symptoms of activity. This slide is that of a young lady of 22 years who applied for a position, was examined in the usual way, and the chest was considered negative. The fluoroscope, however, revealed a small calcified area in the right apex. We advised her to consult her own physician and have periodic examinations, but this she apparently did not do because 9 months later she returned to say she had had an attack of grippe and was not feeling well. Physical examination then revealed an advanced tuberculosis and she is now curing at Saranac Lake.

A somewhat similar case is the next; a basal tuberculosis that was progressive and this girl was admitted to Trudeau.

The same experience in detecting so-called silent tuberculosis was repeated when we came to fluoroscoping our 10,000 Home Office employees at their annual examinations. We found in the first year, 70 cases of whom 37 were age 35 or over, with apparently healed *x*-ray lesion, present lack of symptoms and past history of good health. These were allowed to remain at work under observation. The second group comprised 21 employees who were considered as pre-clinical or "ready to break," and went immediately to our Sanatorium at Mount McGregor. The remaining 12 had no symptoms nor signs as far as could be ascertained by temperature curves, blood counts, and careful history taking and yet since they are of the adolescent and young adult age, 16 to 34, they have not had the test of time or of work and cannot, therefore, be placed in Group 1, the apparently healed class. They have all been advised to spend a short period at the Sanatorium where they may be under close observation and where they have the benefit of Sanatorium instruction in the rules of health. It was during our observation of these latter employees, preliminary to their admission at the Sanatorium, that we observed another important feature of the disease, namely, that there may be definite anatomical progression of the disease as shown by *x*-ray and an entire absence of symptoms and physical signs.

The following slides are those of an illustrative case. J. H., a young man of 19, at his annual examination, July, 1929, was found to have a moderately advanced tuberculosis on *x*-ray. Signs and symptoms were absent. He was advised to go to our Sanatorium, but postponed his departure one month. During this time he took particularly good care of his health. In August, 1929, he was *x*-rayed again; there was a definite increase in the infiltration, but again there was an absolute lack of physical signs of symptoms.

When we, in the beginning, decided to recommend rejection on *x*-ray findings, our basis of rejection was a definite parenchymatous lesion. It was agreed that we would not reject on increased peritruncal markings nor on signs of the healed childhood type of tuberculosis alone. The latter group we have *x*-rayed every 6 months from the date of their employment.

The next slide is that of a young girl, age 19, at whose entrance examination the fluoroscope revealed a healed primary infection. Subsequent *x*-rays showed no change. At the time of her second annual examination she had gained 19 pounds since her employment, but the *x*-ray at this time revealed a definite incipient tuberculosis; this, in spite of the fact that an *x*-ray 6 months previous had shown no change and she had since that time gained 12 pounds in weight.

To summarize the results of our observations of tuberculosis among a large group of industrial workers, of whom the vast majority are adolescent females, we find that,

(a) Of those applying for employment, 1.21 per cent had *x*-ray evidence of disease without physical signs or symptoms. Of these over one-half showed progressive disease within the year.

(b) The application of the fluoroscope as an adjunct to the annual physical examination of our Home Office employees has revealed 0.7 per cent of silent tuberculosis, of whom those who are apparently healed have the benefit of careful observation; those who do not fall in this group had the benefit of Sanatorium treatment before the onset of symptoms. Upon comparing the number of cases of tuberculosis diagnosed during 1927, 1928 and 1929, we find the following:

TABLE I

In other words, out of every three cases at present diagnosed as tuberculosis two are being discovered before the onset of clinical activity The total figures also show a considerable decrease in the total number of new cases diagnosed among the Home Office employees which would seem to indicate that by the methods described above, we have our tuberculosis problem under much better control than ever before

We have shown cases of tuberculosis which were progressive under observation even though physical signs or symptoms of disease have been absent

Conclusions

It is possible to demonstrate pulmonary tuberculosis in many cases in its incipiency as well as in the advanced stage with the fluoroscope Pulmonary tuberculosis may be present in the absence of physical signs or symptoms There may be a definite anatomical spread of the disease without suggestive symptoms or definite physical signs

No examination of the chest may be considered complete without the aid of the *x*-ray

TABLE I

NEW TUBERCULOSIS AMONG HOME OFFICE EMPLOYEES

DISCOVERED IN YEAR	1927		1928		1929		1930†	
	No	%	No	%	No	%	No	%
Examining Room (Annual)	42	30	59 (47*)	38	63	65	41	56
Rest Rooms	96	70	93	62	33	35	32	43x
TOTAL	138		152		96		73	
Number of Employees	8159		9313		10,107		10,642	
Per 1,000	16 9		16 3		9 5		6 8	

*By Fluoroscopic examination

†Figures for the entire year 1930 have been added At the time of the original report, only those of the first four months were given The report is even more favorable than was anticipated at that time

x Of these 43, 18 were fluoroscoped and on the basis of these findings, were sent for X-Ray

Technique of Fluoroscopic Examination of the chest as routinely carried on at the Home Office of the Metropolitan Life Insurance Company, Medical Division

The use of the fluoroscope is a potential source of danger but if the ordinary rules of protection for operator and patient are observed there should be no untoward effects The ordinary rules include the following, namely, a machine which is well grounded, wires which are out of reach of patient or operator, a lead rubber protection either as an apron suspended from the bottom of the fluoroscopic screen or a lead rubber apron covering the body of the operator Lead rubber gauntlets should be worn in making every examination The machine should be installed in a room which may be completely darkened

We use a standard instrument with a 5 inch spark gap at 110 volts and 5 milliamperes The time required for a complete examination varies from 2 to 3 minutes

The physician waits in a darkened room until his eyes are sufficiently accommodated, usually, 2 to 4 minutes, then views the chest in the following sequence, first, the chest as a whole, comparing right and left sides as to contour, size and movement, next the mediastinum and its contents rotating the patient so that the posterior mediastinum is examined, and then the diaphragm, noting contour, freedom of motion on quiet and forced respiration, and then the costophrenic angles

In inspecting the lung fields the diaphragm of the instrument is closed so that only an area equal to one interspace is seen—the right and left sides compared for difference in transmission of the ray The supraclavicular muscles are pushed aside with the gloved hand giving a clear view of the apices The patient is told to hunch his shoulders, thus bringing the apical fields into view above the clavicle To obtain a view of the first interspace the arms are internally rotated so that the palms are facing outward Each interspace is subjected to the same careful scrutiny Rotate the patient slightly to the right and to the left—in this way very small lesions have been picked up Then the patient is turned around and the same procedure is followed (The value of this was appreciated after the demonstration of a small lesion near the anterior chest wall which was not seen until viewed from the posterior aspect) Finally, the patient again faces the operator and with the eyes at their optimum accommodation, a last look is given at the apices and upper lobes

A CONGENITAL CAPILLARY ANGIOMA OF THE PAROTID GLAND

By M. J. FEIN, BROOKLYN, N. Y.

From the Pathological Department, Cumberland Hospital, Brooklyn, N. Y.

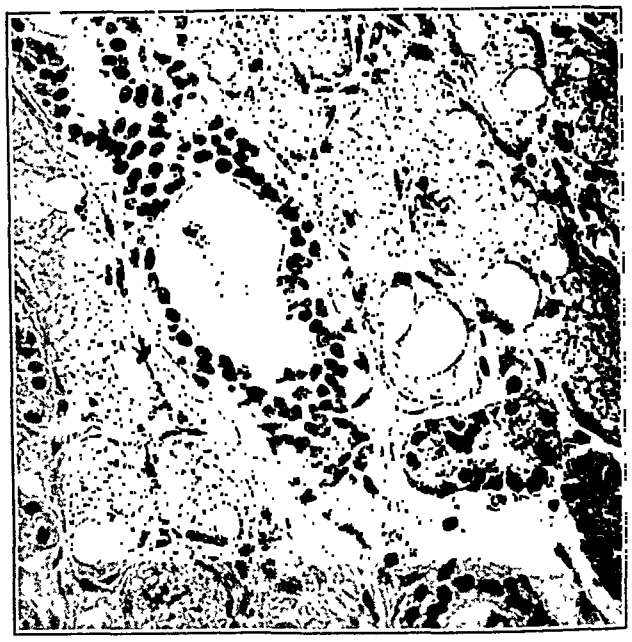
IN an article that recently appeared in the *Archives of Pathology*,[1] Doctor Joseph McFarland of Philadelphia reported a case similar to the present subject. He remarked that this type of angioma was "a rare and interesting tumor of the parotid region," in reporting the thirty-fourth case on record. The termination of the three years' limit allowed for recurrences, justifies my placing this case on record as the thirty-fifth to be published.

Report of a Case: This was a well developed child eight months old, with a swelling that dated from birth, on the right side of the jaw over the parotid region. The skin covering the region was smooth and not attached, freely movable and not discolored. The mother had noticed that the swelling increased when the child cried. No pulsations could be felt. The pre-operative diagnosis was a mixed tumor of the parotid gland. The gland was removed in September, 1927, and it was easily shelled out. The recovery of the child was uneventful; after three years there seems to be no recurrence.

Macroscopic examination revealed an extremely vascular mass, round, soft, which measured about five by three centimeters. It was well encapsulated, and in portions showed the definite lobules of the parotid gland. There were no extremely hard areas nor cysts. It must be admitted that the biopsy offered a rather doubtful interpretation, and I passed it through with a tentative diagnosis of a simple hypertrophy of the gland or possibly an angio-endothelioma.

On microscopic examination, the specimen appeared to be a parotid gland with lobules that were encapsulated and appeared normal. The pathological lobes were atrophied, with many dilated vessels, irregular in contour, which had replaced many of the lobules. In the pathological lobules a few dilated acini were seen between the dilated capillaries, but most of them were small and crowded together. Their cells were not so high, and only the excretory canals seemed to have preserved their normal character. The diagnosis was Capillary Angioma of the Parotid Gland.

Comment: In the year 1889, Henri Hartman[2] described the case of a girl baby five and one-half months old, who presented a tumor of the parotid region measuring about five centimeters in its vertical diameter, and four centimeters antero-posteriorly. The tumor was soft, depressible, somewhat fluctuating, and partially reducible. There were no functional symptoms and the child was otherwise in good condition. Hemorrhage was abundant. The case could not be followed, but proved to be angioma of the parotid gland. In the literature, Hartman then found three cases very similar to this, all examined at autopsy: one by Tenon, published in 1841; one by Berard, and the third by Abraham Duke, in 1842. None of



these cases had microscopic examinations, but Hartman was quite sure these would have proved to be identical in character with the type he described.

Gascoyon[3] in 1860, reported a man of forty-four with a congenital parotid tumor which finally increased to such a size as to cause death by suffocation. At autopsy, numerous nævi were found in the intestinal serosa, one on the submucous tunic, one in the liver. The parotid tumor presented enormously dilated and sinuous vessels which had been transformed into great pouches, finally forming cavernous tissue with phleboliths.

Teale,[4] exhibited to the Royal Medical Society, a nævus of the right parotid removed from a child of eight months.

L. S. Pilcher,[5] removed from a baby only six weeks old, a large tumor of the left parotid which had grown with great rapidity since birth. The facial nerve was cut during the operation, producing paralysis on that side. Histological examination by Doctor Charles Jervett showed the tumor to consist of a mixture of glandular tissue, normal in character, and of cavernous tissue.

Augier[6] reported in 1907 a diffuse angioma of the parotid gland in a baby seven months old, on the left side. The angioma had begun to grow rapidly although it had been present since birth.

The tumor was removed without much trouble. The mass suggested a glandular hypertrophy, and on microscopic examination the author concluded that this was a simple angioma, as the vessels were normal in construction though diffuse and hypertrophic.

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PULMONARY HEMORRHAGE WITH UNUSUAL SEQUELÆ*

By EARLE E. MACK, M.D., SYRACUSE, N. Y.

This man is thirty-two years of age, is married and has three children. His general health has always been good and he has had no serious or long-confining illnesses.

About three weeks prior to the onset of the illness about to be described, he noticed that he tended to tire easily, and that this fatigue was attended by excessive sweating. A harsh, irritative and non-productive cough had been present for several weeks, but had tended to become more persistent during these latter three weeks.

The acute clinical symptoms developed one evening after the patient had retired. He stated that he had coughed quite persistently during the day and had felt that he might be relieved if he could get to sleep. He was unable to sleep, however, the cough becoming more paroxysmal in character until finally, following an especially severe attack, he coughed up what he felt to be a fairly moderate amount of blood.

When seen about one-half hour later, he was still coughing considerably and was found to have a mouth temperature of one-hundred degrees. It was estimated that he had expectorated between two and three drams of blood which appeared to be quite a bit darker than that usually seen in the ordinary case of hemoptysis.

Morphine was administered hypodermically for the control of cough and restlessness, and physical examination of the chest temporarily postponed, especially because of the fact that changes in posture tended to cause a return of the paroxyms. Following the use of the anodyne, the patient rested fairly well during the night, coughing only when he attempted to talk. No further hemoptysis occurred.

Complete bed rest was advised, and was found to be the most satisfactory way of controlling the cough. Aside from the latter which returned at fairly frequent intervals, the patient had no other complaints, although for the next few days the temperature ranged from one-hundred to one-hundred and two degrees.

Physical examination of the chest was made daily, but no abnormal physical signs were detected until the fourth day, at which time a small area of dullness about two inches in diameter was detected near the angle of the right scapula. Auscultation over this area revealed no adventitious sounds.

With pulmonary tuberculosis a first thought, the possibility of a central pneumonia had also been considered, and with this finding the suspicion increased.

The temperature continued to remain elevated, and on the evening of the sixth day after the onset, rose to one-hundred and four degrees. On the following morning the patient was brought to the hospital for further observation and x-ray examination. On admission his pulse was one-hundred and twelve, the respirations twenty-four, and the temperature one-hundred and two and two-tenths, rising later in the day to one-hundred and three and eight-tenths.

The blood examination on admission was as follows:

Hemoglobin	80%
Erythrocytes 4,000,000	
Leucocytes	20,500
Polymuclears	72%
Mononuclears	27%
Eosinophiles	1%

The urine was normal.

A chest plate was taken on the afternoon of admission and, on the following morning, one glance at the roentgenogram shown made the diagnosis evident. (See Figure 1.)

The Roentgenologist reported as follows:

"X-ray examination of the thorax shows shadow of increased density in the right upper lung field at the periphery, apparently with cavity and fluid level. Diagnosis: Lung abscess."

With this hitherto unexpected pathology coming to light, an attempt was naturally made to explain the etiology, and it was at this time that we recalled the fact that the patient had submitted to a tonsillectomy seven weeks before, general anesthesia being used.

While it was obviously impossible to prove that the tonsillectomy had been the cause of this abscess, it offered the most logical explanation, especially when we consider the claims of some au-

* Read at Clinical Session at St. Joseph Hospital Annual Medical Alumni Reunion, Syracuse University, College of Medicine, June 6, 1930.

thorities, that abscesses which follow operations, including tonsillectomy and those on the head and



FIGURE 1

throat, may not be recognized for months. That this abscess had been present for quite some time would be indicated by the fact that the inflammatory zone about it was unusually dense.

Because of the thickness of this zone and because of the situation of the abscess well out near the periphery of the lung, it was felt that the case was not an ideal one for bronchoscopy, and would undoubtedly have to be treated surgically. However, recalling that the earliest clinical sign had been hemoptysis, and feeling that without any doubt this blood had been derived from the abscess cavity, it was reasoned that it might be possible for the encapsulated pus to escape in the same manner.

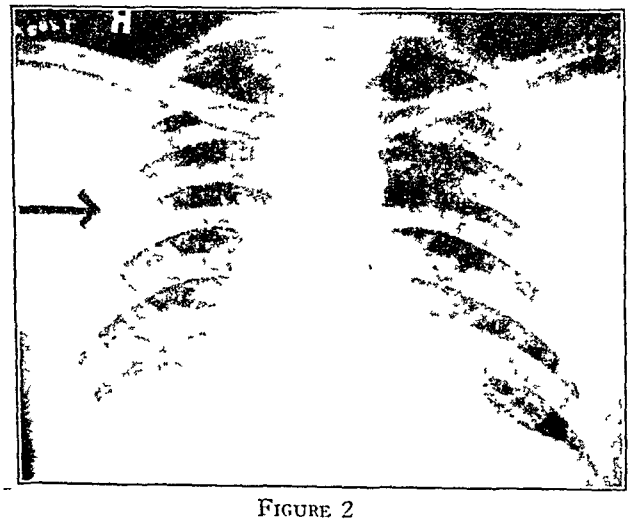


FIGURE 2

The technic of postural drainage was explained to the patient who was advised to lie upon the sound side as frequently as possible. He was instructed to lean well over the left edge of the bed at frequent intervals with the head close to the floor; the lower rungs of a straight bedside chair being firmly grasped with both hands to prevent falling. This manouver was employed for a few minutes at a time, and especially during the paroxysms of coughing.

During his fourth day in the hospital, which was nine days after the hemoptysis, the patient suddenly expectorated a moderate amount of grayish, mouldy-smelling purulent material, which was the first specimen of sputum we had been able to obtain since the onset of the illness.

On this same day the temperature fell from 102.8 degrees to 100. The postural drainage was continued, and while small quantities of purulent sputum continued to be expectorated, at no time was there any large quantity obtained, or at no time was blood again noticed in the sputum.

Two days later the temperature rose slightly again to 102, and on the following day fell to normal where it remained throughout the period of hospitalization.

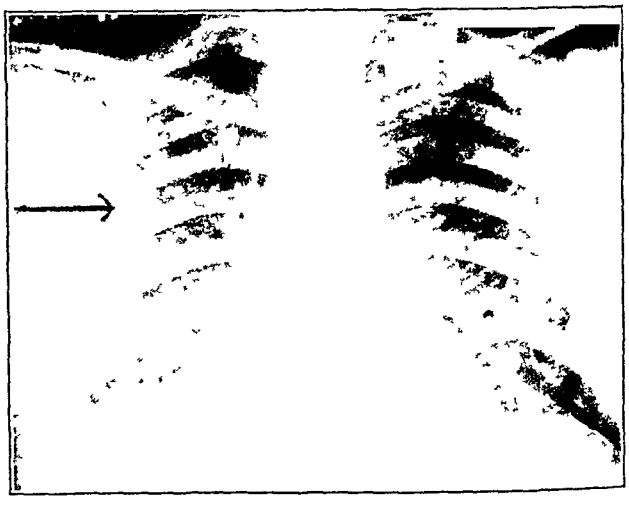


FIGURE 3

The material first expectorated was reported as showing a Type Four pneumococcus, and several additional specimens examined for acid-fast bacilli were reported to be negative.

Five days after the spontaneous evacuation of the contents of the cavity a second blood count was taken which showed a fall in leucocytes from 20,500 to 10,300. 61% were polynuclears, 36% were mononuclears, and 3% eosinophiles

Eleven days after drainage had been established, a second chest plate was taken. Concerning this the Roentgenologist says:

"Marked improvement and recession of the abscess in the right lung field. Cavity smaller—less inflammatory change around it." See Figure 2.)

Fifteen days after the onset of the illness, the patient was back at his home, and two weeks later was able to resume his regular work, making his period of total disability about four weeks in all.

One month after his discharge from the hospital the patient returned for a check-up, and the very satisfactory end result will be seen by a study of the third figure. (See Figure 3)

The patient has been under observation at very frequent intervals during the past few months, is symptom-free and feels exceptionally well.

Conclusions

1—The development of pulmonary symptoms following tonsillectomy should immediately raise the question of impending abscess of the lung.

2—Abscesses, especially those which follow operations on the head and throat, may not be recognized for months.

3—Without x-ray and with spontaneous evacuation of the purulent sputum, an abscess may escape recognition entirely, the case being erroneously diagnosed as acute bronchitis or bronchiectasis.

4—The contents of some of the more chronic cavities may not have the markedly fetid odor usually described in the texts, but may be almost odorless, a fact explained by the dominance of molds rather than bacteria.

5—Cough is present in all cases but varies greatly in intensity. When the abscess is single and of some size, a violent paroxysm of coughing usually accompanies the rupture into a bronchus.

6—Pure blood may be expectorated, but rarely in large amounts.

7—Postural drainage is deserving of first consideration, provided the patient is not apparently becoming worse.

8—An unfavorable location, namely at the periphery of the lung, does not preclude the possibility of escape of contents through a bronchus.

9—Following complete evacuation, healing may be quite rapid and complete.

AN APPRAISAL OF PRESENT DAY METHODS OF RAISING CHILDREN

FRANK VAN DER BOGERT, M.D., SCHENECTADY, N. Y.

At the recent meeting of the British Medical Association held at Winnipeg, Doctor Robert Hutchinson, whom many of you know as a distinguished English pediatrician, raised the very pertinent, yet rather astounding question as to whether the children of the "good old days of mud pies" were not happier and healthier than the oft-weighed, pampered dieted and psychoanalyzed infants of today. If what they did not know did not bother them both they and their parents were undoubtedly happier and if a little knowledge is as dangerous a thing as it is conceded to be they were certainly, on the whole, healthier. Some very definite dangers, at least, they were to a great extent free from; the money-mad exploiter, the over zealous nutrition worker and the medical educator of the public, not to mention the tonsilotomist and the pediatrician.

To be sure many of them died but there is no evidence that the fadism of today would have saved them. Too many factors have entered into the reduction of infant mortality to justify attributing it to any one cause, and in fact, the developments responsible for its gradual accomplishment had become operative long before the advent of what we call modern methods. Steadily improving prenatal care, encouragement of breast feeding and the attainment of a clean, simple and balanced method of feeding artifically under improving hygienic conditions were all playing their part and were beyond criticism.

Then too, unless we can insure those that we save a fair degree of future comfort perhaps it is better, as some believe, that they should not be saved at all. Nothing can be much more cruel than to completely protect a weakling from those distressing contacts, physical or mental, from which inevitably the protection must some day be withdrawn. Better risk death in the hardening process. Biologically too, it is unwise to breed a race of weaklings.

No thinking person can question the need of a preventive medicine but to be preventive it much be rational, directed toward a development of resistance. There are no short cuts to lasting health. Our milk enthusiasts would have us believe that a quart of milk a day is all that is required for perfect physical development. The tonsil has come to be looked upon, by the laiety at least, as the cause of practically all the ills of childhood and its removal is expected to be followed by permanent and perfect health. Nutrition has come to be a question of the number of calories swallowed, the fact that a calorie is merely the amount of energy produced under proper conditions of combustion in a healthy digestive system being completely overlooked. A vitamin is expected to provide for a deficiency whether assimilated or not. Moreover, more is expected from inoculation against specific diseases than can ever be attained. The experience of the army during our generation has clearly shown that attack against the single organism is in the broad sense ineffective. During the Spanish war, typhoid decimated the troops; a preventive vaccine was found, but upon the massing of men for the World War another organism arose and

* Read at the Meeting of the Fourth District Branch of the Medical Society of the State of New York, at Saranac Lake, N. Y., on October 16, 1930, and at the Meeting of the Rensselaer County Medical Society, at Troy, N. Y., on Nov 11, 1930.

caused even greater havoc. There seems always to be a new infecting agent rising to take the place of its defeated predecessor.

The hope of preventive medicine lies in the development of a resistant physical and mental makeup sufficiently strong to dominate the whole field, and such resistance can only be attained by playing the game, by meeting obstacles and overcoming them. What we all really want to do is to disregard the laws of nature and, when injury occurs, to resort to some simple expedient or some possibly not so simple operation to repair the damage, but it can't be done. As Peyton Rous suggests in his "Modern Dance of Death" anyone who is near the tap will use a tooth brush but it requires more fortitude than prevails today to avoid too ardent and exhausting living. The mother of one of my patients recently replied to a very optimistic prognosis that her child would not want to live if he had to follow my regime.

The control of specific infections has rendered the children of today less susceptible to these infections but at the same time it may well develop a false sense of security and a relaxation in the observation of those laws of nature which make for a general resistance. It would be delightful if our children's troubles could be limited to a few pricks of the needle although they themselves might prefer more of a less acutely painful nature.

The discovery of what we call vitamins has been of immense value in the prevention of deficiency diseases; these diseases have been very decidedly on the decline during recent years, but the damage that has been done by misdirected efforts to supply them have very probably to a great extent neutralized their beneficial effects. I do not refer to the danger of over-dosage so generally discussed just now in relation to irradiated ergoserol because I believe it problematical.

Interest in vitamins was enlivened by the development of the machine age. Our ancestors did not worry about vitamins, not only because they did not know about them, but because the refinement of foods did not deprive them of them. Unquestionably our knowledge of their importance has prevented a great deal of suffering but we should beware that in our over-zealous efforts to supply them we are not causing future trouble.

Probably there is no greater absurdity than the constant counting of calories. Food does not contain calories but is simply capable of being converted into calories under proper conditions of digestion. To feed a child upon the basis of calories without regard to the condition of his insides is as absurd as to coal a furnace without regard to its grates. To introduce potential calories in a form which may injure the digestive [illegible] as is commonly done by allowing large [illegible] of sugar, ice cream and other sweets, [illegible]ble, wholesome foods are refused, and to encourage the consumption of any food by camouflage, is sure to end in disaster. Unfortunately our nutrition experts tell us how many calories we need but they fail to tell us that in order to produce those calories we must digest our food. As a pediatrician the only need that I have found for the caloric method of feeding under normal conditions has been to determine whether I am over or under feeding after the diet has been decided upon.

How much better it would have been if nobody had compiled a weight-height table. Think of the low cost of education and the amount of mental suffering spared the parents. Only the milk producer would have lost and he would not have realized it.

Without wishing to appear unappreciative of the good that has come of medical school inspection I can not but condemn the unintelligent nutrition program still carried out in many school systems. To consider every child who does not conform to a weight-height standard, a standard which has been proven to mean little, a potential invalid; to distress him and his parents by telling him so; to remove his normal or, at least, not proven abnormal tonsils and to feed him more when he almost invariably needs less does not seem intelligent practice, and should not have its origin at the seat of learning. Dr. Fruhwald, whose recent criticism of American doctors may not have been very graciously received, is reported to have said that he doesn't believe there is a tonsil left in America.

How can our children be healthier and happier than those who though, perhaps, not guided, were at least not misled? Recently a teacher of children argued that one of my patients should be permitted the mid-morning lunch because of sociability, the very reason which led some of our citizens to insist upon the enactment of a prohibition law.

Despite all the wonderful advances in the medicine of childhood, I believe that the youngsters of the older time were possibly better human specimens, both physically and mentally, because they were not exploited by the efficiency expert and commercialist; they were not deprived of their vitamins by a machine age and supplied them unintelligently by the over-zealous; they were not stuffed to the distressing point because someone had misinterpreted the calorie and they were not on a mass production basis, required to meet specifications.

Medical education of the public has, I believe, been productive of much more harm than good. In enlightening the public a distinction should be made between hygiene and medicine. A rational knowledge and practice of hygiene is essential to healthy and comfortable living and can be imparted to all in intelligible language, but to make generally available or rather force upon them just

enough science to encourage misinterpretation will never lead to a better medical situation The slaughter of the innocent tonsil has been in great part due to the demand of the people who know ing only that it may occasionally cause disease think it will always cause it, who being told that it has no known function demand its removal There are those who believe that inoculation against a specific disease will prevent all diseases and, as I have before suggested nutrition to most of them is only a question of vitamins and calories, height and weight

The children of today, then, are at the mercy of the masses led by over-zealous and unthinking setters of fashion Although I make my living in the practice of pediatrics I honestly believe that they deserve a certain amount of protection from the pediatrician, the nutrition worker and the psycho analyst, as well as from the propagandist and the exploiter, and should be permitted to live a rational and not too carefully guarded existence, which may be summed up to include three simple meals daily, the discouragement rather than the encouragement of the bite between meals, the withdrawal of food when the appetite is lost rather than its forcing in a misdirected effort to improve nutrition, plenty of time for exercise in the open air and school hours adjusted to play, outdoor living and meals rather than the reverse as is now the case Let us forget the weight chart and estimate physical and mental development by the general appearance of well-being, the disposition or reaction to surroundings, the susceptibility to fatigue and to infections and by the progress up or down in the physical scale

The obligation of the pediatrician and of the general practitioner should be to prevent over doing, unnecessary and unwarranted treatment, to stand between the child and the over enthusiastic specialist, whether lay or medical, to see to it that in their efforts to justify their specialties they do not swing the pendulum to the breaking point

I am sorry that I can not agree with Dr Hutchinson in his criticism of the periodic health examination I am sure that, in the case of the child at least, many conditions, if found early enough, may be corrected, although it is very probably true that there is a great deal of non sense about the beginnings of disease in adult life and that many of them can not be detected early and if detected can not be cured Periodic examinations in infancy or early childhood are often worth while if for no other reason than to assure a mother whose nervousness and worry may distinctly react upon the child

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A COMPARISON OF THE ROENTGEN RAY WITH OTHER FORMS OF RADIANT THERAPY IN TREATING SKIN DISEASES*

By HERBERT H BAUCKUS, M D, BUFFALO, N Y

IN making a comparison of clinical results obtained by various means of treatment, much of course in the deduction, depends upon the viewpoint of the observer The observations, here presented are entirely personal and were made by the writer and his associate, Dr W F Hoover, in dealing with more than five thousand cases of skin disease occurring in private practice during the past four years, in which Roentgen ray, Radium or ultra-violet ray were used In but a very small percentage of cases did the treatment consist of the use of these agents alone, but other therapeutic measures were employed when they seemed indicated In other words, radiant therapy was usually employed as an adjuvant to other procedures in the effort to bring about cure, or to relieve symptoms The writer believes that the above is an important attitude for the dermatologist to assume Perhaps we will try to be a little more accurate in our original diagnosis and use a little better judgment in selecting treatment if we are not so quick to "turn on the light" However, the fact remains that for alleviation, or cure, radiant therapy in some form or other is used to treat a very large percentage of patients that consult the dermatologist

Most of our cases were treated by Roentgen ray or ultra-violet ray, often by both The Roentgen ray was used in preference to radium except where the location of the lesion was more accessible to radium or where it was felt that the radium would effect a superior clinical result Lesions of the mucosa and the muco-cutaneous junction are usually more conveniently treated by means of radium The so called soft corn, (which is really a plantar wart), situated between the toes, is a lesion to which radium can more easily be applied Where radiant therapy was employed, we used radium exclusively to treat the various types of angiomatous nevi This type of nevus was the only kind where radiant therapy was followed by good clinical results We thought that the pigment which often occurs early in, or precedes, the various kinds of keratoses, was

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more effectively treated with good cosmetic result by *x*-ray than by radium. Possibly this is because the practical dosage of *x*-ray, at least in our hands, is more accurately controlled, than that of radium. This point seems to us, rather an important one in the therapeutic comparison.

In our section of the country, we see quite a bit of lupus-erythematosus. It was found that radium therapy gave much better results than Roentgen ray in this disease. Most of the indicated cases were treated at the same time with gold sodium thiosulphate. We feel that results were much better in those lesions to which radium was applied. I think that in the past, many cases of lupus-erythematosus were treated by too strongly inflammatory methods. It was found that where the dosage of radium was fractional and an effort made to avoid an acute reaction that a much better result was obtained. Without attempting here to discuss Alpha, Beta and Gamma rays, it was found that filtering the radium in the range from a rubber dam up to a millimeter of aluminum according to the induration of the lesion, was most effacacious. The extent of the eruption, general acute sensitivity and reaction, number and location of the lesions, amount of the scaling and the induration, and even the general constitution of the patient, are all important factors in influencing the dosage of radium therapy. It requires skillful management to obtain good results in using radium for lupus-erythematosus. While we are impressed with the usual proportion of good results which gold sodium thiosulphate produces in lupus-erythematosus, we feel that mild radium therapy is usually a very advantageous addition to treatment. It might be stated that where gold sodium thiosulphate is used, radiant therapy of any kind should be given in small doses. We have practically given up the use of the Kromayer lamp pressure treatment, and carbon-dioxide snow, in treating lupus-erythematosus.

We thought that lupus-vulgaris, treated with fractional doses of radium responded better than it did to *x*-ray. Most of the lupus cases were comparatively early, and not of great extent, but they always seemed to respond well to radium. In other tubercular lesions of the skin, the Roentgen ray appeared to be as efficacious as radium, and was usually employed. When the tubercular lesion was associated with a purulent discharge, we always added ultra-violet ray to our treatment. In such cases, especially those with sinus formation, we felt that ultra-violet ray was an effective aid. We preferred radium in treating various types of onychia and paronychia. Some of the infected, deep, persistent cysts of acne were shielded off well and treated with filtered radium. The chalazion cysts of the eyelid, when the capsule was not too old and thickened, responded perfectly to radium in a great many instances. The obstinate cases were removed by electrolysis. It was not found necessary to use the knife in any case. When these cystic lesions are multiple, radium or *x*-ray is the preferable treatment. It is surprising to find what small doses of radium or *x*-ray often effect the removal of the early chalazion. We preferred radium in treating some of the localized congestive or pernio lesions producing chronic swelling, such as occur at the tip of the nose. Granuloma pyogenicum, when it was not treated by electrolysis, responded better to radium than to *x*-ray. Small and superficial scars and keloids were treated with radium in preference to *x*-ray. Filtered *x*-ray was used in treating extensive keloids. The heavier and deeper the lesion the more filtration of radiant therapy was employed. Extensive and long standing keloids require more of the proportion of the more penetrating ray. The treatment of scars in industrial work, with radium and *x*-ray, has produced good clinical results and we find that more and more the compensation insurance companies are appreciating the results obtained by this form of treatment. We used filtered *x*-ray to advantage in treating cases of chronic lymphangitis, especially those associated with long standing and persistent angioneurotic edema. This type of lesion about the face is quite unsightly and annoying, and we wish to recommend filtered *x*-ray or radium to give slow, but decisively improving results. Radium was of course, used in treating the vascular, keratotic and other similar lesions of *x*-ray burn.

Most of our *x*-ray work was done with a spark gap of from six to eight inches. We did not find that using softer rays improved our clinical results. We have had no experience in treatment with the so-called Grenz rays. For the past several years almost all of the dermatologists have been reporting their observations on treating the lesions of the skin with *x*-ray and radium. After all, as McKee points out in his wonderful book, there is little difference in the action of Roentgen ray and of radium. But in comparing therapeutically, Roentgen ray, and ultra-violet ray, we are dealing with quite differently acting agents.

When the dermatologist uses ultra-violet ray he ought to use that from a mercury quartz burner. For purposes of treating the skin, at least, we feel that the day of the carbon arc lamp either has gone or has not yet arrived. Much of our work with ultra-violet ray has been done in combination with treatment by Roentgen ray. We did not find that exposure to ultra-violet ray enhanced the possibility of causing an *x*-ray or radium dermatitis, or later atrophy. Of course, we did not attempt to put an erythema dose of *x*-ray on top of an ultra-violet ray reaction.

Ultra-violet ray, as we use it in practice, has the following qualities: It is chemically active, has some action on metabolism especially in chil-

dren, produces erythema, vesiculation and desquamation, and thus is a superficial stimulant, and it kills micro organisms of the bacterial variety on the cutaneous surface Its action in treating cutaneous disease is necessarily a superficial one It does not inhibit sebaceous secretion does not penetrate the vascular layers of the skin does not inhibit sweat gland activity and does not cause atrophy It does not cause epilation and in general produces no lasting harm It ought to be mentioned that there rarely are individuals whose skin is very sensitive to sunlight and in whom it is possible to have permanent atrophic lesions follow severe sunburn However, the fact remains that it is a much safer ray to use than *x*-ray Somewhat paradoxically it might be said that *x*-ray tends to relieve inflammation of the skin and ultra violet tends to produce it We find that our results in combining treatment of Roentgen and ultra-violet ray were especially worth while in the following diseases of the skin Seborrhœic eczema and seborrhœa of the scalp, psoriasis, acne, impetigo, rosacea, infectious eczematoid dermatitis, acne varioliformis and tuberculides, onychia and paronychia, lichen planus, lupus vulgaris and other tubercular lesions, dermatitis papillaris capillitii, furuncle and carbuncle In seborrhœic eczema of the scalp we use preliminary *x*-ray to relieve itching, oozing, and inflammation and yet not produce epilation, later using ultra-violet ray as a stimulant with a certain amount of parasiticidal action We believe that recurrences in these seborrhœic conditions are much less annoying when ultra violet ray is used Where the hair is heavy, the action of ultra-violet ray is often not sufficiently received by the scalp *X*-ray quickly relieves the unsightly lesions at the hair line border in psoriasis of the scalp as well as the heavy psoriatic patches After one or two treatments, we discontinue *x*-ray and use ultra-violet ray Pressure treatments with the Kromayer lamp directly to a patch of scalp psoriasis is quite effective In treating psoriasis of the body it is now quite well known that while at first Roentgen ray is efficacious, sooner or later the lesions develop an immunity and no longer disappear For this reason we "save" *x*-ray to use when lesions appear on places exposed to public view It is also wise to "save" *x*-ray for treating the inflamed patches of psoriasis occurring in intertriginous areas, such as the umbilicus, groin, and natal cleft Unless the patient can be frequently exposed to the ultra violet ray to the point of producing a general tanning we have found its action disappointing, in many cases I think outdoor exercise in bright sunshine the most efficacious, even if impractical, method of dealing with psoriasis

When impetigo is inflamed and associated with more or less dermatitis, a preliminary treatment with an eighth to a quarter skin unit of unfiltered *x*-ray is quite effective This soothes the inflamed areas, lessens discharge and makes for less extension of the infectious process We begin at once local treatment with two to three per cent ammoniated mercury ointment In about twenty-four hours we apply a moderate erythema dose of ultra violet ray and repeat this when we think necessary The simple case of impetigo will respond very well to ultra violet ray alone Infectious eczematoid dermatitis and the infectious seborrhœic eczemas occurring about the pinna of the ear respond much better to *x*-ray than to ultra-violet light The dose of *x*-ray in these conditions must be quite light After the inflammation subsides we like to continue ultra-violet ray in doses just under an erythema We treat the fibrous scarring and inflammatory elements of dermatitis papillaris capillitii, cicatricial alopecia and acne varioliformis with *x*-ray, and then continue with ultra violet ray as a stimulant and to take care of the pyogenic infection We feel that in these three diseases it is quite necessary to use this combined treatment

In treating rosacea we of course pay attention to gastro intestinal and other possible reflex vasomotor causes We treat the vascular manifestations of rosacea with mild doses of *x*-ray, using only about one eighth unit of unfiltered ray at two week intervals We then begin ultra violet ray in a dosage enough to produce the slightest erythema This takes care of the pustular element of rosacea and we feel that it also has a stabilizing action in combating local circulatory disturbance We occasionally give further *x* ray treatment to the rhinophyma stage but here we use filtered *x*-ray or radium instead of the unfiltered This combined treatment is very effective in rosacea It might be mentioned here that we prefer unfiltered *x* ray and radium in treating superficial inflammations of the skin but employ filtered ray in deep lesions where fibrous changes are occurring

The itching of lichen planus is best relieved by *x* ray but early acute generalized lichen planus responds very well to an erythema dose of ultra-violet The writer has taken cases of generalized lichen planus in the first week or two and has cleared them entirely with ultra-violet ray alone Of course the lesions under this treatment quickly recur unless internal treatment is begun at once We always use mercury or arsenic or both in our lichen planus cases The more indurated lesions of lichen planus respond better to *x* ray than to ultra violet This is even more true of hypertrophic lichen planus But there finally comes a time when the use of *x*-ray should be dispensed with and here ultra violet ray is certainly a great aid In such chronic cases, we have cleared up some heavy hypertrophic lichen planus lesions with mild pressure ultra violet therapy

We have been much impressed with the results

obtained in treating acne vulgaris of all kinds with a combination of Roentgen and ultra-violet ray. We begin by using *x*-ray to check the seborrhœic activity. After a few treatments the ultra-violet ray is used at regular intervals in a dose to produce erythema followed by desquamation. We try to avoid vesiculation and bleb formation in treating any disease of the skin, with ultra-violet ray. The ultra-violet ray has a marked action in reducing the infective process and its desquamating action is also quite valuable. At intervals of a month or so we interject an *x*-ray treatment of one-quarter unit of unfiltered *x*-ray. Except in acne of the back with keloidal scarring, not many *x*-ray treatments are required. Along with the radiant therapy we employ the usual mild sulphur lotions, almost always lotio alba. In cases where there is much pus formation we may employ vaccine. One of the troubles in treating acne is that the physician is inclined to apply only one remedy. One uses local applications alone, another *x*-ray alone, another ultra-violet ray alone, and quite often vaccine alone is given a trial. The pathology and etiology of the disease require that all these methods of treatment should be used. We have found no reason not to combine them. We keep our *x*-ray and ultra-violet ray treatments at least a week apart. This combined treatment makes it possible to employ less *x*-ray and this is a good thing for the skin. We also are not troubled with the patient who is pleading for a continuation of the *x*-ray treatment that at first brought about so much relief but which might later on cause so much harm.

In general we did not find that ultra-violet ray helped very much in taking care of eczema. We did not like it on the acutely inflamed skin. It was as a rule quite a disappointment in treating the many kinds of fungous dermatitis. We think that the acute generalized cases of this disorder are usually made worse by treatment with ultra-violet ray. The pompholyx type of ringworm of the palms and soles respond poorly to ultra-violet ray except in cases where the staphylococcus complication was prominent. Some of the chronic types of ringworm eczema of the hands, especially on the dorsal surface, responded quite well to ultra-violet ray when the surface became tanned. Of course where continued stimulation of an area was desirable by radiant therapy it was necessary to use ultra-violet. We believe there is much to be gained by treating furunculosis and carbuncle with *x*-ray and ultra-violet. *X*-ray has a valuable action in treating infections of the hair follicles, and the counter-irritating and superficial parasiticidal action of ultra-violet ray is also an aid. We treated large furuncules and carbuncles by using quite heavy doses of filtered *x*-ray. Often this caused a resolution of the lesions without draining. When drainage occurs we like to add the poulticing action of ultra-violet. With the proper applicator, the Kromayer lamp may be effectively used to treat furunculosis of the ear canal. Quite a bit has been claimed for the ultra-violet ray in treating varicose ulcers. This proved a poor treatment in our hands. We did find the *x*-ray of use in treating the eczema associated with varicose ulcer. We felt that radium and other measures were superior to the Kromayer pressure treatment in dealing with nevus. The thickened nail of ringworm and other onychias was occasionally treated with *x*-ray or radium and in the intervals ultra-violet ray used as a stimulant and to combat the staphylococcic paronychia. There are really very few conditions where ultra-violet ray alone is a therapeutic sufficiency. We stimulate the bald areas of alopecia areata with ultra-violet ray and feel that it is a satisfactory treatment in certain instances. However, this is one of the fields in which ultra-violet ray has been abused with much quackery, not only in the realm of medicine but by the public in general. We have tried the ultra-violet ray in several instances where atrophy of the skin was feared or had begun as a result of the Trico method of treating superfluous hair. We have not had enough cases nor a sufficient length of time to draw conclusions but feel there is a certain amount of promise in this endeavor. The treatment of *x*-ray telangiectasia and atrophy by the use of the Kromayer or the air lamp did not give good results in our hands. While ultra-violet ray is now quite generally used and is relatively harmless it is quite as necessary to adopt an accurate technic with it as with *x*-ray. The haphazard "lamp" treatment used both in cases where ultra-violet ray is indicated, and where not indicated, has harmed our general therapeutic efficiency more than tongue can tell. It has now come to the point where the public is dabbling in the treatment of about every known disease with some lamp or other. The mercury quartz burners were too expensive to sell to the public in quantity so manufacturers have devised lamps which sell in drug stores from $10 up. Some of these lamps produce no practical ultra-violet ray at all, but are graced with the advertisement of producing a ray honored with the name infra-red. Sometimes the busy physician seems to forget that the therapeutic efficiency of infra-red rays is no more than that of giving off heat.

So sorely are we in need of real cures in our profession that we are inclined to rely too much on treatments which give bright promise but sooner or later fade out of the picture. We should be rather cautious and take plenty of time to evaluate the results obtained where the more newly discovered light rays are used in therapeutics. However, progress will continue and experimentation lead to ultimate benefit in treating the ills to which the flesh is heir.

BACTERIOPHAGE. ITS APPLICATION IN DERMATOLOGICAL PRACTICE

By ANTHONY C. CIPOLLARO, M.D., NEW YORK, N. Y.

From the Departments of Dermatology and Syphilology and Laboratories of the New York Post Graduate Medical School and Hospital
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THE phenomenon of bacteriophagy was first observed by Twort (1) in 1915. Upon observing the death of bacteria in some of his cultures, he was led to believe that his bacteria were attacked by a plague wiping out colonies of bacteria.

D'Herelle (2) studied this phenomenon most persistently and exhaustively. He applied this principle to clinical medicine and gave to humanity a most powerful weapon with which to combat effectively devastating diseases. This author observed that when the stool obtained from a patient suffering with bacillary dysentery was filtered, and the filtrate applied to a culture of the stool, the colonies of bacteria were wiped out, dissolved, lyzed, disappeared and nothing remained visible where these bacteria formerly were. This is the principle of bacteriophagy. D'Herelle expanded this piece of research and included in his studies most of the known pathogenic organisms.

Mode of Preparation

The most abundant sources of bacteriophage are sewage and stools. A series of broth cultures of different organisms is set up, and to each tube is added some sewage or stool filtrate, and incubated. Clearing of the broth cultures is evidence that the organisms have been attacked by their homologous bacteriophages. These form stock bacteriophages. This process is carried on using materials from different sources until all known races of bacteriophage have been obtained. This is the trial and error method of equipping the laboratory with different races of bacteriophage. A simpler way is to obtain races of bacteriophage from those laboratories which are already supplied.

In the treatment of a patient with bacteriophage, it is essential in every case to test the susceptibility of the organisms to the bacteriophage to be used. This is done by taking a culture from the lesion to be treated, and growing the organisms for 24 hours to determine their nature and susceptibility. Add to this broth culture some of the bacteriophage, incubate, examine every 6 hours and notice if lysis takes place. If the broth clears in 6 hours and stays clear, we have a very potent bacteriophage. If lysis takes longer, then the bacteriophage is less potent. We take this broth culture that has been lyzed by the specific bacteriophage and filter through a Chamberland filter. The filtrate is an autogenous bacteriophage. It matters not whether the autogenous or stock bacteriophage is used, just so long as we get lysis.

Properties of Bacteriophage

The nature of bacteriophage can be concisely and briefly presented by making a numerical list of its properties.

1. Bacteriophage is lytic. It kills and dissolves bacteria in large numbers, and it has been estimated to be potent in dilution as great as 1/100,000,000.
2. Alcohol renders bacteriophage inactive.
3. It permeates tissues.
4. It is innocuous. It does not injure cells.
5. Repeated inoculations may produce anti-bacteriophage antibodies, and may lead to increased susceptibility to infection by the homologus bacteria.
6. It stimulates macrophage production thereby increasing phagocytosis. These phagocytes act on bacteria so as to make them more readily and rapidly digestible. It also stimulates the leucocytes to greater phagocytic activity.
7. Bacteriophage lyzed cultures are antigenic because of the proteolysis of the bacteria lyzed. The protein content of bacteria makes good antigenic material. It is the bacterial protein in a vaccine that makes it valuable. Hence, bacteriophage may be considered to be a supervaccine.
8. It multiplies on artificial media as well as in vivo.
9. In destroying colonies of bacteria on petrie dishes it acts much like a living thing and not like a chemical enzyme.
10. It is transmissible.
11. Bacteriophage attacks young actively growing bacteria more readily than older bacteria.
12. The more acute the infection, the more efficacious the bacteriophage.
13. Bacteriophage produces antibodies, the same as dead, living, or autolyzed bacteria; but the antibodies produced by bacteriophage are developed more rapidly and protect better than bacterial antibodies.
14. It is said that it is just as efficacious in influencing the course of a disease, whether the bacteriophage is applied at the site of the lesion, or subcutaneously at a distance from the focus of infection.
15. The lytic principle is a living, filtrable, ultra-microscopic organism (virus), which is parasitizing and rapidly multiplying at the expense of young rapidly growing bacteria.
16. It is specific in its action.
17. Some of the miscellaneous properties which have been ascribed to bacteriophage and which have not been accepted by all workers are the following:

a. The lytic principle is volatile.

b. The action of the lytic principle is due to the autolytic changes in the bacteria themselves.

c. Bacteriophage activates the normal proferment existing in bacterial cells.

d. The action of bacteriophage is due to the effect of transmissible degenerative changes in bacterial chromosomes.

e. Bacteriophage is in the nature of a receptor, etc.

Elaboration of these properties cannot be undertaken at this time as the field is too large.

Clinical Application in Acute and Chronic Diseases

My interest in bacteriophage was aroused because of the inadequate methods we have at our disposal in the treatment of sycosis vulgaris. Some severe cases of radiodermatitis from the use of X-rays in treating this condition have come to my attention. I have been moved by these sequelæ to find some method that would cure the disease permanently and not injure the skin. In the entire field of therapeutics, bacteriophage holds out the greatest hope.

While carrying out this study, I have also placed considerable emphasis on those conditions that are curable only with considerable expense of time and money. The diseases that have held my interest are: staphylococcic abscesses, staphylococcic infected cysts, carbunculosis, furunculosis, acne vulgaris (pustular type), chronic staphylococcic pyoderma, impetigo contagiosa, etc.

While I admit that in general incision and drainage is the method of choice in treating lesions where there is encapsulated pus, yet there are locations such as in the nose, on the upper lip, cheek, etc., where surgical intervention may lead to serious consequences. Sometimes surgical intervention of pyogenic infection in these locations is directly responsible for sinus, thrombosis, meningitis and in some cases death. Bacteriophage in this type of infection finds its usefulness great.

Carbuncles respond remarkably well when a potent bacteriophage is used. As little as twenty-four hours after the administration of bacteriophage, one can see how the thick purulent material and the slough become thin and liquid. Pain, malaise and toxemia are much ameliorated. There is a feeling of remarkable well being. After resolution there is little scarring; ever so much less than when these lesions are treated by incision and drainage.

The type of furunculosis I have been particularly interested in, is the type that recurs and appears in crops and persists for long periods of time. In these cases it has been my object to immunize the patients against this disease. Years of observation on thousands of cases will tell us how efficacious this agent is in rendering lasting immunity in recurrent furunculosis.

The few cases of impetigo contagiosa that I have treated, have all been cured within one week by the local and subcutaneous administration of bacteriophage. Ammoniated mercury ointment might have done as well in these cases, yet bacteriophage may be of great value when this disease assumes a bullous form in the newborn where it is often fatal. Wet dressings of bacteriophage and its subcutaneous administration may save many lives.

Acne vulgaris and infected acne cysts have not responded as favorably as other conditions which I have treated with bacteriophage. This failure to respond is now being studied both in the laboratory and in the clinic.

The Technique of the Application of Bacteriophage

Certain investigators notably Gratia (3). D'Herelle (2), Arnold and Weiss (4), etc., have claimed and proved experimentally on laboratory animals, that bacteriophage is just as efficacious when injected subcutaneously at a site distant from the pathology as when applied locally to the lesion. Among those to stress this point I might mention Walker (5). The experiment which he performed was the following: The author injected B. coli into the peritoneal cavity of two series of 6 mice each. At the same time, bacteriophage was injected subcutaneously on the back of one series of 6 mice. Four mice out of the 6 protected with bacteriophage survived, while only one mouse out of the six not protected with bacteriophage survived.

There is no unanimity of opinion as to the method and site of application of bacteriophage. There is no disputing the fact that if subcutaneous injections of bacteriophage at a site distant from the pathology is good, then application of the bacteriophage at the site of pathology is better. Many clinical workers have had this same experience.

My first cases were treated routinely by subcutaneous injections with indifferent and poor results. As a result of reading the literature, it occurred to me to inject bacteriophage subcutaneously as well as apply it directly to the lesion. The results of this method have been gratifying. The method of application depends upon the nature of the lesions. In a solitary furuncular lesion or carbuncle or abscess, the bacteriophage is injected into the lesion. In a case of sycosis vulgaris, pyoderma, impetigo contagiosa and widespread infections, the bacteriophage is either swabbed on or applied as wet dressings. Bacteriophage may be ingested or given intravenously. The number and frequency of treatments depend upon the clinical course. It is advisable to administer bacteriophage at intervals no longer than 48 hours.

To make this concrete, let us take a case of sycosis vulgaris. A few hairs from the infected area are removed and a culture made. The organisms are tested for susceptibility to bacteriophage. If the bacteriophage is potent, it is to be injected subcutaneously into the arm in 1cc doses daily up to 30 injections. At the same time the bacteriophage is swabbed on the lesion. This is done daily. If improvement is slow, bacteriophage may be applied in the form of wet dressings.

If we are treating a case of furunculosis, then the bacteriophage is injected daily into the lesion until its disappearance, and using from ¼ to ½ cc. Bacteriophage is also administered daily subcutaneously in 1cc or 2cc doses, depending upon the duration of the treatment. If a single furuncular lesion is being treated, 3 or 4 treatments will usually suffice, and for a short course it is advisable to use 2cc at each injection. If the case is one of recurrent furunculosis of long duration, then it is best to give 30 injections of 1cc each, with the hope of increasing the local resistance.

I am aware of the possibility of the formation of antibacteriophage antibodies. D'Herelle and others have made the claim that repeated administration of bacteriophage makes the individual more susceptible to the infection. But my clinical experience, and that of Crutchfield and Stout (6), does not bear out this point. We have cases to show which did not respond to a few injections, but did respond to many injections. Arnold and Weiss (4) showed experimentally that increased dosage of bacteriophage does not make the laboratory animals hypersusceptible to the homologous bacteria.

The results from bacteriophage therapy may be predicted in many cases. The prediction is to be based on two main factors; first the ability of the bacteriophage to lyze the organism and second the potency of the bacteriophage. If we meet with failure, it will be due to the fact that the etiological agent has changed, and is no longer susceptible to the bacteriophage we are using. We must always bear in mind that with bacteriophagy there is a certain specificity. It will lyze only certain organisms, and if in the course of time, the causative agent which is lyzable is superceded by another agent which is not lyzable by the bacteriophage administered, then the bacteriophage will fail to produce a cure. If we are treating a staphylococcic infection and a streptococcus steps in, our staphylococcic bacteriophage may be absolutely useless against the streptococcic infection. A given bacteriophage may parasitize on bacteria belonging to different species and yet may not destroy all strains of the same bacteria for which it is most potent. Many failures recorded are due to two reasons; first to the failure of the bacteriophage to lyze the organism, and second to the changing of the etiological agent. In other words the proper bacteriophage was not used. A specific bacteriophage must be used for its homologous organism. The term specific is used in relation to bacteriophagy to stress the importance that any bacteriophage may not be used for any infection. A potent polyvalent staphylococcic bacteriophage may not necessarily lyze all the strains of staphylococci, and yet this may possibly lyze an organism totally unrelated to staphylococci. In all cases, a test for susceptibility should be done to determine the potency of bacteriophage.

Reactions following the administration of bacteriophage are few and are of little consequence. These reactions are local in nature and limited to the area inoculated. Systemic reactions have not been noted from the use of bacteriophage. Sterility must be very strictly adhered to. Nonpathogenic air borne organisms may be introduced into rubber stoppered vials if needles and syringes are left exposed to the air for prolonged periods after sterilization. Only freshly boiled needles should be introduced into the vials. The vials used should be of transparent glass, so as to be able to see if contaminating organisms have been introduced. Some severe local and systemic reactions can be traced to the introduction of nonpathogenic air borne bacilli into vessels containing bacteriophage at the time of its administration. It is my opinion that by a careful technique, all systemic reactions may be avoided, unless a patient is allergic to bacterial proteins, or to products in the vehicle.

The report on a series of approximately one hundred cases of pyodermata is now in preparation and will appear in a later paper.

I wish to acknowledge my thanks to the Macy Foundation, Drs. MacNeal and Sheplar of the department of laboratories, and Dr. MacKee of the dermatological department, for their active cooperation and helpful suggestions. Without their aid this paper could not have been written.

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March 15, 1931

IMPORTANT ASPECTS OF MEASLES*

By PHILIP M. STIMSON, M.D., NEW YORK, N. Y.

IN presenting certain aspects of measles, this paper will stress the following points:

1st, The priority of fever in the symptomatology of the disease.

2nd, The importance of eye signs in the early diagnosis, and

3rd, The necessity for the rigid individual isolation of measles patients. To tie these subjects together, there will be presented a procedure, or course of action, should a family be exposed to measles.

Let us imagine a family of children aged eight, six, five, and two, and an infant of four months. The third child, five years old, has broken out with a measles rash beginning on the 4th of the month. Therefore, the first day of the month must be considered the first day of exposure for the others, measles being definitely contagious for at least three days before the appearance of the exanthem. The other four children have all been markedly exposed to the disease, having been attended to by the same mother or nurse. What shall be the procedure?

The Infant: First, the infant of four months. The mother has had measles. It is therefore reasonably safe to assume that the baby has still an inherited immunity, enough either to give him complete protection, or to protect him sufficiently so that he will not have more than a modified form of the disease, from which he will have little trouble recovering. And Herrman has shown that if four months old babies are exposed to measles it is possible that, without contracting the disease, they may nevertheless be sufficiently immunized to give complete protection against future exposures.

The Two-Year-Old: The two-year-old child in this family is none too robust. Yet he is at a most susceptible age. He needs help. Accordingly he receives intramuscularly 4 to 6 c.c. of blood serum from a recently convalescent patient, if any such serum is available; otherwise 10 to 15 c.c. of the serum, or twice as much of whole blood, from one of his parents. In this case, one will hope either for a complete though temporary immunization, or for a very mild or modified case of the disease, but one which will nevertheless be enough to give him immunity for life.

About the fifteenth or sixteenth day he perhaps does develop the fever of modified measles, which runs up to about 101 at its highest and lasts only three or four days. He has a mild diffuse macular rash irregularly scattered over his face and body and a very slight catarrh, but no Koplik's spots, and practically no conjunctivitis—in fact, no means by which a diagnosis of measles can be made except his history of exposure and of having received serum. However, he has probably developed an immunity to measles for life.

The Older Children: The eight and six-year-old girls may either be given parental blood as was perhaps done for the two-year-old child, or they may be allowed to take their chances since they are thoroughly fit. They may not have convalescent serum, because, being scarce, it is all needed for other children who are greater risks. Since fever is almost invariably the first evidence of the disease and the incubation period is seven to fourteen days, their temperatures shall be taken four times a day beginning on the eighth day, instructions being given to put a child to bed with the onset of fever and to isolate her. This may save the other child from a re-exposure. However, probably before the eleventh or twelfth day, one or both will show a definite fever, the one having perhaps only a degree, the other even as much as 102 on the first day of fever. This latter, the six-year-old, may have nearly normal temperature on her second day, her fever then rising again and rapidly—a malarial form of fever curve. Many of the measles cases this spring have been of this latter type, and for two or three days have much resembled grippe. Even Koplik's spots have seemed slow to appear. The former child, the eight-year-old, proceeds to have more and more fever each day for three or four days, or five, until her rash comes well out. Yet it is undesirable to wait for the rash to give certainty of diagnosis, or even for the buccal spots of Koplik, for it must be borne in mind that it is the early catarrh that is most apt to spread the disease, and that this catarrh is usually present one to two days before Koplik's spots are found. Therefore the children's eyes must be watched.

The Measles Line: In the eight-year-old, ere the fever is 24 hours old, if the lower eyelid is pulled down a reddish streak or line is noted already present, the so-called *measles line,* parallel to the lid margin. By the next day it has already become a band involving most of the lower lid, and the caruncle at the inner corner of the eye is slightly red and swollen. This measles line, first reported in November, 1927, has now been seen by a number of observers. I have personally noted it in some thirteen cases, have failed to find it when I thought it should be present in two or three other cases, and in two instances two years ago have thought it present in patients which subsequently proved not to have measles but grippe, a disease wherein the lower lid is often also congested though usually rather more diffusely from the start.

* Read before the New York County Medical Society, May, 1928.

Red Macule In addition to this measles line the six-year old on her second day of fever shows in one eye a small reddened macule on the plica semilunaris, and a day later a tiny white speck is found on its center—much like a buccal spot of Koplik Koplik's spots in the eyes have been reported by several observers, usually being seen as two or three whitish specks on the much swollen and inflamed caruncle found at the height of the disease But in three instances I have seen on the second day of the fever a definite macule on the somewhat swollen plica semilunaris with a suggestion of a streak of inflammation running in towards a caruncle which had just begun to become red and swollen So in this six-year old, that macule on the plica gives confidence in the provisional diagnosis that it is measles in this child and not grippe For when a youngster has fever and a linear conjunctival congestion, or measles line, measles should be considered, and if a macule appears on the plica and the caruncle becomes red and swollen measles becomes almost a certainty Of course, for further proof one looks for cough, coryza photophobia, a speckled injection of the tonsils and soft palate, and particularly for Koplik's spots

Koplik's Spots In this girl, on her second or third day of fever, one perhaps finds a little irregular reddening inside her cheeks But by artificial light it is difficult to be sure there are Koplik's spots present, and it is necessary either to take the child to a window or to wait until morning for more to appear And with the finding of these spots in the cheeks, of course the diagnosis is confirmed But it has paid to watch the eyes For here may be found signs which even when there is no history of exposure to measles, may enable one to suspect its presence in time to isolate the patient before much exposure of others has occurred

Isolation of Cases The girls have been put to bed with their onset of fever, even though the eight-year old with an elevation of only one degree protested that she felt fine The reasons for this action are these First any child with a fever should be in bed Second, the course of measles is usually milder if the patient is put to bed at the very onset Third, a case of measles in bed is of less danger to others than one up and about And fourth, perhaps the most important reason of all, a child in bed will be less apt to pick up a secondary infection

In fact these patients are not put to bed in the same room, but are scattered in the home as widely as may be It cannot be repeated too often that in measles it is the complications due to secondary infections that kill or cripple, and that these secondarily invading infections are nearly if not quite as readily spread from child to child as is the primary measles And the germ which may cause only a head cold or mild grippe in one child, or in a nurse, may cause otitis media and mastoiditis, or broncho pneumonia, in a measles patient Two other families out of many available will illustrate this point A professor's daughter developed measles The two small brothers had been markedly exposed The sick girl was isolated at one end of the apartment and was cared for by her mother, while a grandmother took sole charge of the boys at the other end of the apartment The girl developed a very severe bilateral otitis media and pyelitis, and was sick several weeks The brothers developed fever on the ninth and tenth days from first exposure respectively, were promptly put to bed in separate rooms and had uneventful cases without much discomfort and without complications The secondary infection was here kept isolated with the girl

The other family also had three children but lived in a miserably small apartment The oldest child started the trouble with measles, and then developed a running ear just at the time when the other two children in an adjoining bed were first breaking out In the next few days these three children had among them five running ears, three mastoid operations and a case of broncho pneumonia The secondary infection made far more trouble in that family than did the primary measles For there was absolutely no individual isolation there

So in conclusion, the following points are emphasized In watching for secondary cases of measles, one should expect to find fever as the first evidence of ill health Then the mucous membrane of the lower eyelids the caruncle, and the plica semilunaris should be carefully observed especially during the early prodromal period for at that time and in those places much helpful evidence of oncoming measles may be found And above all, every measles patient should be isolated from every other sick person, with measles or otherwise, but particularly from those with upper respiratory catarrhal infections, lest through neglect of this simple precaution the child add to his measles some secondary infection that may either cripple, as with impaired hearing —or even kill

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Advertising Manager—JOSEPH B. TUFTS.....New York

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For list of officers of County Medical Societies, see this issue, advertising page xxv.

Next Annual Meeting, Hotel Syracuse, Syracuse, N. Y., June 1, 2, 3, 1931.

DISTRIBUTION OF MEDICAL SERVICE

The Wicks-Hutchinson public health bill, embodying the suggestions of the Governor's special health commission, deals with the distribution of medical service. The Commission recognizes that the medical army is well trained and equipped to take the field against the forces of death and disease. The bill specifies what the people shall do in cooperation with the medical army, especially in providing it with hospitals and clinics, and in outlining methods of administration, so that the people themselves shall bear their just share of the burden of giving adequate medical service and health defense to every person regardless of his status financially.

PRESIDENTIAL COMMENTS ON CURRENT EVENTS—NO. 18

The public health bill introduced by Senator Wicks and Assemblyman Hutchinson in the Legislature, for the promotion of public health, has aroused more public interest and as much medical discussion as any other legislative measure this year. The bill is the result of the study of the Governor's Special Health Commission of the adequacy of the existing health laws, the health problems of the present, and the administration of public health in the State.

The health problems of the State can be mainly met by effective health departments with qualified personnel, more facilities for the control of tuberculosis, cancer, and syphilis, better organization for the case finding and rehabilitation of crippled children, further coordination of school hygiene and health services,—all this involving an extension of public health nursing throughout the State so as to reach a standard now in effect in a few areas, additional safeguards in the purification of water, more attention to the growing problems of industrial hygiene, and improved organization for the preventive service in industry. The bill proposes the most advanced step in constructive public health development undertaken in years.

The Commission's proposals have apparently met with unanimous public approval. The entire press of the State appears to support the bill. Every large civic and social organization has endorsed it. Political leaders of the State have indicated their approval of the potential advancement of public welfare and public health that can flow from the provisions of the bill if enacted into law. The leaders of medical thought have complimented the Commission's report and have endorsed the bill. Most of the ex-presidents of the State Society have written letters of commendation and endorsement of the bill, stating that it is both in the interest of the medical profession and of the laity, and that enlightened public opinion generally supports the bill. Other States are becoming interested in the Commission's study. Within a week I have answered five requests from other States for copies of the Commission's report, the Governor's Health Message, and the bill, and two requests from State Societies to address them on the constructive public health development in New York State.

All this is a remarkable demonstration. It indicates more definitely than anything else that I have been able to observe this year, the public interest in better public health. Since speaking over the radio a few nights ago on the Commission's report many people have written me and the trend of thought is that the public is entitled to the service indicated in this bill. Some County Medical Societies are still considering their endorsement. Others have endorsed it.

The Erie County Medical Society has adopted a resolution by a vote of twenty-seven to seventeen out of a membership of eight hundred, stating that "the recommendations of the Special Health Commission are revolutionary and drastic and violate the principle of home rule and if enacted into law would confuse and disturb public health regulations * * * * * and result in chaos to the medical profession and to the public and would be inimical to the well being of our citizens." They have resolved to petition the Governor of the State to reconsider his special message to the Legislature in which he requested that the recommendations of the Special Health Commission be translated into legislation.

The resolutions are definitely expressed opinions and quite at variance with an editorial in the *Buffalo Times* of Wednesday, March 4, 1931. If this editorial is taken as an expression of public opinion, it is sufficiently informative to warrant perusal by anyone.

The State Sanitary Health Officers' Association objects to certain features in the bill. In conversation with the leaders of the Association, it seems that the major objection is that the bill does not make secure enough the tenure of office of the part-time health officers.

Let us realize that the bill proposes the most advanced step in constructive public health development in years. I hope that every physician will read the bill carefully. It proposes to enact into law the recommendations made by the Commission after a fact finding study for the last nine months by the Commission and its Sub-committees totalling eighty-six physicians and health experts.

Let us consider the salient features of the bill, first, the provision for organizing the public health work of the State with the county as the unit. The arguments in favor of this feature are so convincingly expressed in the report that it will be received with satisfaction, but there are certain details involved in the reorganization that may need some revision. Frank conferences between interested groups should result in ironing out differences of opinion. These conferences are now being held.

There are certain details, namely, the selection of a health board and a county commissioner, that each county should do very carefully and deliberately, not hastily. County Medical Societies will greatly aid the proper authorities in developing their preliminary plans so that no mistakes may occur in the reorganization. The bill intends a minimum amount of change in the present administrative personnel, and perhaps its wording can be improved for this purpose.

The next important feature is the provision for the construction and operation of three other tuberculosis hospitals by the State. Counties too

small to support a tuberculosis hospital of their own will now have adequate, accessible facilities. This will be a great boon especially to those counties who were obliged to go to distant counties to hire beds for their patients. These hospitals will also have great educational value to the medical men of their communities.

The third outstanding feature is the creation in the Department of Health of a division for cancer control. While knowledge of the cause and prevention of cancer is even more hazy than was the knowledge of tuberculosis when antituberculosis work was first undertaken as a public health problem, there is reason to believe that much can be accomplished by a State Department. The reduction of venereal diseases and the rehabilitation of handicapped children are given careful consideration and provision made for their advancement in their fields.

Of course, the first draft of this bill may not be entirely satisfactory in detail to everyone and amendments and revisions will have to be made before it is finally enacted into law. The principles, however, are so definitely and clearly stated that there can be no misunderstanding of their intent.

The recommendations of the Health Commission were arrived at after long consideration and they are intended to meet the present day health problems of New York State. In all this study medicine has been liberally represented. There has been presented the viewpoint of the practicing physician.

During the last three years the administration of organized medicine has stressed the importance of the relationships of medicine and the need of medicine's leadership in sound health programs. Medicine today is confronted and challenged by public opinion. Public opinion has caused government to take a different attitude toward the welfare of its people. The problems of hygiene in industry have increased and the present day social medical needs run with appalling swiftness. Public opinion challenges medicine today to increase the availability of the resources of scientific knowledge for the prevention of disease and the protection of child health. Irrespective of what has been done, there is still much to do.

There was statesmanship enough one hundred twenty-four years ago to foreshadow preventive medicine when the membership of the State Society was just seventeen people. There was statesmanship enough one hundred twenty years ago when social problems and public relations were discussed when the membership was twenty people. There was statesmanship enough in organized medicine eighty years ago to reorganize medical education. Is there statesmanship enough in medicine today to assume leadership in the solution of the great problems of health and sickness service distribution, with twelve thousand members?

Changing times demand a changing attitude of organized medicine. The science of medicine is secure but its medical relationships do not make the profession of medicine secure unless medicine makes it so. We need in medicine no less than in public life, a spirit that will not set private gain above common welfare or the common good.

No activity in history has ever pleased everyone. Willingness to sit down together will reach satisfactory compromises. Misunderstanding is usually based on the smaller things. The objectives are frequently found to be the same and differences only exist in methods. The criticisms of medicine must be met, increasing a little more rapidly than is healthy for the profession.

The subject of this comment — constructive health advance before the profession—is a matter of public policy. Action will in the end measure professionalism. The decision will reflect medicine's statesmanship. It will reveal medicine's capacity for leadership. It will show medicine's capacity to tackle the problems of health and sickness service already called America's greatest problem by both medical men and laymen.

WILLIAM H. ROSS.

LOOKING BACKWARD

This Journal Twenty-five Years Ago

Quack Legislation—The present attempts of cultists to get licenses to practice in New York State recalls an act which was described by Dr. James J. Walsh in the NEW YORK STATE JOURNAL OF MEDICINE of March, 1906, as follows:

"On February 28, 1806, a bill was passed granting to a certain John M. Crous, the sum of $1,000 for a cure for hydrophobia, which he was said to possess. Most of the legislators, however, were the descendants of the old Dutch burghers, and had a proper sense of economy about them. They were not quite so easy to fool as they seemed. They fastened a good string to their appropriation of $1,000, by requiring Mr. John Crous to file a bond before the Supreme Court of the State for $2,000, in order to make ample provision for the return of the $1,000 if, after the end of four years, it should prove that his remedy were deceptive. Of the further history of Crous and his remedy unfortunately there are no data at hand."

MEDICAL PROGRESS

Bismuth Oxychloride Ointment in the Treatment of Lupus Erythematosus—R M B MacKenna reports a series of 19 cases of lupus erythematosus in which bismuth oxychloride was employed with benefit in every instance Five of the patients were entirely cured by the use of the ointment in conjunction with injections of bismuth The ointment is the result of experiments carried out at the St Vincent Laboratories, Glasgow It contained at first 5 per cent colloidal bismuth oxychloride, which was later increased to 10 per cent In all of the cases the ointment was applied freely and rubbed with moderate vigor on the affected areas for at least two minutes twice daily In nearly all of the cases injections of bismuth or bismuth salts were given at fortnightly or monthly intervals in order to intensify the action of the ointment MacKenna is convinced, however, that the average patient with the disease can be cured by the persevering application of the ointment alone but the time in which a cure may be obtained can be shortened by giving a few injections of one of the usual bismuth preparations The ointment appears to have a slight antiseptic or bactericidal effect It has also been employed with advantage in two cases of tinea unguium and in two cases diagnosed as chancroid An attempt was made to determine whether or not colloidal bismuth oxychloride in ointment was absorbed by the skin in sufficient quantities to make bismuth injection a feasible proposition in syphilis The results indicate that, while the preparation may be of some value as a local application, it is valueless if used as an injection—*The Lancet*, January 17, 1931, ccxx, 5603

Diuresis through Conditioned Reflex—In the *Klinische Wochenschrift* of January 10, 1931, Hellmut Marx describes his experiments on dogs in which he undertook to discover whether it is possible to produce diuresis in animals by means of psychic influence Four dogs of about equal weight but of different breeds and temperaments were kept under the conditions of a metabolic experiment from February 1929, to March, 1930 They received a standard diet and a constant fluid intake always at given times in the day Every day except Sunday they were catheterized in the morning, placed in a special room and chained up After they were quiet and lay still in their places, a musical signal was given on a harmonica and a pan containing 400 c c mixed milk and water 1 2 set before each While they drank the signal was given again 4 times, directed to each dog Then they were left quietly at rest for 3 hours, after which each was catheterized again and brought back into the metabolic cage Amount and specific gravity of the urine obtained was recorded After establishing this habit for 6 weeks, the dogs were once or twice a week brought fasting into the room and given only an empty dish with nothing to drink, with the usual musical note, after which they had the usual rest and catheterization It was hoped that under the usual drinking conditions a reflex would have been formed which would result in diuresis For 5 months nothing happened Then a 3 weeks' vacation broke the experiment and it was feared the effect of the long training had been lost The reverse was the case On the third day of the resumed experiment and the first day of faked drinking, one dog exhibited a veritable diuresis of 180 c c urine with a specific gravity of 1 007 It was thus judged that this was a case of diuresis through conditioned reflex, in view of the fact that the amounts of urine on drinking days had been in 3 hours 145 205 c c and the specific gravity 1 007-1 010 The experiments show that in the animal diuresis can be produced by the psychic route They therefore offer a new proof of the significance of cerebral regulation for diuresis The method seems a useful one for studying certain psychic mechanisms in the animal, since it was here possible for the first time to make quantitative estimates of the intensity of the effect produced

The Differential Diagnosis of Subacute Bacterial Heart Disease—William D Reid cites a case which serves to illustrate the importance of distinguishing between subacute bacterial heart disease and Banti's disease In the latter affections splenectomy is indicated while it is unwarranted in *Streptococcus viridans* infection In Reid's case too much attention was given to the enlarged spleen and anemia and too little to the petechiae chills detailed of the blood fever, history of probable embolism etc Splenectomy performed for supposed Banti's disease was without benefit The patient died from cerebral hemorrhage and the autopsy showed a definite *Streptococcus viridans* endocarditis In Banti's disease the blood usually shows a low color index, leucopenia and frequently changes in the ery

throcytes. In subacute bacterial heart disease the white blood count may vary from 20,000 or higher to 6,000, it being not uncommon to find a difference of many thousand within a few hours. The presence of large phagocytes is certain evidence of subacute bacterial heart disease. The finding of one or two large mononuclear cells with an ingested red cell or an increase in the number of large mononuclear cells is evidence of *Streptococcus viridans* infection. In Banti's disease the temperature is usually normal or there is slight fever from time to time, while in subacute bacterial disease there is fever of the septic type. Petechiae occur in about half the cases of *Streptococcus viridans* infection, while they are not mentioned by Stevens in connection with Banti's disease. Clubbing of the fingers and toes occurs in 70 per cent. of the cases of subacute bacterial heart disease. In this condition the spleen is usually only moderately enlarged, though in the case reported it was markedly enlarged; in Banti's disease it is grossly enlarged. Ascites, bleeding, usually from the esophagus, and hepatic cirrhosis, often present in Banti's disease, are not found in subacute bacterial heart disease. Chills and sweats are common in *Streptococcus viridans* infection, but not in Banti's disease. Heart murmurs are more frequent in subacute bacterial heart disease, and the *Streptococcus viridans* may often be found in the blood; in Banti's disease the blood is sterile. A duration of ten years is not uncommon in Banti's disease, whereas subacute bacterial heart disease runs its course in a few months to two years. Periodic remissions and exacerbations may occur in both.—*New England Journal of Medicine,* January 29, 1931, cciv, 5.

Zoster, Varicella, and Encephalitis.—W. Russell Brain, writing in the *British Medical Journal,* January 17, 1931, i, 3654, expresses the opinion that, as herpes zoster is regarded as due to a virus which is quite distinct from that responsible for herpes febrilis, it would be advantageous to confine the term herpes to the latter disease, and to speak of herpes zoster simply as zoster. It is important for clinical purposes to distinguish two types of zoster —symptomatic, that occurring during the course of certain intoxications, and idiopathic, the cause of which is not known. In addition to zoster in its commonest form with cutaneous eruption and sensory disturbances, zoster may invade the gasserian ganglion. At times it may affect only the ophthalmic division, giving rise to corneal lesions or ocular paralyses. The geniculate ganglia may be invaded causing facial paralysis, or typical zoster vesicles in the auricle, or sensory loss in the anterior two-thirds of the tongue. If the facial nerve is involved, it may cause lower motor neurone lesions. Occasionally it invades the joints, and it may give rise to meningitis and encephalitis. Zoster infection of the meninges is indicated by inflammatory changes in the cerebrospinal fluid. Zoster in one individual may be followed after ten days by varicella in a contact. The converse also holds good, and all possible combinations of these associations have been recorded. It has been found that nearly all zoster-from-varicella cases occur in adults, while almost all the varicella-from-zoster patients are children. This difference in age incidence seems to require an explanation in terms of immunity. Adults are relatively immune to the varicella virus, but this immunity wanes as life goes on and the adult who becomes susceptible develops zoster rather than varicella. Brain analyzes 32 cases of varicellar encephalitis recorded in the literature. In half of the cases the conspicuous feature was disturbance of coordination, with or without involuntary movements. The spinal lesion usually produced the picture of a transverse myelitis at the dorsal level of the cord. The prognosis in this condition is good as to both life and recovery of function. A comparative study of varicellar encephalitis, measles encephalitis, and post-vaccinal encephalitis indicates that the clinical pictures, mortality rates, and progress as to functional recovery are quite different in the three conditions. Those who regard them as due to the same virus will have to suppose that the action of this hypothetical organism is hypothetically modified by the influence of the different pre-existing infections. It would seem less speculative to suppose that the differences are due to the encephalitis being produced by different organisms.

The Moro Apple Diet in Diarrhea.—Writing in the *Deutsche medizinische Wochenschrift,* of December 26, 1930, Siegfried Wolff recommends a diet of finely grated apples in diarrheal conditions in very young children. He has used it in 150 children suffering with acute and chronic diarrhea, among whom were five cases that were clinically dysentery with bloody stools. Moro's name is attached to the method because it was he who first subjected this old folk remedy to extensive clinical tests, and found it astonishingly effective. Ripe, mellow apples are peeled, the seeds and cores carefully removed, and the flesh of the apples reduced to a fine pulp by grating on a glass grater. Of this substance a child receives 100-200 gm. at every mealtime, with no other food whatever. No medicine is given, nor are enemata administered. The children are well satisfied with the diet and do not ask for anything more. In case of extreme thirst or on

very hot days dehydrated children may have an occasional drink of cold water or tea and in case of marked loss of weight saline or glucose injections may be given subcutaneously The rule of no other food by mouth must be strictly observed In nearly 100 per cent of cases the cure of the diarrhea was prompt and complete The diarrhea or vomiting stops immediately, and in most cases constipation sets in, or a formed stool is evacuated on the second day at latest But the usual course is that a child who has been having 10 or more stools on the day prior to the treatment will have one or two stools after the first apple meal, and then no more until a mixed diet is restored After the second apple day a transition diet is given, rich in protein milk poor, and vegetable free Rarely diarrhea returns when a normal diet is resumed, in which case one or two more apple days may be carried out The protocols of three typical cases and of three very severe cases are given Two of these children were moribund when treatment began, and the third had been lying 12 hours in writhing pain All responded immediately to the apple pulp, as soon as it passed the intestine Treatment in these cases was prolonged four days and repeated after an interim if the stools showed a tendency to become soft again

The Importance of General Medicine in the Practice of Otology—In his presidential address before the American Otological Society, D Harold Walker emphasized the fact that the field of otology has grown so rapidly that the preparation of those entering the specialty must be broadened Forty or fifty years ago the term otologist was applied to those who were purely and simply aurists At the present day there is a broadening of the outlook from a surgical standpoint New fields are being added — intracranial surgery, bronchoscopy, esophagoscopy There are, however, as many medical problems as there are surgical, and, as a rule, they are more difficult to solve To the man who intends to specialize in otology a medical internship would be more valuable than a surgical one When the young graduate begins his practice he finds that there are many medical conditions which he must meet The examination of the blood, the chemistry of the cerebrospinal fluid, intracranial pressure, etc, are very important It is in private practice where the non suppurative conditions are met that the weakness in the treatment by otologists is most apparent Headache is a very important symptom and calls for a most thorough examination, for there are numberless causes of headache which may be more or less easily found and here one must not omit one of the most common and important causes namely, constipation Practically every deaf person complains of having had constipation for years Vertigo is another very common symptom, to which unfortunately the name Ménière's disease is still attached Cases are often met in which the diagnosis lies between toxic neuritis and an acoustic tumor Walker cites several cases in which intracranial operation was avoided by the simple removal of some carious teeth or infected tonsils The patient with tinnitus requires a thorough medical examination, including the circulatory system and the endocrines Young men who specialize in otolaryngology should be made to appreciate that the treatment of deafness must necessarily occupy a large portion of their time, and in order to be successful they must be willing to be patient and cheerful, and to sacrifice time The problem of deafness is, to Walker's mind the one where the specialist shows the greatest weakness and fails most often, because he is not willing to make the sacrifice to help these deaf people Deafness must be prevented, and until there is an educational propaganda spread among family physicians, school teachers, and parents and also among the specialists the problem will never be solved Its solution lies very largely with the otologists —*Laryngoscope*, January, 1931, xli 1

Causes of Success and Failure in the Irradiation of Graves' Disease—P Hess and H Schlecht say that roentgen irradiation in Graves' disease is a very effective mode of treatment and gives results equal to those of surgery, with the advantage of no mortality, if it is applied cautiously Adequate doses are, however, required, and sufficient time must be allowed for them to take effect This is a matter of capital importance From 3 to 24 months must be allowed, with an average of 16 months Improvement begins in four weeks, and goes forward steadily If quick results are desirable for social reasons, surgery should be advised The authors' technique consists in three series of treatments, each comprising three sittings on three successive days, with an interval of 4-6 weeks between series At every sitting both sides of the neck are irradiated and also the thymus gland, each with 1/3 E S D, using crossed rays with exposure of the anterior parts of the larynx Thus a total dose of about 50 per cent is striven for in every series Treatment is always given with due regard to the basal metabolism, which is under constant surveillance Of about 80 cases treated in recent years, it has been possible to follow up 41 with examinations covering a period of over one year These include cases of pure hyperthyreosis, of light and also of very severe form

The follow-up has frequently shown that it is precisely in the most severe cases that retrogression of all symptoms has occurred in the course of time to an extent they had not dared to hope for. This has led them to believe that irradiation offers a very active weapon against the disease, one which is equal to surgery, and the correct use of which results in cure in the majority of cases. Of the 41 cases treated and followed up, 16 were cured, 16 improved, and 9 unchanged. The improved cases are those in which there has been complete retrogression of general symptoms, and improvement of organic symptoms, which regress more slowly. Omitting 12 cases which for one reason or another dropped out of sight before cure was complete, the results are: Total, 29; cured, 13; improved, 14; unchanged, 2. Irradiation must be supported by an internal dietetic and medical treatment. All cases are suitable for the treatment, with no contraindications.—*Münchener medizinische Wochenschrift,* January 9, 1931.

The Etiology of Psoriasis Vulgaris.—Florio Sprecher, in an article in the *Riforma medica* of December 15, 1930, says that the pathogenic agent of psoriasis vulgaris is still unknown. Some investigators have thought that it is due to a special morbid constitutional state, hereditary or acquired, such as arthritism, herpetism, gout, uricemia, altered metabolism, and the like. On the basis of a personal case, Sprecher repudiates this view, and holds that the affection is attributable to an exogenous infective agent, and has all the characteristics of dermatoses that spread from this cause. In the case here studied, in a man of 23, who had been the subject of innumerable tattoos 6 years previous, the dermatosis had exactly followed the outline of the patterns. After every implantation of the needles in the skin in making the tattoos, the two operators had, as is customary, cleansed the surface of the tattoo with their lips, wet with saliva. Although one of the two operators was presumably affected with tuberculosis, there was no indication that the infection transmitted was of this type, since the patient remains a robust individual and all tuberculin reactions have been negative. Furthermore, this reaction is negative in the great majority of cases of psoriasis. The fact, now well established by documentary evidence from all countries, that by producing traumata of various kinds on the healthy parts of the skin of a psoriatic patient efflorescences of his dermatosis can be reproduced, is of great significance, since it puts psoriasis in the class of skin diseases that are certainly provoked by an infectious agent. Its mode of spread from a punctiform center toward a constantly widening periphery accords perfectly with that of dermatoses due to external infections. The eruption begins on tracts of skin that have been subjected to attrition or other continuous trauma; its successive spurts continue to choose the cutaneous regions which are the most greatly subjected to irritation. They heal without a trace, but readily recur, always at the old site, where attrition or irritation is greatest. The histopathologic changes are exclusively epidermal and superficial. These considerations, together with the ready transmission of the affection from man to man and from man to animals and vice versa, point unmistakably to the infective nature of psoriasis vulgaris.

A New Form of Mental Inhibition in Children—Epileptic or Epileptoid.—Gilbert Rodin, writing in the *Bulletin de l'Académie de Médecine,* of December 30, 1930, describes a form of mental inhibition which is distinct from that due to emotive causes, and is more correctly termed an obtusion, since it is a temporary suspension of the intellectual faculties, with the mind veritably absent. This absence involves the thinking faculty alone and not the consciousness nor the sensibility, as in classic absent-mindedness. Children of this kind are found to exhibit the epileptoid constitution, having attacks of anger, impulsivity, turbulence, nightmare, nocturnal agitation, somnambulance, and persistent enuresis. There is usually an heredity of syphilis, alcoholism, epilepsy, or emotive and anxious agitation. Epileptoid inhibition may assume different forms. It may resemble bradypsychia, as in children who reply after a prolonged pause, as if stopping to assimilate the question. Again it may appear less an inhibition than as a kind of distraction, which can be diagnosed when other epileptoid signs are present. Here belong those children who forget the errand on which they have been sent, and children who skip over words in a dictation or recitation without noticing that they do so. The condition is not simply one of bradypsychia, because the inhibition persists as long as the question is maintained; there is an intellectual void. Nor is it to be mistaken for a postparoxystic state of torpor, for it may appear without any previous epileptic manifestation, and its diagnosis derives its importance from this fact. Its exact place lies between bradypsychia and absent-mindedness, and it serves as a link between these two manifestations. It is of first importance that this condition be properly diagnosed when the child reaches school age. Excellent therapeutic results have been reached by treatment with phenylethylbarbitalum, accompanied by arsenobenzol, mercury, or bismuth injections, even where there is no precise luetic etiology.

LEGAL

THE OWNERSHIP OF X-RAY PLATES

By LORENZ J. BROSNAN, ESQ.
Counsel, Medical Society of the State of New York

Your counsel is frequently asked the question as to whether a patient has a right to demand X-ray plates which have been taken by a physician or which may be in the actual custody or control of a physician although not actually taken by him. It seems singular that this question has never been passed upon by the courts of this or other States, but such seems to be the fact Our own research has not disclosed any decisions passing upon the question under consideration, and the research of others seems to be the same effect. For example, in a very interesting paper entitled, "The Legal Aspects of X-ray" which appeared in the journal of the Michigan State Medical Society in October, 1930 the author, Dr. S. W. Donaldson says:

"The proprietorship of the films has been an oft discussed question but apparently has never been carried to the higher courts."

We have had occasion to have been consulted on a few occasions by members of the medical profession in cases where a disgruntled patient had demanded possession of X-ray plates in the doctor's possession, threatening if the doctor did not give them up to take out a summons in the magistrate's court charging the doctor with unlawfully withholding property belonging to the patient. Such a demand of course carries with it very clearly a probable lawsuit for malpractice. In such a case, where no express adjudication has been made by the courts, a physician is naturally reluctant to become embroiled in a proceeding in the magistrate's court and hence, rather than subject himself to a distasteful experience in the magistrate's court with its attendant loss of time, the doctor's desire naturally is to return the plates. We, however, have always cautioned the physician before doing so to have prints made of the plates and also to make a careful reading of the plates and reduce to writing exactly what condition is disclosed by the X-ray plates.

How the courts would rule if the question were squarely presented, it is of course difficult to say. On principle it would seem that the X-ray plates should not belong to the patient but should be considered the property of the physician. In that respect we believe that a proper analogy could be drawn to the case of a commercial photographer upon whom demand is made for the negative of a picture taken by him. There can be no question that the sittee in such a case has a right to control the use of the photograph, and the photographer may not use such picture for advertising purposes or for the purposes of trade except upon the express consent of the sittee. To do so would clearly be a violation of the Civil Rights Law of this State which provides in Section 50 thereof as follows:

"Right of privacy.—A person, firm or corporation that uses for advertising purposes, or for the purposes of trade, the name, portrait or picture of any living person without having first obtained the written consent of such person, or if a minor of his or her parent or guardian, is guilty of a misdemeanor."

However, while the sittee has the right thus to control the use of the picture, we believe that the courts would hold (although there is no express adjudication on this point either) that the negative was the property of photographer.

It seems clear that as to X-rays taken in a hospital these would form part of the hospital record and the patient could not legally demand possession of them. In a recent case in a court of a nearby State, although there was no question involved of the property rights of the X-ray pictures, the language of the court in discussing X-rays taken in a hospital is very significant. On this point the court said:

"* * *there was undisputed evidence that the X-rays taken in the hospital, as these rays were, are considered hospital property; hence they are not taken except on order of the physician or surgeon, that the X-ray pictures are indexed and numbered as part of the hospital record, that from the pictures the radiologist makes findings in writing, which are a part of the X-ray laboratory records and held there as a part of the records of the hospital."

As we have already said, it is difficult to speculate as to what the courts would do if the question involved here were squarely presented, but we believe that the resolutions adopted by the Radiological Society of North America on this point is not only good common sense but good law as well, and it undoubtedly expresses the belief and understanding of physicians generally upon this point. In those resolutions it was said:

"That all roentgenograms, plates, films, negatives, photographs, tracings or other records of examinations are the property of the roentgenologist who made them or the laboratory in which they were made."

In commenting generally upon the subject under consideration, Dr. Donaldson in the paper to which reference has already been made says:

"The roentgenologist acts as a consultant and in obedience to the professional code of ethics is not to make known any findings or conclusions to the patients, relatives, friends or anyone directly or indirectly connected with the case other than the requesting physician. General acceptance by the profession of these principles and existing rules in many hospitals will go a long way if ever this question comes before the courts. When a patient presents himself for an examination he agrees to be examined in whatever way may be necessary to make a diagnosis and there is no reason to assume that he owns the films any more than there is reason to believe that he owns the dictating machine cylinder the doctor used in making the report or to ask that his temperature chart be turned over to him when he is discharged from the hospital. Some laboratories have a rule, a copy of which is on their receipt, stating that films may be demonstrated to patients on written consent of the referring physician and are open to inspection to any reputable physician who may show a legitimate interest in the case, or subject to subpoena the same as any other hospital records."

CLAIMED NEGLIGENT TREATMENT OF FRACTURE OF RADIUS AND ULNA

In this case a woman about seventy years of age was thrown from a wagon by a runaway horse, causing her to fall upon her left arm. She sustained a compound comminuted fracture of the distal portion of the radius and a simple fracture of the ulna. The patient, in a state of profound traumatic shock, her pulse barely palpable, was brought to a hospital for emergency treatment. The chief surgeon of the hospital examined her and caused X-rays to be taken. Her general condition was very poor, disclosing arteriosclerosis, shock, senile dementia, high blood pressure and poor quality of pulse. The surgeon dressed the wound, but because of the probability of infection, the protrusion of the bone and the poor condition of the plaintiff, he considered that to operate under a general anaesthesia or to manipulate the fracture would probably result fatally to the patient. Therefore, the fracture was partially reduced, using a minimum of manipulation and applying a splint. The patient was given pneumococcus vaccine and antitetanus serum.

Two days after her entry into the hospital she developed pneumonia, and because of her previous poor condition she became critically ill. However, her condition improved and she was discharged about 10 days later. At the time of her discharge she was told that her fracture needed further attention, but because of her weakened condition nothing could be done then and she was directed to return about a month later for further treatment. This she did not do.

Thereafter, a suit was instituted by the patient charging that the failure to properly set her arm had caused a deformity. For some reason the plaintiff named as defendant not the doctor who treated her but another doctor associated with the said surgeon who had never treated her in any way except to change her dressings.

The case was never pressed by the plaintiff's attorney for trial and after the Statute of Limitations had run as to a claim against the physician who actually cared for the plaintiff, the defendant's attorney brought the case on for trial and as the plaintiff or her attorney did not appear in court to proceed with the case, a dismissal of the complaint was obtained, thereby terminating the entire matter in favor of the defendant.

CLAIMED IMPROPER TREATMENT OF FRACTURE OF RADIUS

In this case a patient was brought to the doctor's office complaining that she had fallen in her home and broken her arm.

Upon examination the doctor found an impacted fracture of the radius. He thereupon reduced the fracture, applying anterior and posterior splints, and caused an *x*-ray picture to be taken directly after the application of the splints. The *x*-ray report showed that apposition and alignment were good.

The patient returned to the doctor's office every three or four days and the doctor renewed the bandages about the splints to keep them tight until about two weeks had elapsed, at which time he removed the posterior splint and rebandaged the arm leaving the anterior splint in place. At the end of the fifth week he removed the anterior splint. At this time the doctor found good union to be present, although there was some limitation of motion of the wrist. Massage was then

suggested and the doctor heard nothing more of the patient until some months later when he learned that another doctor had caused an *x*-ray to be taken, which report read as follows:

"Radiographic examination of the right wrist shows a deformity of the ulna approximately one and a half inches above the articulation. This exhibits an internal and palmer bowing. The mortise between the radius and ulna appears somewhat wide."

The doctor was informed that at the time of the second *x*-ray report the patient had satisfactory use of her arm with the exception of inal to apply strength in her grip.

A law suit was instituted against the dc charging that the defendant had improperl the bones in the plaintiff's arm and had give improper aftercare, as a result of which plaintiff had suffered much pain and a perma deformity. The suit was not promptly pre for trial and before the action could be rea in its regular order for trial, the defendant dc died. The plaintiff's attorney therefore sented to discontinue the action.

CLAIMED NEGLIGENT POST-OPERATIVE TREATMENT OF CLUB FEE

In this case a girl, seventeen years of age, was brought to the defendant doctor. She was suffering from congenital club feet.

It was arranged that she be operated upon in an attempt to correct the condition. She went to a hospital and an operation was performed upon her feet, which consisted of a cuneiform osteotomy of scaphoid, tenotomy of tendon achilles (the astragalus had previously been removed), separation of metatarsal and cuboid, correction to overcome varus. A portion of tuberosity was removed at the fifth metatarsal. Both feet were placed in plaster casts and the girl was removed to her room where she came out of the ether in good condition.

The defendant-surgeon attended the girl the next day and she appeared comfortable and needed no adjustment of the casts.

That same day the defendant left for a trip abroad and placed the girl in charge of his associates at the hospital. The girl thereafter ran a temperature and complained continuously of siderable pain in one foot. The cast was rem from that foot and her condition did not impr and seventeen days after the operation the pa developed lobar pneumonia, from which she three days later.

An action was commenced against the def ant-doctor charging him with the responsit for the girl's death in that he failed to perso remain in charge of her case and left her in care of incompetent doctors who permitted casts to remain on the feet for an impr length of time, which, it was asserted, ca gangrene to set in and as a result the girl The true facts were that no gangrene had developed.

When the case was brought on for trial plaintiff failed to appear and a motion was n on behalf of the defendant to dismiss the c plaint, which was granted, thereby termina the matter in favor of the defendant.

ALLEGED NEGLIGENCE IN TONSIL AND ADENOID REMOVAL

A child about two and one-half years of age was referred to the defendant doctor in order that a tonsillectomy and adenoid operation be performed upon him.

Subsequent to said operation an action was instituted on behalf of the child by his guardian ad litem against the doctor, in which it was claimed that the defendant conducted himself so negligently and carelessly in the removal of the plaintiff's tonsils and adenoids as to permit inflammation and infection to develop in his nose and throat, thereby damaging him greatly.

In the plaintiff's bill of particulars it was specified that the particular manner in which the defendant was negligent was that he inserted a sponge in the plaintiff's nose or throat and failed to remove said sponge, which remained therein, to the detriment of the child's health. It was charged that this negligence caused the child to be confined to his bed for a period of about one month due to an infection and a subsequent distribution of pus throughout the body, wl caused fever and pain.

It appeared, however, that the doctor formed the operation with all care. The ton were removed by the snare method, and patient bled but slightly. Gauze sponges w placed into each tonsil cavity and the nasal pl ynx. These pieces of gauze were attached strings, and after the bleeding receded the do removed the sponges and carefully checked determine that all were removed. The do contended that all charges of negligence w false.

After the case had been noticed for trial, before it could be reached in its regular or the doctor died and a motion was made to disn the summons and complaint on the ground t the action abated by reason of the death of defendant. Said motion was granted, thus ter nating the matter.

NEWS NOTES

PUBLIC RELATIONS SURVEY, NUMBER 18, TOMPKINS COUNTY

The members of the Tompkins County Medical Society enjoy intimate and cordial relations with all the public health activities of the county, in the formation and administration of which we have been active, either as an organization or as individuals. We are aware of the trend in Medical affairs and are in sympathy with the same.

The Ithaca Tuberculosis Association was formed about twenty years ago, during which time, with one exception, the president has been one of our members, with three or four other physicians associated with him on the board of directors.

The Open Air School and the Cayuga Preventorium were both initiated by the Tuberculosis Association. The Cayuga Preventorium, founded fifteen years ago, as the first in the state, has a physician as president with three others on the board.

The appointment of a full time health officer for Ithaca and the establishment of the County Tuberculosis Sanatorium were both approved and urged by the society. The need of a County Laboratory was pointed out, an efficient committee was appointed to confer with the Board of Supervisors, and the end was achieved.

We are also represented on the board of directors of the County Health Committee, the Tompkins County Conference of Public Welfare agencies, and the Reconstruction Home for Infantile Paralysis.

Various clinics are held weekly or monthly, in various fields, which include, tuberculosis, baby care, and work along prenatal, genito-urinary, mental, and orthopedic lines.

The toxin-antitoxin campaign in the county has been well carried on by the city, village and town health officers with the assistance of the school nurses and the nurses of the county health committee who cover the rural sections.

The campaign against cancer has been carried on by newspaper publicity and a public lecture.

Much time has been given to the consideration of a County Health Unit, and while we are agreed in many ways to the principle of such an organization, we feel that possibly our problem can be solved better by a modification of the plan adapted to local conditions. If we recommend such a step, we wish to be sure our plan will be to the best interest of all concerned.

This report does not indicate any activity of the Public Relations Committee during the past year, but does draw attention to the fact that the medical men of Tompkins County have been and are aiding, influencing, and initiating public health activities.

The laymen of the county who are interested in public health have done excellent work, the results of which are of benefit to all. The Board of Supervisors has always cooperated generously when the need and public approval have been demonstrated.

H. E. MERRIAM, *Chairman,*
Committee on Public Relations
Tompkins County Medical Society.

TRI-STATE CONFERENCE

The seventeenth session of the Tri-State Conference was held in the Hotel Pennsylvania, New York City, on February 28, beginning at 10 o'clock. There were present:

From New Jersey:

Dr. G. N. J. Sommer, Trenton, President of the State Society;

Dr. J. F. Hagarty, Newark, Vice-President;

Dr. J. B. Morrison, Newark, Secretary; and

Dr. S. T. Snedecor, Hackensack, Councillor Second District.

Dr. H. O. Reik, Atlantic City, Editor.

From Pennsylvania:

Dr. H. Walbertson, Scranton, Past President;

Dr. Ross Patterson, Philadelphia, President;

Dr. W. F. Donaldson, Pittsburgh, Secretary;

Dr. Frank Hammond, Philadelphia, Editor.

From New York:

Dr. W. H. Ross, Brentwood, President;

Dr. J. S. Lawrence, Albany, Executive Officer;

Dr. Frank Overton, Patchogue, Executive Editor.

Dr. Lawrence led a discussion on the subject: "What are State Departments of Labor Doing to Advance Industrial Surgery?" His special contribution was a description of the psychology of the administrative officials of the Department of Labor, and also that of the physicians who do industrial surgery and compensation work. A great need is that a law should be passed authorizing the appointment of a medical representative on the advisory committee to the Commissioner of Labor.

The running remarks of the members of the conference made in the course of the round-table discussion, disclosed a great similarity in the administration of the labor departments of the three States, and the existence of the same problems in them. The impression was confirmed that education, rather than legislation, would solve the difficulties in executing the provisions of the Workmen's Compensation Acts.

Luncheon was served at one o'clock with the Medical Society of the State of New York as the host; after which Dr. Ross outlined the legislative work which has been suggested by the Commission.

Dr. Snedecor described the progress made in New Jersey in initiating the plan of holding meetings in each Councillor District, as in New York and Pennsylvania. He referred to the discussion in the Conference of County Secretaries and Reporters, which was held in Trenton on November 5, 1930, and was reported in the NEW YORK STATE JOURNAL OF MEDICINE of January 1, 1931, page 48; and described the meeting of the First Councillor District held in Newark, a of the Second in Jersey City. The officers the Second District will assemble in April a will listen to reports of the members to wh have been assigned the following topics:

1. Legislation.
2. Credentials of specialists.
3. Examination of preschool children.
4. Administrative methods of diphtheria i munization.
5. Publicity and advertising by County Me cal Societies.
6. Supervision of free medical service.
7. Administration and supervision of cour health departments.

Dr Snedecor called attention to the fact th the Councillors of New Jersey had the adva tage of starting something new to them; and th could profit by the experience of New York a Pennsylvania. He hoped that the Councill would develop definite activities which would recognized by the State Society and incorporat in its rules and regulations.

LEGISLATION

BULLETIN NO. 5—FEBRUARY 19, 1931

Since issuing the last bulletin, the following bills have been introduced:

Senate Int. No. 741—Hastings, creates a temporary commission to study economic effect of sickness on the working life of human beings, best method for state to cooperate to prevent and cure sickness and by which compensation for unemployment caused by sickness may be effectuated, and appropriates $15,000.00. Referred to the Finance Committee.

Senate Int. No. 744—Love (Assembly Int. No. 980—Story), amends the Workmen's Compensation Law by striking out list of occupational diseases and providing compensation shall be payable for any occupational disease or illness which it shall be established by medical testimony was directly due to or caused by any employment enumerated in subdivision one. Referred to the Labor Committee.

Senate Int. No. 837—Wicks (Assembly Int. No. 1158—Stevenson), adds a new article to the Public Health Law, providing for the establishment, maintenance and acquisition of tuberculosis hospitals and providing for management and operation thereof as state institutions. Referred to the Finance Committee.

We understand the Governor's Commission recommended the erection by the state of three additional tuberculosis hospitals, and legislation to that effect may be awaited.

Senate Int. No. 870—Love (Assembly Int. No. 1249—Story), amends the Civil Service Law providing for the medical examination of vetera before they shall be disqualified from holding a position in civil service because of physical di ability. Referred to the Civil Service Committe

The law enacted last year which gave disabl veterans preference in civil service examinatio where they are competitors, is causing the civ service considerable difficulty. They have fou it necessary to have physical examinations ma of veterans competing in an examination in ord to establish their disability before lists of su cessful contestants can be established. We are i formed that several civil service lists are bei held up at present for this reason.

Assembly Int. No. 991—Coughlin, adds ne section to the General Municipal Law for crea ing a division or bureau for supervising treatme of indigent ill. Referred to the Cities Committe

* * * * *

We learned this morning that the osteopat have a bill prepared and are introducing it toda

* * * * *

The "white book" has come out and you wi find your copy enclosed.

* * * * *

Action on Bills

The Hickey optometry bill, Senate Int. N 441 (Assembly Int. No. 727—Piper), has ad vanced to third reading in the Senate.

BULLETIN NO. 6—FEBRUARY 26, 1931

Since the last bulletin was issued, the following bills have been introduced:

Senate Int. No. 915—Fearon (Assembly Int. No. 1277—Tellier). This is the osteopathic bill and the most vicious bill that they have ever presented. In the twinkling of an eye it would create medical practitioners skilled in the use of drugs out of men who have received no training in the prescribing of drugs. The bill deletes from the law all restrictions with regard to the use of drugs by osteopaths; and then, at some length, describes what limits there shall be to their performing surgery; namely, a license to practice osteopathy shall not entitle the holder thereof to perform any surgical operation involving incision for the opening of a natural body cavity, for the removal of cancer, for the amputation of an extremity or an appendage, or for the removal of any gland or organ, or part thereof, of the human body. The author of the bill apparently feels that cancer is well defined so that an osteopath would as readily recognize a cancer as he would an arm or a leg. In our opinion, the most serious part of the bill is that which permits the osteopaths unlimited use of drugs. Action on this bill will be hastened. We are authoritatively advised that the Education Committee, with whom the bill rests, will take action upon it on Tuesday. May we urge every physician who receives this bulletin to get in touch immediately with his legislators, registering his opposition, and particularly those who have as legislators members of the Education Committee.

Senate Int. No. 917—Lord (Assembly Int. No. 991—Coughlin), provides in the General Municipal Law for the creation of a division or bureau for supervising treatment of indigent ill.

Senate Int. No. 993—Wicks (Assembly Int. No. 1362—Hutchinson), amends generally the Public Health, State Charities, Public Welfare, Conservation, Village, Town and County Laws, and makes an appropriation for state tuberculosis hospitals and sites. This is the bill that embraces the recommendations of the Governor's Health Commission. It is a voluminous bill and has not yet been printed.

The Porter chiropractic bill—Assembly Int. No. 636—has been amended. The new print is No. 1346. The amendments make it conform more strictly to provisions of the medical practice act. However, it still contains the following objectionable features: The examining board shall be a specially constructed board, appointed by the Regents from the chiropractors who are practicing in the state at the present time. The provision states that the board shall consist of three members, all of whom shall be chiropractors who shall have the minimum qualifications specified for applicant for the special examination. It further states that no medical doctor nor osteopath shall be eligible for appointment to the board at any time. It is provided that the *present practitioners* may be licensed by passing before this board a special written examination in anatomy, physiology, symptomatology, including diagnosis of communicable diseases, hygiene, and the theory and practice of chiropractic. One may well wonder how many chiropractors there are in the state who know enough about these subjects either to set or take an examination in them.

Those who make application for license in the future shall be obliged to pass a written examination in the same subjects that are now presented to osteopaths and physicians, but, again, the examination will be before this special chiropractic board. This gives another point of opposition to the bill in that it provides for the creation of a special examining board, a procedure which our Regents have effectively opposed in the past. The definition of the practice of chiropractic is broader than in previous years—it is: "'The practice of chiropractic' is defined as diagnosing and the treating by the palpating and adjusting by hand of the vertebral column *and tissues.*" In the past the chiropractors have maintained that their field lay in the adjustment of the vertebral column, but now they include manipulation of the tissues, and that gives them absolutely the same field as the osteopaths.

This bill will also be acted upon on Tuesday and the warning that was given with regard to the osteopath bill applies here with equal force.

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Action on Bills

The Hickey optometry bill—Senate Int. No. 441, has passed the Senate and now rests with the Assembly Education Committee.

Senate Int. No. 344—Cilano—Assembly Int. No. 442—Esmond; Mental Hygiene Law, relative to qualified psychiatrists, has been reported out of committee in both Houses.

* * * * *

On last Tuesday the Assembly Codes Committee gave a hearing on the Vaughan anti-vivisection bill. For the Medical Society the following persons appeared: Dr. Sweet, Chairman of the Committee on Medical Research; Drs. Wyckoff, Hartwell, Rous, Robinson, Linsly Williams, Gerster, Wadsworth, E. MacD. Stanton, and L. F. Schiff.

Arguments presented by these men were very convincing and although the committee took no immediate action, there can be little doubt but that the bill will be killed in committee.

Senate Int. No. 870—Love, offering an amendment to the Civil Service Law in relation to preference allowed veterans. Our particular interest in this lies in the fact that there is already

in the law a preference given to disabled veterans In a civil service examination the disabled veteran shall be given preference over other competitors. The Civil Service Department is having difficulty in carrying out this provision, because it necessitates a physical examination of every veteran trying a civil service examination, in order to establish his disability before preference can be accorded him. Several lists are being held up at present because of the inability of the Department of Civil Service to secure physical examinations.

Assembly Int. No. 636, late Print No. 1346 This is an amendment to the Porter chiropractic bill, the original of which was identical with the McNaboe bill which we sent you some time ago—Senate Int. No. 361. Look this bill over very carefully. The first objectionable feature is that it provides for the creation of a special examining board to consist of chiropractors who are practicing in the state at the present time. The second point is that the definition of chiropractic has been extended to include the manipulation of tissues as well as the vertebral column This would make the chiropractor the equal of the osteopath. Third—while provision is made that no persons shall be licensed except they pass either the special or the regular written examination, these examinations will be before this board of chiropractors who are asked to present only such qualifications as those demanded of the applicant for licensure. It is very cleverly drawn now, but, nevertheless, it aims to admit to practice persons who are not educationally qualified.

Senate Int. No. 915—Fearon, amends the Education Law in relation to the practice of osteopathy. Observe carefully that this amendment would remove all restrictions from osteopaths with regard to the prescribing of drugs; in other words, if this were enacted into law every osteopath would immediately become a physician fully qualified to prescribe drugs, in spite of the fact that he had never received any training with regard to their use. It also would permit him to do surgery within certain limitations, not clearly defined; for instance, who can tell what is a cancer in its early state?

Opposition to the last two bills should be registered immediately, because action will be taken upon them in committee early next week.

BULLETIN NO. 7—MARCH 4, 1931

Since issuing our last bulletin, the following bills have been introduced:

Senate Int. No. 1080—Wicks (Assembly Int. No. 1453—Bentley), authorizes the Greene County supervisors to establish a public general hospital. Referred to Internal Affairs Committee.

Assembly Int. No. 1462—Foody, is this year's version of the methanol bill which Dr. Lattin carried for a number of years. This bill prohibits the sale of food, drink, medicinal or toilet preparations or anti-freeze mixtures for autos containing wood alcohol, methanol, methyl alcohol, or sale of such alcohols except under license and with label. Referred to the Codes Committee.

Assembly Int. No. 1464—Gimbrone, amending the Workmen's Compensation Law. This is a reintroduction of last year's free choice bill. Referred to the Labor Committee.

Assembly Int. No. 1470—Hanley, amends the Workmen's Compensation Law, providing that claims for legal services and medical treatment when approved shall be payable forthwith and deductable only out of last payments of compensation award. Referred to the Labor Committee.

Assembly Int. No. 1500—Sullivan, adds a new article, 11-a, and repeals section 181-a of the General Business Law, relative to nurses' registries. Referred to the Judiciary Committee.

Assembly Int. No. 1540—Cahill, amends section 377 of the Public Health Law, relative to registration of death certificates. Referred to the Health Committee.

Action on Bills

Assembly Int. No. 574—Dickey, making it a violation of article to obtain habit-forming drugs from one physician while receiving treatment from another without disclosing the fact, has passed the Assembly.

Hearings

A hearing has been accorded the anti-vaccination bill and the Love finger print bill, by the joint Health Committees. Anderson, of the Citizens' Medical Reference Bureau, New York City, appeared in favor of the anti-vaccination bill. As in previous years, this bill was introduced at his request. In addition to our Executive Officer, there appeared in opposition, representatives of the State Department of Health; Dr. Darlington, from the New York City Department of Health; and Mrs. Wakely, of Saratoga Springs, representing the Parent-Teachers' Association.

The Assembly Education Committee requested the Executive Officer and representatives of the Department of Education to appear before them on Tuesday to explain the amendments involved in the chiropractic, osteopathic and physiotherapy bills.

The Assembly has adopted a resolution to adjourn on March 28th.

HARRY ARANOW,
WALTER A. CALIHAN,
JOHN J. RAINEY,

Committee on Legislation
Medical Society of the State of New York.

PHYSICAL THERAPY CLINICS OPEN FOR GENERAL PRACTITIONERS

The Committee on Physical Therapy of the Medical Society of the State of New York herewith publishes a list of physical therapy clinics which practitioners are welcome to visit at the times stated. The physician in charge at each clinic will be glad to demonstrate the work so that physicians can become familiar with its scope and later avail themselves of the existing regular postgraduate courses for the thorough study of its theory and practice. There is, of course, no charge for attending any of these clinics:

New York City

Beekman Street Hospital; Daily, 9:00 A.M. to 5:00 P.M. (except Saturday, 9:00 A.M. to 12:00 M.). Dr. Randolph Raynolds and Dr. Wm. B. Snow, Jr.

Hospital for Joint Diseases; Daily, 9:00 A.M. to 4:00 P.M. Dr. Jerome Weiss.

Hospital for the Ruptured and Crippled; Daily, 1:00 P.M. to 3:00 P.M. Dr. K. G. Hansson.

Misericordia Hospital; Daily, 9:00 A.M. to 3:00 P.M. Dr. Robert Muller.

Montefiore Hospital; Daily, 9:00 A.M. to 5:00 P.M. Dr. I. M. Leavy.

Mount Sinai Hospital; Daily, 9:30 A.M. Dr. Heinrich F. Wolf.

Polyclinic Hospital; Daily, 10:00 A.M. Dr. Richard Kovacs.

Vanderbilt Clinic; Daily, 9:00 A.M. to 5:00 P.M. (except Saturday, 9:00 A.M. to 12:00 M.). Dr. Norman E. Titus and staff.

Albany

Albany Hospital; Daily, 9:00 A.M. to 10 A.M. and 3:00 P.M. to 5:00 P.M. Dr. John W. Ghormley.

Syracuse

University Hospital; Wednesday, 2:00 P.M. and Saturday, 9:15 A.M. Dr. J. J. Levy.

Memorial Hospital; Daily, 9:00 A.M. Dr. Lee A. Hadley.

As other approved opportunities are offered, they will be added to this list.

RICHARD KOVACS, *Chairman.*

KINGS COUNTY RESOLUTIONS

The Medical Society of the County of Kings passed four resolutions on legislative subjects at its meeting held on February 17, 1931, and requested their publication in the NEW YORK STATE JOURNAL OF MEDICINE.

The first resolution is in opposition to bill number 4582 introduced in the United States Senate by Senator Frederick H. Gillette of Massachusetts. The bill amends section 305 of the Federal Tariff act of 1922, and sections 211, 245 and 312 of the Federal criminal code. The Tariff Act forbids the importation of articles or literature in which there is involved either lottery, or obscenity, or the prevention of conception, or unlawful abortion. The law implies that some forms of abortion may be lawful, but it also implies that nothing concerned with the prevention of conception is lawful.

The sections of the Federal Criminal Code are of a similar nature, and forbid the mailing, transportation, distribution, or exhibition of practically everything mentioned in the Tariff Act.

Senator Gillette's amendment is intended to exempt literature, information, instruments, and drugs when put out by proper medical authority. That part of the amendment to which Kings County Medical Society objects reads as follows:

"The provisions of this section shall not apply (1) to information relating to the prevention of conception if published either within or without the United States by any governmental agency, medical society, medical school, or medical journal, or if reprinted after such publication, by any person or organization whatever."

The objection is to the second clause which is a sweeping permission that the reprinting may be done by any person or organization whatever. The Medical Society of the County of Kings therefore "Disapproves the provisions of the Bill and opposes its enactment because it not only opens the door for unlicensed and vicious teaching and practice of birth-control, but it also interferes with the freedom of scientific congress among 'medical men in the exchange of their views in medical schools, medical societies and medical journals' in that it authorizes the use and reprinting of such delicate and potentially dangerous material and information, at will, by 'Any person or organization whatever.'"

The second resolution adopted by the Kings County Medical Society was in opposition to a health insurance bill which is described in the resolution as follows:

"WHEREAS: Assembly Bill No. 5 introduced by Assemblyman Cuvillier in the current session of the legislature and described as 'An act to establish a system of compulsory insurance to fur-

nish benefits for employees in case of old age unemployment, death, sickness and accident, not covered by workmen's compensation and for their dependants in case of sickness, accident and death, and to furnish maternity benefits, and to provide for contribution by employers, employees and the State, and to create the health insurance commission' contains all the features that have been objectionable to the Medical Society of the County of Kings in other similar bills introduced in other years, and

"WHEREAS: The Bill, as presented this year, in addition to health insurance, includes old age and unemployment insurance thereby confusing the issues and broadening the appeal for support of a measure designed primarily to fasten on the State and the medical profession a system of compulsory health insurance, therefore be it

"Resolved, that the Medical Society of the County of Kings reiterates and reaffirms the opposition it has consistently maintained against such legislation."

The third resolution was in opposition to Senate Bill, No. 346 amending the mental hygiene law so as to create a Board of Examiners whose membership might include psychologists and other non-medical experts. The ground of disapproval is that the bill "is inimical to the best interests of the medical profession, the administration of justice and the State." The resolution also says:

"Resolved, that it is the sense of this Society that coordinated action within the County Societies and the State Society should be initiated for the purpose of having organized medicine present for legislative consideration a rational and effective measure to standardize and regulate expert examinations and testimony in criminal cases, in relation to the existence of insanity or mental defect on the part of the defendant at the time of the alleged commission of the offense charged."

The fourth resolution was in approval of Assembly Bill No. 588, Senate 386, which "provides for an Act to amend the Civil Practice Act and the decedent estate law, in relation to the survival of actions for personal injury. This is to correct the law so the right of action for personal injuries would survive after the death of the wrongdoer where the law now specifically excludes an action for personal injuries."

GREENE COUNTY

The Board of Supervisors of Greene County considered the question of a County Hospital at its meeting on February 17, and voted unanimously to establish it. The resolution was as follows:

"Resolved, That there be established in and for the County of Greene, pursuant to Sections 45 and 49 of the County Law and 126 of the General Municipal Law, a County Hospital, said hospital to be erected in the Village of Catskill at a cost not to exceed $70,000, including equipment, and to be operated with funds jointly from the State of New York, Department of Public Health, pursuant to said Sections 45 and 49 of the County Law and Section 126 of the General Municipal Law, and funds jointly to be received from the Trustees of the Greene County Memorial Hospital Committee, said Trustees to provide the amount of $35,000 for the erection and equipment of said hospital and also such amounts as may be necessary from the income of the trust funds in the hands of said Greene County Memorial Hospital Committee to meet any deficit which might occur in the maintenance and operation of said hospital."

The establishment of a county hospital for Greene County has been under consideration for several years, and a legacy of $50,000 was available for the purpose. (See this Journal May 15, 1929, page 627.)

A special meeting of the Greene County Medical Society was held on the evening of Thursday, February 26th, for the purpose of discussing the advisability of establishing a county health unit for Greene County. A general meeting, which was open to the public, was first held in the Court House. A meeting of the Health Officers of the County was also called by Dr. F. E. Coughlin, Acting District State Health Officer, to discuss the question, but no official action was taken.

A dinner was served at 7 P. M., after which Dr. William H. Ross, President of the Medical Society of the State of New York, addressed the meeting.

The question of a County Health unit for Greene County was then debated by the members of the Society and some of the members of the Board of Supervisors who were present. No official action was taken, for the sentiment was in favor of awaiting the action of the Legislature in regard to the bill compelling the establishment of county boards of health in all counties by September 1, 1931, as was suggested by the Governor's Health Commission.

W. M. RAPP, *Secretary*.

TOMPKINS COUNTY

The Comitia Minora of the Tompkins County Medical Society met on January 14, and considered ways and means of carrying out the provisions of the Welfare Law. The following principles were formally stated to be applicable to the City of Ithaca:

1. It should be recognized that the Welfare Official can pay for no services (except those rendered in emergency), unless he has previously authorized the same, preferably in writing.

2. The attending physician should report promptly to the Welfare Official at the termination of service on each case; and on prolonged cases make frequent reports of progress or the opposite. He should consider the Welfare Official as the head of the family which he is serving.

3. At the termination of service in each case the physician should at once render his bill for such service and be sure it is properly sworn to.

4. The fees charged by the attending physician should be the minimum fees adopted by the County Medical Society for such cases or the usual minimum fees for such cases.

It was also suggested that there be created a grievance and advisory committee of the society to which may be submitted for adjustment any differences arising beween the physician employed and the welfare official, and, if occasion arises, confer with the Mayor, and, or, with the Finance Committee of the Common Council.

These principles were adopted at the meeting of the county society in January, and were approved by the Mayor of Ithaca.

The Society held a special meeting on February 10 and adopted a minimum fee bill for welfare work (see next article).

The regular February meeting of the Society was held Tuesday evening the 17th, at the Ithaca Hotel, with a fairly full attendance despite a stormy night. Several visitors were present from the Cortland County Society and from Clifton Springs.

A resolution upon the recent death of Dr. Veranus A. Moore, a distinguished member of our Society, was adopted, ordered spread upon the minutes and a copy sent to the bereaved family.

Dr. Howard L. Prince of Rochester then opened the scientific session, speaking on "Vascular Diseases of the Extremities" citing many such conditions and their appropriate treatment. Discussion was opened by Dr. F. J. McCormick, followed by Dr. J. H. Wattenberg of Cortland, Dr. Floyd R. Wright of Clifton Springs, Drs. Martin B. Tinker, H. B. Sutton, and J. W. Papez of Ithaca.

Dr. William D. Johnson of Batavia presented interesting conditions, including Ruptured Liver, Duodenal Ulcer, Peritonitis, Infected Kidney, and Intestinal Obstruction—presenting each briefly, succinctly and to the point in his usual happy and impressive manner. Discussion was opened by Dr. Martin B. Tinker followed by Drs. F. J. McCormick, W. F. Lee, J. H. Wattenberg, H. B. Sutton, and Howard L. Prince.

The members, after passing a vote of thanks to the speakers, enjoyed a buffet lunch and indulged in a general visit before breaking up. The remark was many times heard that this was one of the most enjoyable, interesting and instructive meetings of the season.

FEE LIST, TOMPKINS COUNTY

The following Minimum Fee Bill was adopted February 10, 1931, at a Special Meeting of the Tompkins County Medical Society called solely for the purpose of establishing services rendered to Welfare patients at the request of Commissioners of Public Welfare, and applies only to those Physicians residing in the City of Ithaca, N. Y.

GENERAL

Office call, $1.50.
Day house call, $2.00.
Hospital call, $2.00.
Call outside the City—$3.00 for the first mile outside city; .50 for each mile thereafter, one way.
Night house call received afer 9 o'clock p.m., $4.00.
Surgical dressing at house, $1.00 extra.
Consultation, $5.00.
General physical examination, $3.00.
Gynaecological examination and treatment, $3.00.
Genito-urinary examination and treatment, $2.00.
Cystoscopic examination, $25.00.

OBSTETRICS

Uncomplicated cases, $25.00.
Complicated or instrumental, $35.00.

SURGERY

Minor surgery, incisions, etc., $5.00
Caesarean section, $100.
Dilation and curettage, $25.00.
Salpingectomy, $75.00.
Oophorectomy, $75.00.
Circumcision, $10.00.
Fractures—
Colles, uncomplicated, $25.00.
Arm or forearm, $50.00.
Clavicle, $25.00.
Thigh, $75.00.
Neck of femur, $100.
Leg, $50.00.
Ribs, $20.00.
Fingers or toes, $10.00.
Reducing dislocations, $15.00.
Appendectomy uncomplicated, $75.00.
Gastro-enterostomy, $125.00.
Repair single hernia, $75.00. Double hernia, $125.00.
Prostatectomy, $100.00.
Nephrectomy, $125.00.
Catherization, $5.00.
Resection of rib, $75.00.
Aspiration, $15.00.
Mastectomy, single, $50.00. Radical, $125.00.
Drainage of gall bladder, $75.00.
Cholecystectomy, $100.00.
Hemorrhoidectomy, $25.00.
Transfusion, $25.00.
Intravenous saline, $10.00.
Laparotomy, $100.00.
Hysterectomy, $100.00.
Goiter, $100.00.

ANÆSTHESIA

Surgical—ether or chloroform, $10.00.
Gas—ther, $15.00.

EYE, EAR, NOSE AND THROAT

Mastoidectomy single, $125.00. Double, $165.00.
Removal of cataract, $125.00.
Enucleation of eye, $75.00.
Opening of ear drum, $10.00.
Opening of antrum in office, $5.00.
Sub-mucus resection, $50.00.
Iridectomy, $50.00.
Removal of foreign bodies in cornea, $5.00.
Refraction, $5.00.
Fracture of nose, $25.00.
Tonsillectomy, $25.00.

COURSE IN EARLY DIAGNOSIS FOR QUEENS COUNTY

A special course in early diagnosis has been arranged for members of the Queens County Medical Society through [illegible] of the Society with the Special Health Examinations, the School, and the Queensboro Tuberculosis and Health Association.

The course will be given in the Post-Graduate Medical School and Hospital, 20th Street and Second Avenue, at 8 o'clock on Monday evenings, from March 23rd to April 13th. Four sessions will be held, each consisting of three parts:

1. A lecture on the early diagnosis of a general condition by a member of the Staff of the Medical School.

2. A talk on pre-clinic signs in the same condition by Dr. C. Ward Crampton.

3. The examination of cases and then round table discussion.

The four subjects of the lectures in the course are as follows:

March 23, Early Diagnosis in Surgery by Dr. H. H. Ritter.

March 30, Early Diagnosis in Medicine, by Dr. Herman O. Mosenthal.

April 6, Early Diagnosis in Gynecology, by Dr. Walter Dannreuther.

April 13, Early Diagnosis in Nervous Disorders, by Dr. Michael Osnato.

CAYUGA COUNTY

The 125th annual meeting of the Cayuga County Medical Society was held on December 9th, 1930, at the Pompeian Room in the Osborne Hotel, Auburn, at which 65 physicians of Cayuga County, their wives and invited guests were present. Dr. C. F. McCarthy, president for 1930, presided.

The reports of the officers showed the medical association in a prosperous condition with a balance of $1,000 in the treasury and practically 100 per cent membership of physicians and surgeons of the county identified with the county society and also the Medical Society of the State of New York.

The principal event of the evening was an address by the Rt. Rev. John Francis O'Hern, Bishop of the Catholic Diocese of Rochester. The Bishop showed himself to be familiar with medical affairs, and discussed hospitals with a breadth of view that is unusual even among physicians. His address is published in full on page 330 of this Journal.

THE DAILY PRESS

HONOR TO DR. CHARLES STOVER

The *Amsterdam Evening Record* of March 2, contains the following account of a meeting in honor of Dr. Charles Stover who was President of the Medical Society of the State of New York in 1910:

"Saturday, February 28, was the 80th anniversary of the birth of Dr. Charles Stover, for 50 years a practicing physician in this city; and at a special meeting of the medical staff of the City Hospital recognition was made of the event.

"Dr. Horace M. Hicks said that it is given to very few men to complete their 80th year in full possession of all medical and physical faculties.

"Dr. David Wilson recalled his associations with Dr. Stover during his own boyhood and later as a physician. He said that it was the impression made upon him as a boy by Dr. Stover that created his own desire to become a physician.

"Dr. E. C. LaPorte, in his tribute, declared that the brightest spot in his practice of medicine in Amsterdam was his association with Dr. Stover.

"Dr. Julius Schiller said that one of Dr. Stover's finest characteristics in his ability to disagree with one in a gentlemanly manner. He can disagree to the end and carry no grudge. His disagreement is firm and forceful, and leaves one with as much or more respect for him than at the beginning."

The NEW YORK STATE JOURNAL OF MEDICINE extends its congratulations to Dr. Stover in the name of the medical profession of the Empire State.

CRITICISM OF PHYSICIANS

The *New York Times* of January 21 comments editorially on an article signed "Alice Elinor" in the February *Forum*, written by a nurse in criticism of the doctors who attended her in an hospital. The editorial says:

"She burns with indignation because not one of the dozen specialists consulted during five years of ever-increasing pain made the one examination which would have revealed the cause of her ailment. The fact that she had had two children did not interest the doctor skilled in intestinal disorders, nor his brother who ignored everything but the kidneys, nor the spine man, nor any of the other specialists.

"Her more general complaint of doctors is their failure in diagnosis. The tendency toward specialization might be expected to bring medicine ever further from the arts and closer to science. Yet this patient, like a number of others whose experiences have recently been published, declares that diagnosis has become so hasty and casual that it is hardly better than guesswork.

"It is true that most physicians work under terrific pressure. Many of them lack that rare intuition and knack for diagnosis which make a few famous. The public complaint is not against individual doctors, but against the widening breach between the family and the family physician, who is qualified to direct them to the specialist they really need.

PUBLICITY AND CRIME

The New York *Times* of February 12 has an editorial discussion of the effect of publicity on crime, and says:

"Police Commissioner Mulrooney, addressing the Women's Democratic Union, deplored the effect of the publicity of crime in making new crops of criminals. 'Whenever the newspapers publish details of an unusual crime, it will almost inevitably be repeated,' he said. In two instances when the newspapers failed to obtain the facts of two ingenious swindling devices they never appeared in practice again."

The editorial writer argues that the duty of newspapers is to present the news, and of the Police Commissioner to prevent crime. Psychiatrists know that reading the story of a crime impels others to emulate the criminal. Yet doctors will agree with the editor when he says:

"What really increases the criminal crop is the exploiting in sensational newspapers of the criminals themselves. The 'own story' and 'frank confession' type of journalism is what breeds the spirit of emulation. If there were none of this, the commissioner's troubles would be fewer."

FOSSIL WEATHER

By a study of the annual rings of growth on treetrunks and their sequence, scientists of the American Museum of Natural History have computed how many years ago the logs of long deserted houses of Cliff Dwellers in Arizona were living trees A similar study of the layers of clay in the brick yards of Haverstraw has disclosed the number of the annual floods which deposited the layers The New York *Herald Tribune* of February 22 devotes an editorial to a similar revelation of weather conditions, and says

"Less attention than it deserves has been attracted to a really exciting publication recently from the presses of the United States Geological Survey Out in Wyoming and Utah there existed millions of years ago a lake country not unlike our present chain of Great Lakes but smaller Rocks now exposed in the region have long been recognized as bottom muds and sands deposited in these ancient lakes and since hardened and exposed by the slow alterations of the earth's crust During recent years Mr Wilmot H Bradley of the Survey's staff of geologists has been climbing about over the sides of ravines where these ancient lake beds are exposed measuring thousands of paper thin layers of darker and lighter material which he identifies as annual layers deposited by the ancient lake, like the annual growth rings of trees Thus he has uncovered a record of fossil weather unequaled anywhere The thicknesses or thinnesses the dark colors or the light the percentages of sand or oil or limestone crystals of these ancient lake layers are capable of yielding, he believes, veritable records of temperature and rainfall from those long ago days'

The writer describes the discovery that the layers disclose cycles of weather, one of eleven years, corresponding to the cycle of sun spots, and *one of 21,600 years, possibly representing a* grand cycle of the precession of the equinoxes The writer closes with the remark

Perhaps most exciting of all is the evidence that millions of years ago things were moving with our earth our sun and our weather almost precisely as they do today The same sunspots were repeating themselves every eleven years, the same weather changes were recording the vaster cycle of the equinoxes It is doubtful whether man ever has discovered a historical document of as great interest as these annual records on the banks of Wyoming ravines and canyons

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PSYCHOLOGICAL EFFECTS OF EINSTEIN'S THEORY

Disclosures regarding the extent of the Universe, the constitution of space, and the nature of physical bodies are often items of front page news in the daily papers, and many have been their theological and metaphysical interpretations James J Montague, in his daily feature "More Truth Than Poetry" in the New York *Herald Tribune* of February expresses a universal human reaction to all these learned dissertations when he writes

I watch the stars perambulate
The avenues assigned them,
Each with its own allotted gait
And wonder what's behind them
Have they more stars, far out in space,
Upon their course to light 'em
The while they run their circling race,
And so ad infinitum?
If I from this terrestrial sphere
My hold some day should sever,
And dropped and dropped, year after year,
Would I just drop forever?

Does our sun have still greater suns
In still more distant places
While round its ether track it runs
Through interstellar spaces?
And must these other suns avoid
By moving with precision
Still bigger suns or be destroyed
In some immense collision?
And up, or down, or maybe out
Are other suns revolving?
And what do they revolve about?
This problem seems past solving

But when with realms of space at last
We all become acquainted
We'll likely find they're not as vast
As they have long been painted
These smallest details we shall know
About the starry legions
And maybe talk by radio
To spaces utmost regions
And yet I feel within my heart
No joyful palpitations—
I may not be here to take part
In these communications

BOOKS RECEIVED

Acknowledgment of all books received will be made in this column and this will be deemed by us a full equivalent to those sending them. A selection from this column will be made for review, as dictated by their merits, or in the interests of our readers.

CARE OF THE INFANT AND CHILD: A Book for Mothers and Nurses. By HARRY R. LITCHFIELD, M.D. and LEON H. DEMBO, M.D. Octavo of 138 pages, illustrated. Baltimore, Waverly Press, Inc., 1930.

THE MORBID PERSONALITY: Psycho-Analytical Studies in the Structure of Character and Personality. By SÁNDOR LORAND, M.D. Octavo of 181 pages. New York, Alfred A. Knopf, 1931. Cloth, $3.00.

THROUGH THE ALIMENTARY CANAL WITH GUN AND CAMERA: A Fascinating Trip to the Interior. By GEORGE S. CHAPPELL. 12mo of 231 pages, illustrated. New York, Frederick A. Stokes Company, 1930. Cloth, $2.00.

HOW IT HAPPENED. By ADALBERT G. BETTMAN, M.D., F.A.C.S. 12mo of 110 pages. Philadelphia, F. A. Davis Company, 1931. Cloth, $1.00.

PHILOSOPHY OF A BIOLOGIST. By SIR LEONARD HILL, F.R.S. 12mo of 88 pages. London, Edward Arnold & Company: New York, Longmans Green & Company, 1930. Cloth, $1.40.

ABNORMAL PSYCHOLOGY: Its Concepts and Theories. By H. L. HOLLINGWORTH, Ph.D. Octavo of 590 pages. New York, The Ronald Press Company, 1930. Cloth, $4.50. (Psychology Series.)

ORAL DISEASES: A Practical Treatise Offering Diagnostic and Therapeutic Aid to the Practitioner of Medicine and Dentistry. By JAMES J. ZEMSKY, D.D.S. Octavo of 402 pages, illustrated. Brooklyn, New York, Physicians and Surgeons Book Co., 1930. Cloth, $8.00.

CLINICAL ALLERGY particularly ASTHMA and HAY FEVER: Mechanism and Treatment. By FRANCIS M. RACKEMANN, M.D. Octavo of 617 pages, illustrated. New York, The Macmillan Company, 1931. Cloth, $10.50.

ABDOMINO-PELVIC DIAGNOSIS IN WOMEN. By ARTHUR JOHN WALSCHEID, M.D. Quarto of 1000 pages, illustrated. St. Louis, The C. V. Mosby Company, 1931. Cloth, $12.50.

THE CLINICAL INTERPRETATION OF BLOOD EXAMINATIONS. By ROBERT A. KILDUFFE, A.B., M.D. Octavo of 629 pages, illustrated. Philadelphia, Lea & Febiger, 1931. Cloth, $6.50.

MEDICAL CLINICS OF NORTH AMERICA. Vol. 14, No. 4. January, 1931. (Philadelphia Number.) Published every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues). Cloth, $16.00 net; paper, $12.00 net.

ANTE-NATAL CARE: Including the abnormalities associated with pregnancy and a section on post-natal care. By W. F. T. HAULTAIN, O.B.E., M.C. and E. CHALMERS FAHMY, M.B., F.R.C.S.E. Second edition. 12mo of 127 pages, illustrated. New York, William Wood & Company, 1931. Cloth, $2.25.

INFANT FEEDING IN GENERAL PRACTICE. By J. V. C. BRAITHWAITE, M.D., M.R.C.P. 12mo of 140 pages. New York, William Wood & Company, 1930. Cloth, $1.75.

PYE'S SURGICAL HANDICRAFT: A Manual of surgical manipulations, minor surgery, and other matters connected with the work of house surgeons and surgical dressers. Edited by H. W. CARSON, F.R.C.S. Tenth edition. Octavo of 641 pages, illustrated. New York, William Wood & Company, 1931. Cloth, $7.00.

A TEXT-BOOK OF MEDICAL JURISPRUDENCE AND TOXICOLOGY. By JOHN GLAISTER, M.D., D.P.H. in collaboration with JOHN GLAISTER, Jr., M.B., Ch.B. Fifth edition. Octavo of 954 pages, illustrated. New York, William Wood & Company, 1931. Cloth, $8.50.

HANDBOOK OF DISEASES OF INFANTS AND CHILDREN for students and practitioners. By F. M. B. ALLEN, M.D., M.R.C.P. Octavo of 595 pages. New York, William Wood & Company, 1930. Cloth, $5.00.

SURGICAL EMERGENCIES IN PRACTICE. By W. H. C. ROMANIS, M.A., M.B., and PHILIP H. MITCHINER, M.D., M.S. Octavo of 608 pages, illustrated. New York, William Wood & Company, 1931. Cloth, $6.00.

EPIDEMIOLOGICAL ESSAYS. By F. G. CROOKSHANK, M.D., F.R.C.P. Octavo of 136 pages. New York, The Macmillan Company, 1931. Cloth, $2.50.

THE PRACTICAL MEDICINE SERIES. Comprising Eight Volumes on the Year's Progress in Medicine and Surgery. Series 1930. Chicago, The Year Book Publishers, 1930. General Medicine. Edited by GEORGE H. WEAVER, M.D., and others. 12mo of 848 pages, illustrated. Cloth, $3.00.

OPERATIVE OBSTETRICS ON THE MANIKIN for students and practitioners. By CHARLES B. REED, M.D., F.A.C.S. Octavo of 314 pages, illustrated. Philadelphia, P. Blakiston's Son & Co., Inc., 1931. Cloth, $4.00.

LOVETT'S LATERAL CURVATURE OF THE SPINE AND ROUND SHOULDERS. Fifth edition revised and edited by FRANK R. OBER, M.D., and A. H. BREWSTER, M.D. Octavo of 240 pages, illustrated. Philadelphia, P. Blakiston's Son & Co., Inc., 1931. Cloth, $3.50.

AN INTRODUCTION TO PHARMACOLOGY AND THERAPEUTICS. By J. A. Gunn, M.D., D.Sc. Second edition. 12mo of 233 pages. New York and London, Oxford University Press, 1931. Cloth, $1.50. (Oxford Medical Publications).

THE TREATMENT OF CHRONIC DEAFNESS by the Electrophonoïde Method of Zünd-Burguet. By GEORGE C. CATHCART, M.A., M.D. Second edition. 12mo of 111 pages, illustrated. New York and London, Oxford University Press, 1931. Cloth, $1.50. (Oxford Medical Publications).

BOOK REVIEWS

LABORATORY MEDICINE. By DANIEL NICHOLSON, M.D. Octavo of 433 pages, illustrated. Philadelphia, Lea & Febiger, 1930. Cloth, $6.00.

Laboratory Medicine by Nicholson is one of the best books on the subject that it has been the good fortune for the reviewer to read. In the preface the author states that "the aim of the book is to provide in detail, information on the indications, method and interpretation of useful tests that a medical practitioner should be able to perform. It also outlines the principles and interpretation of the more highly technical diagnostic procedures which may be performed for him at a large laboratory." He has surely attained his aim. The little volume contains a veritable wealth of knowledge so arranged and described that its usefulness is generous. It is impossible to enumerate the contents in a short review, but the entire field of laboratory medicine is fully covered. The author has indeed supplied just the kind of work that will be of inestimable value to the general practitioner, and of great practical assistance to the laboratory worker.

The author is to be congratulated on the original arrangement of the subject. His presentation, too, is practical, and conveys the definite indications, methods and application of any laboratory work which he describes. No practitioner of medicine can really afford to omit this book from his library, if he practices modern medicine.

MAX LEDERER.

TROPICAL MEDICINE. By SIR LEONARD ROGERS, M.D. and JOHN W. D. MEGAW, C.I.E. Quarto of 536 pages, illustrated. Philadelphia, P. Blakiston's Son & Co., Inc. 1930. Cloth, $4.00.

This is a relatively small work for the man in the field or the general practitioner who occasionally encounters tropical disease. There is enough discussion—and authoritative discussion—of etiology and pathology to give the reader an intelligent idea of what it is all about, but the emphasis is placed on the practical problems of recognition and handling of the characteristic maladies of hot countries, particularly India.

T. H.

DISEASES OF THE EAR. By PHILIP D. KERRISON, M.D. 4th revised and enlarged edition. Octavo of 627 pages, illustrated. Philadelphia and London, J. B. Lippincott Company, (c. 1930). Cloth, $7.50.

There is an excellent chapter on the anatomy of the ear which would be enhanced if the author were to enlarge his illustrations. Those on the radical mastoid are poor, and should be enlarged.

Mention is not made of the Electric Otoscope. This is of value after examining an ear with the ordinary speculum, in small babies, in consultation in the home, and for those who have not microscopical eyes.

The chapter on functional testing omits the use of the audiometer based on the vacuum tube principle first described by Guttman in 1921, and developed the following year by the Western Electric Co. This instrument is fast superseding the tuning forks and will be in the hands of every otologist as soon as he recovers from his losses in Wall Street.

Diabetes as a cause of furunculosis, pus and polypi coming from the antrum, and the radical mastoid operation causing a serous labyrinthitis are not mentioned. The chart differentiating the various forms of labyrinthitis could be dispensed with and replaced by that of Neuman. Some men will disagree with the author in giving the Gradenigo-syndrome as an indication for a mastoid operation. Occurring in an acute otitis it may clear up without operation. A polyp on the promontory can be removed with a strong solution of Silver Nitrate and Enzymol in a great number of cases without recurring or danger to the labyrinth and without doing a radical mastoid.

The Kobrak test is not mentioned nor is Primary Jugular Bulb thrombosis described. There are several other methods of differentiating a sinus thrombosis occurring in a double mastoiditis, beside the Tobey-Ayer test. Mention is not made of Fowler's interesting contributions on the relation of sinus infection to ear disease. Nor does the author quote from Eagleton's many papers on intracranial complications which should be read over and over again by every otologist.

The chapters on the chronic ear, facial paralysis, and Acoustic tumors are excellent. This is an interesting book and should be read by every otologist.

H. W. RUBIN.

DISEASES OF THE SKIN. A Text-book for Practitioners and Students. By GEORGE CLINTON ANDREWS, A.B., M.D. Octavo of 1091 pages with 988 illustrations. Philadelphia, W. B. Saunders Company, 1930.

From the number of new books devoted to dermatology which have appeared during the past few years together with new editions of the older works on this subject; it would seem that a new work on diseases of the skin was not needed, but even a cursory review of Dr. Andrews' book shows that it is both timely and of great value.

Dr. Andrews has added much material in his book which is not found in the older works. He has made a radical change in his arrangement of the different divisions of his subject, for example, etiology and pathology are considered in one section and not taken up with each separate disease. Under the heading of Classification he has given the older ones. This is interesting and instructive. The application of physiotherapy to this branch of medicine is most excellently explained. The physics of X-rays and Radium is complete. The newer Grenz rays are also described with indications for their use.

The bibliography is extensive. The description of the different conditions affecting the skin is good. The photographs have been well chosen. In brief, the reviewer can find only praise for the work. It should be in every physician's library, both specialists and general practitioners; and for students it deserves to rank with the classical Introduction to Dermatology of Norman Walker.

The mechanical construction of the book is good. The printing is clear, the paper and binding are excellent.

BINFORD THRONE.

CONGENITAL CLUBFOOT. By E. P. BROCKMAN, M.Chir., F.R.C.S. Octavo of 110 pages, illustrated. New York, William Wood & Company, 1930. Cloth, $4.00.

Dr. Brockman has produced an excellent treatise on clubfoot, or rather on the subject of congenital equinovarus not including the other congenital deformities of the foot usually considered under this classification in America. This book won the Sir Robert Jones Gold Medal for 1928 given by the British Orthopedic Association. The history of clubfoot is traced from the time of Hippocrates down through Scarpa and Little to the present, and so the author groups together in a fascinating manner the literature of the subject and this in itself is a valuable contribution.

There is however nothing new developed as to either etiology or treatment but many theories of the past of both are thoroughly discussed. The treatment of the early clubfoot will surprise many Americans as it consists of manipulation only without the fixation usually used here. One must remember however that the orthopedic surgeon of England really had as predecessor the bone setter whereas with us the orthopedic surgeon was a refined or special general surgeon becoming a specialist. As a result true manipulation as a measure for correction of deformities is more conspicuous in England than here where we have developed open operations more fully.

Ja. C. R.

STUDIES ON THE DIAGNOSIS AND NATURE OF CANCER. By Various Authors. Being Reprints of Special Articles from the "Cancer Review." Octavo of 240 pages. New York, William Wood and Company, 1930. Cloth, $4.00.

The British Empire Cancer Campaign has compiled the reprints of special articles written for the "Cancer Review" and published them in this volume of 221 pages.

Early diagnosis of the most common cancers is considered in a number of well written articles by such authorities as Handley, Kolodny, Morson, Lockhart-Mummery, Kerley, Wyard and Sir St. Clair Thomson.

The nature of cancer is discussed in (a) "The Metabolism of Tumors" by Cramer; and (b) "The Relation of Heredity to Cancer" by Cockayne. An extensive article on "Immunity to Transplantable Tumors" by Woglom, reviews 600 pertinent papers.

The book thus brings to the clinician a clear insight into the present concept of the nature of cancer, and emphasizes many practical points in the early diagnosis of neoplasms.

HARRY MANDELBAUM.

OBSTETRICS. By J. WHITRIDGE WILLIAMS. 6th enlarged and revised edition. Octavo of 1157 pages, illustrated. New York & London, D. Appleton & Company, 1930. Cloth, $10.00.

Williams' well known text book in its sixth revision is better than ever. It is an ideal text for the real student of obstetrics, the specialist anxious to increase his knowledge. It is a veritable mine of information, and yields place to no other book in the discussion of abnormal mechanisms. Pelvic deformities are exhaustively covered. It is not, however, a good textbook for the medical student, who must be drilled in essentials, before he is disturbed by critical analysis, and philosophical discussion. It is interesting to note that Williams has not yet fully accepted Henderson's views on carbon dioxide as the sole stimulant of delayed fetal respiration. The book is a masterpiece, and invaluable to the obstetrician.

C. A. G.

HISTOLOGY FOR MEDICAL STUDENTS. By H. HARTRIDGE, M.A., M.D., and F. HAYNES, M.A. Octavo of 369 pages, illustrated. New York & London, Oxford University Press, 1930. Cloth, $5.00. (Oxford Medical Publications.)

In fifteen short chapters concisely, yet fully explanatory, the authors have covered the subject of Histology in all its phases and necessary subdivisions. The various tissues and organs are described microscopically and discussed embryologically and physiologically. The definitions of new terms are simple and clear.

There are 82 well labeled colored plates, illustrating every possible detail.

The section on fixation, cutting and staining of tissues and microscopy, usually very difficult and uninteresting, is really very delightful reading.

The classification and description of connective tissue, the very important tissue, is briefly, orderly, and very intelligently compiled.

The chapter on blood and blood forming organs is very meaty. It touches the reticulo-endothelial system.

The brain and spinal cord are rigidly covered in 25 pages.

The authors should be commended for their very practical volume which should be an asset to the armamentarium of the toiling student of Histology.

NATHAN REIBSTEIN.

RIDERS OF THE PLAGUES. The story of the conquest of disease. By JAMES A. TOBEY. Octavo of 348 pages, illustrated. New York, Charles Scribner's Sons, 1930. Cloth, $3.50.

This is a very readable book, written by a Doctor of Public Health, who understands his subject thoroughly. It describes the great plagues which have devastated the human family, from the earliest historic times up to the present day, in a popular style, which presents the scientific facts in a manner readily comprehensible to lay people.

Embodied in the book are brief histories of the outstanding men who have successfully coped with these epidemics of disease and, in many instances, discovered their causes, and elaborated efficient methods for their prevention. It is a volume which should be on the waiting room table of the doctor and on the shelves of those who are interested in public health and the noble, unselfish efforts of scientists who have risked and even lost their lives for the public weal. The book is beautifully printed and well illustrated.

J. M. VAN COTT.

A PRACTICAL MEDICAL DICTIONARY. By THOMAS LATHROP STEDMAN, A.M., M.D. 11th revised edition. Octavo of 1222 pages, illustrated. New York, William Wood & Company, 1930. Cloth, $7.50.

After comparing Stedman with other medical dictionaries, the reviewer does not hesitate to say that he considers it the best.

Dr. Stedman is to be congratulated for saving the medical dictionary from the degradation of becoming the desk-book of a single group of publications. He is preserving the purity of the language of medicine by observing correct orthography established by usage, not the whim of an editor. This is the paramount duty of a lexicographer. When the editor of a medical journal deliberately chooses to misspell terms, he is within his rights. But any attempt to carry this faulty orthography into a dictionary, and thus represent it as generally accepted, is a corruption of the language of medicine and a violation of the rights of the reader.

Up-to-date in its definitions and free from bad spelling, Stedman is a dictionary upon which both physician and medical student can depend.

FREDERIC DAMRAU.

GROW THIN ON GOOD FOOD. By LUELLA E. AXTELL, M.D. 12mo. of 336 pages. New York and London, Funk & Wagnalls Co., 1930. Cloth, $2.00.

A number of fairly good books on weight-reducing have been published for the layman during the past year. This book does not depart essentially in its method of presentation from that of its predecessors.

The information is wholesome in that it conforms with accepted professional methods of treatment. The reader is warned against the uses of drugs, or against sudden losses in weight through physics or baths. Dr. Axtell recommends the free use of water, and besides offers a complete diet schedule for 21 successive days to effect a satisfactory reduction. In perusing these tempting diets the reviewer wondered whether they could actually help to reduce weight on that account. At any rate this book reflects a painstaking effort to offer something tangible for the reader, and a trial experiment by the layman could surely do no harm, especially if the cause of the obesity has been established by the practitioner.

EMANUEL KRIMSKY.

NERVOUS INDIGESTION By WALTER C ALVAREZ M D Octavo of 297 pages New York Paul B Hoeber Inc 1930 Cloth $3 75

In this book a subject of great practical interest is treated in a very satisfactory manner The ideas which most physicians have about nervous indigestion are rather vague this book will greatly clarify them It puts this difficult subject on a scientific basis It tells how emotion affects the digestive tract and what are the types of indigestion thus produced Very wise are the directions given for managing the patient which is an important part of the treatment This book should have a large appeal for the medical profession

F I CAVANAH

RECENT ADVANCES IN DISEASES OF CHILDREN By WILFRED J PEARSON D M and W G WYLLIE M D M R C P Second edition Octavo of 548 pages illustrated Philadelphia P Blakiston's Son & Co Inc 1930 Cloth $3 50

The title might suggest a review of the literature but instead the authors have given a brief practice of Pediatries somewhat general their word recent giving the practitioner some older material along with that just out

The main impression given is the general uniformity of thought in disease and standardization of method in treatment though we do think ourselves a bit ahead in our country

The authors place greater stress on diathesis than most of us are inclined to

The book is readable it is worth while for Americans to get the English point of view

One small point specially interests this reviewer The Mental Deficiency Act of 1927 recognizes Idiots Imbeciles, Feeble Minded Persons and *Moral Defectives*

W D I

LEONARDO DA VINCI The Anatomist By J PLAYFAIR McMURRICH Octavo of 265 pages Illustrated Baltimore, Williams & Wilkins Company 1930 Cloth $6 00

Leonardo da Vinci was essentially a scientist His work in Anatomy demonstrates it clearly He no doubt took to dissecting to aid him in his paintings and sculpturing nevertheless his anatomical drawings and manuscripts show that he became inquisitive in his anatomical studies far beyond his first purpose This phase of Leonardo's genius has been most ably evaluated by Prof McMurrich one of our leading modern anatomists His analysis of da Vinci's anatomical achievements is most unprejudiced based on his profound knowledge of anatomy *and of the history of anatomy It took him* ten years to create this volume of 265 pages for the Carnegie Institution It is a masterpiece most interesting instructive and entertaining He has added one more treatise to Medical History a branch of Medicine so important for the betterment of cultural Medicine

GAETANO DE YOANNA

MOTHER ALPHONSA Rose Hawthorne Lathrop By JAMES J WALSH M D Octavo of 275 pages illustrated New York Macmillan Company 1930 Cloth $2 25

A delightful book

The appealing story of Mother Alphonsa Lathrop younger daughter of Nathaniel Hawthorne who rented a little flat in New York City took incurable cancer cases into her home and mothered the work so devotedly that the little flat grew up into Rosary Hill Home Hawthorne in Westchester New York For thirty two years she labored in the cause of the poor afflicted with incurable cancer Only those were admitted for whom there was no hope Her story will never grow stale and will repay reading

C A G

HANDBOOK OF ANATOMY By JAMES K YOUNG, M D Revised by GEO W MILLER M D 7th revised edition Octavo of 460 pages illustrated Philadelphia F A Davis Company 1930 Flexible Cloth $3 75

This handbook of Anatomy is so familiar to the average *student of Medicine that it does not require any* introduction It is to be recommended as a Vade mecum to the student of anatomy and graduate in Medicine

GAETANO DE YOANNA

AN OUTLINE OF CONTRACEPTIVE METHODS for Physicians and Medical Students Exclusively By JAMES F COLLER M D Octavo of 23 pages New York City *The American Birth Control League 1930*

*Recent meetings arranged for physicians by the Amer*ican Birth Control League have proved by their large representations that the subject of contraception is one which concerns every practitioner of medicine That such an important prophylactic measure should be tabooed from discussion by our more prominent medical journals has been responsible for much misunderstanding on this matter

This booklet of 23 pages is full of valuable information and tells the practitioner in simple terms why almost every contraceptive measure with one or two exceptions is either harmful or ineffective EMANUEL KRIMSKY

THE DEVIL An Historical Critical and Medical Study By MAURICE GARÇON and JEAN VINCHON Translated by STEPHEN HUDEN GUEST from the Sixth French Edition Octavo of 288 pages New York E P Dutton and Company Inc. 1930 Cloth $3 50

The book is divided into two parts In the first which comprises more than one half the volume the authors discuss magic demonology witches witchcraft sorcerers, exorcism etc with numerous references to the Bible In quoting from a book by Sammarinus it is stated that there are seventeen symptoms which for a theologian, denote a demoniac The doctors signs enumerated by Baptiste Codroncus are also seventeen in number, the first of which is If the disease is such that the doctors cannot discover nor diagnose it

At the end of the chapter devoted to The Formation of the Christian Devil the authors state The truth is that the whole diabolic doctrine was born in the subtle brain of erudite theologians

One chapter is devoted to The Sabbath What is this Sabbath? It is the propitiatory ceremony the adoration of the Devil It is superlatively the sacrilegious festival One chapter is devoted to The Witches' Trial and another to The Modern Devil

Part two is devoted more particularly to the medical aspects of the devil and all his works The authors convey *the impression that they consider* that there is a distinct form of mental disorder which might be classed as demoniac insanity It is difficult at times to determine whether the authors are expressing their own opinions or paraphrasing the language of others They cite a number of cases and from the meagre history given some appear to be cases of hysteria some schizophrenia and occasionally a manic depressive

In the chapter headed Demoniacs and Convulsionaries the authors say The mental specialists of today class among the demonopathic states as acute mental disorders those which are due to manic fits or to melancholic anxiety to dream—delusions of confusional states among disorders of slower evolution must be classed delusions of interpretation and of imagination without hallucination and hallucinatory delusions where the mystic duality intervenes the eternal conflict between God and the Devil

Under therapy they advocate the cooperation of priest and physician and say 'It is much to be desired that the hope of Frederick of Spee and Jean Wier will *not* remain unfulfilled *and* the association of religious and lay treatment may achieve the relief of those who without it would continue in the midst of our modern life to suffer the torments of the Possessed of the Middle Ages

I O TRACY

OUR NEIGHBORS

LEGISLATIVE PROCEDURE IN TEXAS

The February number of the *Texas State Journal of Medicine* begins with the following editorial describing the legislative methods at work in Texas, which are in contrast with the procedure in New York:

"The whole procedure of the legislature has been changed. The first thirty-day period of the session is supposed to be devoted entirely to the introduction of bills and the consideration of emergency measures. During the next thirty-day period nothing but committee hearings will be on the regular docket. Debate and final determination will be reserved for the last sixty days. That makes a four-months' session and, carried out as intended, will give a much more deliberative session. It is not being carried out exactly as intended, but those legislators dealing with controversial subjects are, for the most part, holding back their measures so as to accord exactly and beyond a doubt with the aforesaid constitutional amendment. Under this amendment, as a matter of fact, by a four-fifths vote the procedure may be interfered with. The difference of opinion among authorities lies in the decision as to whether this provision has reference to individual measures or whether it may be made a blanket affair.

"Bills are not printed until after committees have passed upon them and reported them back to their respective bodies. For that reason it is a difficult matter to learn at this stage of the proceedings just what any measure seeks to do, beyond the information found in its caption, and that is not always illuminating.

"Our two measures, namely the annual registration bill and the bill amending the Medical Practice Act, were both introduced early. The former is known as House Bill No. 6 and the latter as House Bill No. 7. An effort will be made to have the committee pass on these two bills on the first day of the second thirty-day period of the session. They will then have priority on the calendar of the House, in accordance with their early number. This means that we must be on our toes if we expect to bring about the enactment into law of these two essential measures. They have been introduced only in the House. Our friends in the legislature saw no need of bothering the Senate with them until the House had finished. The Senate passed these bills several times during the several sessions of the last legislature"

The editorial then discusses some of the bills especially the chiropractic as follows:

"The chiropractic bill differs in no important particular from that which has gone before. It seeks to pattern after the Medical Practice Act. It is quite clear that many of its provisions are for effect on the legislature and intended merely as talking points. The big idea is to get the sanction of the State, both as a boost for chiropractic and as a protection for those practitioners of this cult who may receive the cloak from the Elijahs at the present time on the job.

"The subjects covered by the examination provided for in the measure are as follows: Anatomy, physiology, symptomatology, chiropractic principles, technic and diagnosis, neurology, spinal orthopody and vertebral palpation, and chiropractic adjusting as taught by chiropractic schools and colleges, chiropractic jurisprudence and public health service. We are just wondering whether the examination in anatomy will call for a knowledge of those hypothetical nerves which carome around over the body from the spinal cord to the eye and nose, and regions thereabout, in order to enable the chiropractor to relieve blindness and the like by adjusting the spine. And we also wonder what chiropractic public health service is."

PUBLIC RELATIONS IN INDIANA

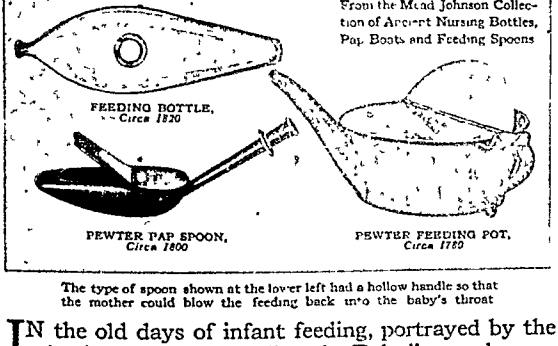
The Indiana State Medical Association has a special committee called the Liaison Committee whose duties are those of the Public Relations Committee of New York State in that it forms contact with organizations outside of the medical profession. The President of the State Association, Dr. A. B. Graham, of Indianapolis, writing in the February Journal of the Indiana State Medical Association says:

"The Indiana State Medical Association has a liaison committee the chairman of which is our president-elect. This liaison committee has been and is now doing a splendid work. Recently its chairman was in session with the chairmen of committees appointed by the following associations:

The Indiana Hospital Association.

(*Continued on page* 380—*adv. xii*)

CEREALS THEN — AND NOW:



The type of spoon shown at the lower left had a hollow handle so that the mother could blow the feeding back into the baby's throat

IN the old days of infant feeding, portrayed by the classic painting, "Feeding the Baby", cereals were "pap" and were fed to babies with a "pap spoon" or with a "pap boat" from a "feeding pot."

The pap was usually made from bread crumbs boiled in water, and supplemented the frequent breast feedings which were continued into the child's second year.

Fortunately for the babies of those pre-vitamin and pre-mineral deficiency times, whatever elements were lacking in this crude cereal were made up by the generous supply of the mother's breast milk. So that these babies lived neither by bread alone, nor by milk alone. In their own way, mothers had learned that neither cereal nor milk is a perfect food.

Nowadays, babies are not breast fed to the same extent nor for so long a period as were the babies of those days. They are early placed on cow's milk which, among other elements, is lacking in iron, copper and in the antineuritic vitamin B.

For a century and a half there has been no outstanding improvement in cereals from a nutritional viewpoint. High in starch, low in protein, deficient in calcium and other minerals, scarce in vitamins (especially G), each of the cereal grains remains today what it was then.

To make matters worse, "the highly milled products, particularly of white flour, constitute another avenue of escape of vitamin B in the present diet."*

Mead's Cereal, now available to the medical profession, draws its nutritional and palatable qualities from a carefully tested mixture of farina, oat meal and corn meal. From the added wheat embryo, it derives iron and vitamins A, B, E and G. Yeast furnishes copper, as well as iron; also vitamins B and G, while powdered bone richly supplies calcium and phosphorus, two essential factors lacking in ordinary cereals. By the addition of alfalfa, both iron and vitamin A are contributed and the flavor notably improved.

Mead's Cereal, therefore, represents this significant step in the development of cereal nutrition: Derived from natural sources, it contains nine minerals and four vitamins in substantial amounts, together with protein, fat, carbohydrate and calories.

Mead's Cereal was devised,† after long study, in the Research Laboratories of the Hospital for Sick Children and the Department of Pediatrics, University of Toronto, and is regularly tested by the Pediatric Research Foundation.

Just as vitamin C is prescribed in a specific vehicle like orange juice, and just as vitamin D is prescribed in a specific vehicle like viosterol or cod liver oil, so it is hoped that Mead's Cereal will be prescribed for all other vitamins and for its rich supply of essential minerals‡ as an important supplement to the diet of the young baby and the adolescent child.



Please send for a package of Mead's Cereal for use in your household.

Mead's Cereal is Palatable
Mead's Cereal is Economical

* Edit., *J.A.M.A.* 97:268, 1930 † Tisdall, F. F., Drake, T. G. H., and Brown, Alan. A new ... and mineral elements *American Journal of* ...d annual meeting of ... eighth annual meet..., Brockville, Ontario, ...ains 18 times as much ... much copper Com..., 5 times as much

Mead Johnson & Co. Pioneers in Vitamin Research and Specialists in Infant Diet Materials Evansville, Ind., U.S.A.

Mead's Cereal is supplied in 1-lb packages through drug stores and is advertised only to the medical profession Samples on request.

Cardiologists prescribe

Pil. Digitalis

(Davies, Rose)



because they are digitalis in its completeness. They are physiologically tested leaves in the form of physiologically tested pills, giving double assurance of dependability.

Each pill contains 0.1 gram, the equivalent of about 1½ grains of the leaf, or 15 minims of the tincture.

Convenient, uniform, and more accurate than tincture drops.

Sample and literature upon request.

DAVIES, ROSE & CO., Ltd.
Pharmaceutical Manufacturers, Boston, Mass.

Nonspi
For
Excessive Armpit Perspiration

You can use it and recommend it to your patients with absolute confidence.

THE NONSPI COMPANY
117 W. 18th Street
New York City, N. Y.

Send free NONSPI *samples to:*

Name.....
Street.....
City.....

(Continued from page 378)

The Catholic Hospital Association of Indiana.
The Indiana State Nurses' Association.
The Indiana State Dental Association.
The Indiana Pharmaceutical Association.
The Indiana Tuberculosis Association.

"The purpose of this session was to develop a spirit of mutual interest in the mutual problems of these naturally allied interests. The chairman of our liaison committee reports that the idea went over big. However, he stressed the very important point that these committee chairmen in turn must now sell the idea to their respective associations which they represented.

"Any organization that is sincere in its efforts in relieving human suffering and misery within the boundaries of our state is entitled to and deserving of the cooperation of our Association. The report of the chairman of our liaison committee is in sympathy with the ideas I have expressed. It is now absolutely essential that these ideas be sold to our members. A concerted policy on the part of all our members must be obtained before successful results can be attained."

Dr. Graham describes the assistance and endorsement given to the State Tuberculosis Association and continues:

"This action on the part of your Executive Committee will in all probability be regarded by some of our members as just another step toward state medicine. As to just what this much discussed and supposedly threatening bugaboo, state medicine, is, I do not know. I may perhaps have something to say regarding this subject in the near future. At the present time the mention of the term state medicine does not cause me any undue anxiety. I am very thankful for the possession of sufficient optimism as to make me opine that state medicine and a concerted policy on the part of all or even a majority of the members of the Indiana State Medical Association are not compatible. If perchance state medicine should overtake us, it can only imply that very unfortunately the medical profession failed in the performance of its assigned duties, and the censure for this disaster must very properly be placed at its own door. State medicine is a possibility—yes, a probability—but not with a concerted policy on the part of members of the Indiana State Medical Association."

PHYSICIANS' CARDS IN THE TEXAS JOURNAL

The medical journals of several Western States publish the professional cards of physicians with the full approval of their State Societies. The February issue of the *Texas State*

(Continued on page 381—adv. xiii)

(Continued from page 380—advertising)

Journal of Medicine is an example of a State journal, giving publicity to those physicians who are willing to pay for the advertising space. That journal carries eleven pages of advertisements of doctors, mostly specialists listing 123 advertisers.

The number of partnerships is striking. The advertising cards listing two doctors in partnership number 30, those with three partners 9, with four partners, 2.

Associations consisting of more than three physicians are usually listed as clinics. Nine such clinics are listed, containing 88 doctor members.

Altogether the names of 267 doctors are listed in the advertisements, while 34 spaces are marked 'for sale, $2 per issue.'

It may be interesting to know what State Societies sanction the insertion of physicians cards in their Journals. There are 32 official state journals organs of 43 State Medical Societies. The Journals publishing physicians cards in their advertising departments number 14 as follows:

Arkansas, Indiana, Iowa, Kansas, Kentucky, Michigan, Nebraska, New Orleans Medical & Surgical Journal (Louisiana and Mississippi), Northwest Medicine (Oregon, Washington, Idaho, Montana), Oklahoma, Rhode Island, Tennessee, Texas, West Virginia.

This summary is not a criticism in any sense of the word. The members of the Medical Society of the State of New York do not wish to list physicians in the advertising pages of their Journal, but they are willing that the members of other State Societies should do so.

MEDICAL MOVIES IN INDIANA

The February issue of the Journal of the Indiana State Medical Association contains an article by Dr. W. D. Little, evidently in comment on three original films which were shown at the meeting of the State Society. The pictures were described as follows:

"The first picture is part of the film which Doctor Gilman took to the State Medical meeting in Fort Wayne. He was to show it twice and he showed it twelve times—ten times by request. It was made at the City Hospital through the courtesy of Doctor Doeppers. You may feel inclined to criticize the technique because there is a fly buzzing around the patient during the cisternal puncture but I feel it serves a good purpose, because it shows the patient was more concerned with the fly than the puncture. It was made out doors in August on the City Hospital roof.

"The second picture is a combined median and ulnar nerve lesion in a little boy who came to the

(Continued on page 382—advertising)

IN
PNEUMONIA
(TYPES I and II)

Give ample Antipneumococcic Serum (Refined and Concentrated) within the first twenty-four hours. Clinical improvement occurs soon after treatment.

Antipneumococcic Serum Lederle
(Refined and Concentrated) as prepared by Felton is supplied in syringe packages as follows:

1 syringe containing 10,000 units
each of Types I and II,

1 syringe containing 20,000 units
each of Types I and II

LEDERLE LABORATORIES
INCORPORATED
NEW YORK

Send for Booklet

CROOKES
COLLOSOLS

℞ **COLLOSOL MANGANESE**
For boils, acne, and all suppurative affections

℞ **COLLOSOL ARGENTUM**
Stainless, non-irritating colloidal silver, for eye, ear, nose, throat and genito-urinary affections.

Full information and samples for clinical trial will be sent on application to

CROOKES LABORATORIES INC
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Phone Volunteer 5-1182
London Paris Milan Bombay

ELECTRICALLY LIGHTED SURGICAL INSTRUMENTS

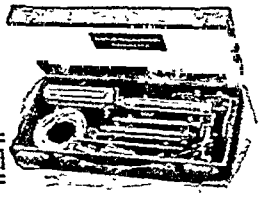
"E. S. I. Co."

The mark that stands for quality and service also represents a complete line of electrically lighted instruments for specialists in practically every field.

The tenth edition of the E. S. I. Co.'s catalog is interesting because it not only outlines the wide scope of the line, but describes the most recent developments in this important field.

Write today for a free copy . . . sent postpaid.

ELECTRO SURGICAL INSTRUMENT CO.
ROCHESTER, N. Y.



The Follow-Thru Of Your Instructions

THE physician who prescribes exercise for his patients is generally too busy to follow thru his instructions to see whether the prescription is being carried out—or neglected.
The physician who takes the extra precaution of sending a client to McGovern's Gymnasium for exercise and re-building has the assurance that his "exercise" prescription is being carried out to the letter, and that he can follow the progress of his patient by regular reports.
A work-out at McGovern's will show you why so many physicians send patients here. We'll be glad to send you a guest card.

McGovern's Gymnasium
INCORPORATED
(for men and women)
41 East 42nd St., at Madison Ave.
New York City



(Continued from page 381—adv. xiii)

Riley Hospital. Combined injury of the median and ulnar nerve is not uncommon, but such injuries usually occur as a part of extensive and complicated wounds which damage a great deal of the hand and wrist. In this boy the nerve injuries were the only things of importance. No tendons, arteries or other structures were cut.

"The third picture is one of Doctor Garceau's orthopedic patients which shows that motion pictures make a better record of many orthopedic patients than any other record we can have. We do not have a follow-up on this boy, but we will have pictures at various times to show his progress during all stages of treatment."

Dr. Little makes the following excellent comments on the value of medical movies:

"A great many amateur photographers have attempted to make pictures of operations, but even when panchromatic film has been used, there is not enough differentiation between blood and muscle and fat and the other structures to make them very valuable when projected on a screen. It is not possible to distinguish the different structures very clearly, and most films of this type have been a disappointment. Some orthopedic operations may be well shown, especially if animated drawings are used in connection. The chief use, it seems to me, for motion pictures in medicine is first to make a better record of some patients than can be made in any other way; the second, it will allow the accumulation of a vast variety of cases with the same deformity."

EXHIBITS IN ILLINOIS

The annual meeting of the Illinois State Medical Society will be held in East St. Louis, May 5-7 and will emphasize its exhibits, both scientific and commercial. The *Illinois Medical Journal* of February comments editorially on the exhibits, as follows:

"One of the interesting features of all modern medical meetings is the exhibits. At East St. Louis, we will have one of the finest exhibition halls in the state of Illinois. The spaces are all unusually large, and there will be uniform booth set-ups all ready to be occupied by the exhibitors.

"There will be an unusually large number of fine scientific exhibits this year, and any member of the Illinois State Medical Society who has something that he would like to exhibit, that is free from all advertising, should make application at once with the Secretary, stating the nature of the exhibit, naming the features of general interest, and proper space for same will be allocated.

"Only commercial exhibits that are on the approved list of the American Medical Association will be shown at the meeting. Arrangements are being made whereby our exhibitors will be well cared for at the meeting. Every exhibit space is

(Continued on page 383—xv)

(Continued from page 382—adv xiv)

unusually adapted to suit the convenience of our exhibitors, and each is a desirable space, regardless of price.

"A synopsis of each exhibit will be given in two issues of the *Illinois Medical Journal* before the meeting, and will also be printed in the official program of the meeting.

"The Illinois State Medical Society has an unusual appeal this year to prospective exhibitors, and the attendance should be unusually large. The St. Louis Medical Society, and the Missouri State Medical Association have given every assurance that they will aid our Society in making the meeting a successful one, and will give it much publicity on the West Side of the river.

"It is hoped that all members of the Illinois State Medical Society will favor our exhibitors, and make them feel that it is worth the expense and effort to have exhibits at the Annual Meeting of the Illinois State Medical Society."

LICENSURE IN CALIFORNIA

The February number of *California and Western Medicine* contains an editorial describing vividly the extent of medical cultism in California, and says:

"In the December issue of *California and Western Medicine*, page 915, was printed one of the monthly reports of the California Department of Professional Standards, in which department under Division No. 1, the Board of Medical Examiners has a place. Under Division No 2, the figures showing the number of licentiates who in the last decade have been granted licenses as 'doctors' of the healing art of one particular cult were given. Almost three thousand of such have been licensed in California in the last ten years!

"In some of the Sunday Metropolitan newspapers of California may be found the alluring and come-on advertisements of some of the schools of that cult. From time to time illustrated single, double and triple column reading notices have appeared in the news columns of newspapers, playing up 'perfect infant,' 'most beautiful female back,' and what-not-side-shows held at the annual or other sessions of the societies of such cults. To these 'beautiful female back' shows the members of the laity are invited.

"In another cultist group, prize contest announcements were sent out to the high schools, inviting all students to participate. The daily press recurrently made mention of the contest, and much free or paid for publicity was thus secured for that cult. The award in one such contest, if our memory serves us well, was one year's free tuition in a school of the cult. This award was granted to the high school student who gave the best reasons why a young man

(Continued on page 384—adv. xvi)

VITAMIN B
DURING LACTATION

"To avoid infant mortality, the nursing young needs large amounts of even concentrated vitamin B products daily during lactation

"The large requirement of vitamin B for lactation can now be explained as due to the inability of the nursing mother to secrete vitamin B quantitatively in the milk

"Accelerated growth of nursing young can be obtained by administration of liberal quantities of potent concentrated preparations of vitamin B"
—*Barnett Sure Dietary Requirements for Fertility and Lactation, Jour Biol Chem, 76, 685, 1928*

BEMAX
REG U S PAT.OFF.
ENTIRE CEREAL-EMBRYO

offers an excellent means of supplying nursing mother with vitamin B in "lib quantities of potent concentration"

Here is entire cereal embryo—so proce as to retain vitamin B very richly—in it is perhaps the richest known source!

BEMAX assays at least 500 units per o (Sherman method), showing marked con tration. It is very palatable, and is t eagerly in even delicate cases.

Its blandness allows its use where roug and bulk may be undesirable

Try it in your next case! A heaping ta spoonful a day on cereals, or fruits, o soup or milk furnishes vitamin B abundance.

Samples and Literature on Req

Schieffelin & Co.
20 Cooper Square New York City
Sole Distributors for
AMERICAN VITAMINS INCORPORAT

Why **CHEPLIN'S**



B. ACIDOPHILUS MILK

High concentration is essential for maximum clinical results. Cheplin's has a concentration of 250 Million organisms per c.c. Viability is retained through the use of a Milk Medium. That is why you can depend on Cheplin's, "the original."

Sample and literature upon request.

CHEPLIN BIOLOGICAL LABORATORIES
Incorporated
Syracuse, New York

Dependable Products
AND
Dependable Service

We sell direct to physicians.

No salesmen are employed and the saving thus effected results in lower prices to buyers.

Write for Catalogue and Price List

MUTUAL PHARMACAL CO., Inc.
107 No. Franklin Street
SYRACUSE, NEW YORK

(*Continued from page 383—adv. xv*)

should choose as his life work the practice the profession of that particular cult.

"One of these cultist groups has licensed abo 3,000 practitioners of that cult in California the last ten years or so. That is a large numb for even so large a state as California to assim late, digest and take unto itself. The law brin ing into existence the examining board of th cult contains many defects, but was passed as a initiative act, and therefore can only be amend by the people. Yet that law, sanctioned sever years ago by vote of the electors of Californi makes it obligatory for the examining board c that particular cult to accept the diplomas c practically all chartered schools of that cul without regard to the quantity or quality of th courses given. The language is so loose th diplomas of any kind of a state-chartered scho of that cult must be accepted. The examinir board of that cult cannot step in and inspect th schools in an effort to maintain the standar which even its own members favor. And th in California, the sixth state in the Union, wi its 1930 United States census population 5,672,009 persons. Truly a remarkable state affairs.

"Nor is the above citation all. For in one the well-known newspapers of California, a pu lication with advertising figures comparing favo ably with those of papers of cities such as Ne York and Chicago, there is a so-called heal column in one of its magazine sections flank by and including a surprising number of wh seem to be misleading advertisements. This pa ticular health column for the last several decad has been one of the big revenue producers that portion of this particular newspaper, a the present editor of its columns is said to mai tain a suite of offices covering almost the ent floor of one of the large buildings in that pa ticular city, where he supposedly practices t healing art according to the tenets of his cult.

"What can be done about conditions such have been noted? The answer ofttimes must b not very much, for the State of California, on having granted legal licenses to practice the he ing art, cannot recall such licenses except for leg causes; and the electors having voted a deplo able set of minimum standards for licensure certain cults, only the people by again registeri their votes in favor thereof can raise or bett those deplorable standards.

"However, from the standpoint of preventi medicine, the regular or non-sectarian professi does owe it to itself and to the public to enlight the laity concerning health and concerning d ease prevention. Such publicity the professi has given in the past through publication of jou nals on hygiene and of miscellaneous pape Are any more effective methods available?"

FEE SPLITTING IN PENNSYLVANIA

A new form of fee splitting is recorded in the February number of the *Pennsylvania Medical Journal*, which says.

"We have received 'the last word' in the commercialization of male babies. As a practitioner of medicine the writer received in the mail a printed folded-leaf pamphlet, and a printed circular letter from a Philadelphia rabbi. The leaflet is printed with blue ink, possibly in keeping with this appropriate color scheme for boy babies."

Then follows a copy of the leaflet which contains testimonials from seven physicians, all from New Jersey, and also those of three laymen, praising the rabbi's skill in doing circumcisions. The leaflet also contains the following letter from the rabbi, who signs himself as a surgeon mohel:

"I am addressing these lines to you with the hope of gaining your cooperation in recommending me as a Surgeon Mohel to confinement cases you are attending where there is the birth of a son to be circumcised.

"I am a Surgeon Mohel, having many years of practical experience; having circumcised hundreds of male babies, and in possession of many references of the parents whose children I have circumcised, as well as physicians.

"I use every modern, hygienic precaution and being a man in the prime of life I am fast, causing practically no pain during the circumcision of the newborn baby

"I will gladly reward you for your kindness and will pay you for any circumcision I will perform through your recommendation. I will not use your name in any case without your consent and I can assure you that you will never have any cause to regret your recommending me to confinement cases you attend.

"P. S. The fee for your part will be 40 per cent. Your only obligation is to give me the name and address of your confinement case."

The editorial ends:

"From an investigation we find that many of the physicians in Philadelphia have not received this correspondence, and that two hospitals have refused him admission based upon complaints filed by certain members of the staff of both institutions who had received this letter.

"We understand this rabbi is very poor and has resorted to the procedure herewith detailed to increase his income. We sympathize with his poverty, but must unqualifiedly condemn his method to relieve it. His correspondence is a direct insult to the medical profession, and his fellow rabbis."



. . . whenever milk is an important part of the diet

Cocomalt not only renders it more palatable but increases its food value over 70%

COCOMALT is a delicious, high-caloric food—ideal for convalescents, expectant and nursing mothers and undernourished children.

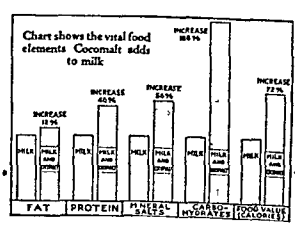
Not only does Cocomalt make milk a tempting chocolate flavor drink; *it actually increases its food value* 70%—adding 46% more protein, 56% more mineral salts (Lime and Phosphorus), 188% more carbohydrates.

Laboratory tests show that Cocomalt contains Vitamins A, B complex and D. Vitamin D is present in sufficient quantity to make a definite contribution to the anti-rachitic potency of the child's diet.

Cocomalt is available at grocery and drug stores in ½ lb., 1 lb. and 5 lb. hospital can.

FREE to Physicians

Use the coupon below It will bring you a trial can of Cocomalt without cost.



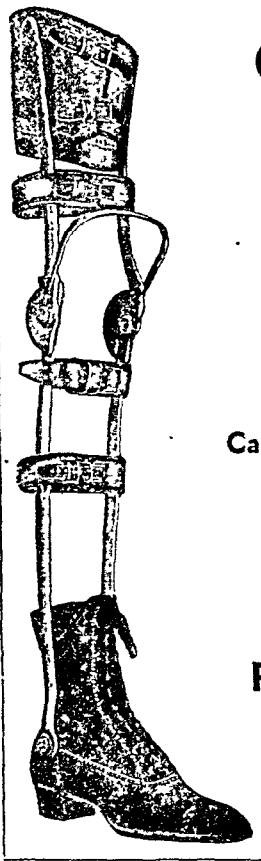
Cocomalt

DELICIOUS HOT OR COLD



ADDS 70% MORE NOURISHMENT TO MILK

R. B DAVIS CO , Dept. Bk-3, Hoboken, N J.
Please send me, without charge, a trial can of Cocomalt
Name .....
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Orthopedic and Surgical Appliances

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Next Annual Meeting

of the

Medical Society

of the

State of New York

June 1-2-3, at Syracuse, N. Y.

Regular advertisers in this Journal given preference when applying for space in the Technical Exhibit Hall.

COMMITTEE ON PUBLICATION

BASIC SCIENCE LAW IN ARKANSAS

The Basic Science Law of Arkansas became a law on March 14, 1929, and is now in operation. It consists of twenty-one paragraphs, but its essential features are found in the first three which are printed in the February issue of the Journal of the Arkansas Medical Society as follows:

Section 1. Basic Science certificate required. No person shall be eligible for examination or permitted to take an examination for a license to practice the healing art or any branch thereof, or granted any such license, unless he has presented to the licensing board or officer empowered to issue such a license, a certificate of ability in anatomy, physiology, chemistry, bacteriology, and pathology (hereinafter referred to as the basic sciences), issued by the State Board of Examiners in the basic sciences.

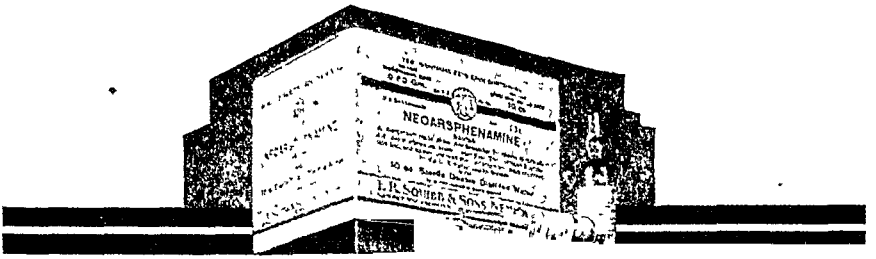
Section 2. The Healing Art Defined. For the purposes of this Act, any license authorizing the licentiate to offer or undertake to diagnose, treat, operate on, or prescribe for any human pain, injury, disease, deformity, or physical or mental condition is a license to practice the healing art.

Section 3. Board of Examiners in the Basic Sciences. The Board of Examiners in the basic sciences shall consist of five persons to be appointed by the Governor, and the Superintendent of Public Instruction who shall be a member ex-officio. Every member shall serve until his successor is appointed and qualified. The members of the Board shall be selected because of their knowledge of the basic sciences aforesaid. No member of the Board shall be actively engaged in the practice of the healing art or any branch thereof. No member of the faculty of any medical school shall be eligible to appointment as a member of said Board. The members shall be appointed one for two years, one for three years, one for four years, and one for five years and one for six years from the date of their respective appointments. Upon the expiration of the terms of any member, the Governor shall fill the vacancy by appointment for a term of six years. Upon the death, resignation or removal of any member, the Governor shall fill the vacancy by appointment for the unexpired term. The Superintendent of Public Instruction shall supervise all examinations conducted by the Board, and the office of said Board shall be in the office of said Superintendent."

BIBLIOGRAPHIES—AN INDIANA OPINION

Some State Medical Journals refuse to publish bibliographies on the ground that they have little to do with the article. The policy of the NEW YORK STATE JOURNAL OF MEDICINE is in accord with that of *Northwest Medicine* as stated in the

(*Continued on page 388—adv. xx*)



"Low toxicity."

sometimes these are dangerous words

Authorities on syphilology are emphasizing the fact that laying too much stress upon the flash solubility and low toxicity and too little upon the curative activity in the manufacture of Neoarsphenamine is a very dangerous thing in the treatment of luetic cases.

One writer believes that a high incidence of tertiary syphilis will be observed in later years because of the lack of spirocheticidal activity in some brands of Neoarsphenamine.

The production of Neoarsphenamine Squibb Improved is rigidly controlled to yield a product of high therapeutic (spirocheticidal) activity and at the same time to provide an ample margin of safety from the standpoint of toxicity. Neoarsphenamine Squibb Improved is prepared solely from the therapeutic viewpoint. Of course it is readily soluble, but its uniformity and parasiticidal activity plus a wide margin of safety are the features of greatest interest to the physician.

Neoarsphenamine Squibb Improved is distributed in ampuls containing 0.15, 0.3, 0.45, 0.6, 0.75, 0.9, 3.0, and 4.5 Gm.

For an interesting booklet giving complete information about Neoarsphenamine Squibb Improved, write to the Professional Service Dept., 745 Fifth Avenue, New York City.

E·R·SQUIBB & SONS, NEW YORK
MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858.

Please mention the JOURNAL when writing to advertisers

A characteristic of Mead's Powdered Lactic Acid Milk No. 1 (containing Dextri-Maltose) is the finely divided soft curd which never clogs the nipple. In a few moments, any mother can carry out the simple procedure required without error — a saving in time to her and an assurance to the physician that the feedings are correctly prepared. This product never curdles; it is always ready, and quickly reliquefied. No ice is necessary to keep the powder. It is convenient while traveling. Samples and literature on request. Mead Johnson & Company, Evansville, Indiana, U.S.A.

(*Continued from page* 385—*adv. xviii*)

first editorial in the February number which says:—

"Whenever one writes a paper on a given medical topic, he must of necessity consult certain books and medical journals, from which a large proportion of his information will be obtained. If he wishes the paper to present an air of authority, this will be fostered by references to the texts which he has consulted in its preparation. It is customary to publish these references in the form of bibliography at the end of a paper or as foot-notes to each page in which they appear. The latter plan is commonly considered preferable as it offers convenience of reference and the notes are more likely to be consulted by the reader.

"Sometimes an author attaches to his paper a list of references of considerable length in addition to those mentioned in the text. It is not considered desirable to include these, as usually they are not intimately connected with the substance of the paper and occupy space that might be more profitably employed. The most extensive collection of references will be found in the French thesis, which every graduate from the University of Paris must present before obtaining his degree. Such a paper may occupy months or years in preparation. When completed it will list every publication which has appeared in any language on the subject of the paper. Naturally anything approaching this in completeness is out of place in connection with a paper published in a monthly medical journal. It is desired to emphasize the fact that suitable references elucidating the text are of value in connection with the writing of any paper. They should include the names of authors, titles of papers and the journal or book in which they have been published."

POPULAR MEDICAL EDUCATION IN ILLINOIS

The *Illinois Medical Journal* for February contains the following summary of the work of the Education Committee of the State Society for January:

Health talks, 35 in number, were given before Women's Clubs, Church Groups, Farmers' Institutes, Young Mothers' Clubs, Parent Teacher Associations, Y. M. C. A.'s. Among the subjects presented were—Religion and Health, Cancer, Periodic Health Examinations, Sex Hygiene, Child Psychology, Mental Hygiene, Communicable Diseases, Child Health, Early Detection and Correction of Defects, Animal Experimentation, Sheppard Towner Legislation.

Radio talks, 35 in number were given, from WGN and WJJD.

Scientific papers scheduled: 9, before as many county medical societies.

Films: A new film on carbon monoxide, loaned by the Bureau of Mines, Pittsburgh, Pa., was secured to be shown in factories in Chicago.

Press service: 355 regular press releases.

Health education: 9 articles prepared.

MENTAL HYGIENE IN PENNSYLVANIA

The February number of *The Pennsylvania Medical Journal* has the following announcement:

"The outlined activities for the Medical Hygiene Committee of the Medical Society of the State of Pennsylvania for the ensuing year reflect the committee's desire to be of extreme help to the physicians, members of the auxiliary, and the public at large.

"While the activities seem far-reaching, the committee feels with its organization of psychiatrists in the eastern, central, and western sections of the State, by the close of the year its efforts will have met with just rewards. The committee, however, can do nothing without the support and cooperation of the component county medical societies and the individual physician

"A brief abstract of the program should be interesting to the readers of the Journal, which is as follows: (1) Promoting a mental hygiene day in each county society; (2) a similar day for each woman's auxiliary; (3) providing a speaker on mental hygiene before the next annual session; (4) cooperating with program committees of sections in arranging symposia, etc.; (5) promoting a speaker's bureau on mental hygiene for nonmedical organizations; (6) arranging for clinics at mental hospitals for county societies; (7) stimulating a greater interest in psychiatry in medical education; (8) urging the cooperation of general hospitals in treating borderline cases; (9) arousing the physician's interest in maintenance needs of our mental hospitals and the need of a psychiatric hospital; (10) presenting an editorial monthly to the State Journal on mental hygiene in some of its phases."

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LEGISLATION IN OHIO

The problems of medical legislation are the same in all the States. The following editorial in the February issue of the *Ohio State Medical Journal* would apply equally well to New York State:

"Representatives of the cultists and faddists have been much in evidence at all sessions of the General Assembly to date and it is no secret that they have already obtained the promises of too many members of the Legislature to support the vicious and destructive proposals that they hope to have enacted. On the opening day of the General Assembly the halls of both houses were circularized by the anti-vaccinationists and anti-vivisectionists with their usual type of false, ignorant and destructive propaganda literature, followed later by propaganda by chiropractors, christian scientists and other cults.

"The selfish and ill-advised demands of these groups are certain to add to the confusion and pressure of the present session of the law-making body, which is already confronted with the important task of studying and enacting into law an unusually large number of vital, necessary and constructive measures.

"The present session of the General Assembly challenges the alertness and active interest of the medical profession and organized medicine of Ohio.

"Of course, the Policy Committee and the state headquarters of the State Association, as in the past, will closely watch all legislation and will communicate developments and suggestions to the legislative chairman in each county medical society and academy."

AUTOMOBILE INSURANCE IN GEORGIA

The February issue of the Journal of the Medical Association of Georgia records the following action taken by the Ware County Medical Society:

"*Whereas,* The number of automobile accidents on the highways is showing an alarming increase, and

"*Whereas,* The increasing number of injured persons is taxing both the medical profession and hospital facilities to the utmost to render necessary treatment, and

"*Whereas,* The persons injured are frequently irresponsible, and without means to pay either for medical attention or hospital services, thereby placing an unfair burden upon them; therefore be it

"Resolved: That this Society petition our local Legislators to introduce some comprehensive measure making the carrying of liability insurance compulsory in this State by all individuals who secure a license from the State to operate any motor vehicle within its boundaries, and be it further

"Resolved: That copies of this resolution be sent to the editor of the Journal, to the Committee on Public Policy and Legislation, and to all the County Societies with the request that they endorse it, and petition their respective legislators to aid in securing such an act."

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HELP TO MEDICAL WRITERS IN IOWA

The January number of the Journal of the Iowa State Medical Society announces that the Society will assist its members in writing articles, and says:

"Through the personnel of the editor's office of this Journal, suggestions and assistance may be obtained in preparing medical papers. We are glad to cooperate with any member of our Society in the preparation of scientific papers, whether for use in the Journal of the Iowa State Medical Society or not, and will undertake such service as editing, proof-reading, compilation of bibliographies, tracing of references, preparation of cuts and typing of manuscripts. This service will be rendered to our readers at nominal expense and by persons whom we can recommend for accuracy and training in this particular work.

"Finally, I would offer two suggestions for the guidance of every medical author. One, know what you have to say. Two, say it and stop."

NEW YORK STATE
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PERFORATED ULCERS OF THE STOMACH AND DUODENUM*

By MANDEL WEINSTEIN, M.D. and JOHN P. McHUGH, M.D., LONG ISLAND CITY, N. Y.
A Review of Fifty Cases With Particular Emphasis Upon the Current Methods of Treatment.
From the Surgical Service of St. John's Hospital, Long Island City, New York.

JUDGING from the vast literature on the subject, widely diverging views prevail as to the proper methods of treating perforated peptic ulcers. All agree that the earlier operative measures are instituted from the time of perforation, the greater will be the number of recoveries. But the procedure varies from the more radical gastric resections at the time of perforation, to simple closure of the ulcerated opening.

We believe that the time-proven principles of surgery also find their application here: an emergency surgical operation should occupy as little time as possible together with a minimum amount of operative trauma. If upon the recovery of the patient, carefully applied medical treatment fails to make the patient comfortable, and to arrest the pathology, further surgery can always be resorted to.

Herewith are recorded all the cases of acute ulcers of the stomach and duodenum admitted to St. John's Long Island City Hospital during the past two and a half years—an even fifty in number: Our youngest patient was 19 years old, our oldest 72. Read (10) records two cases of 18 years, and one of 76 years. Dunbar in a review of 387 cases of perforated ulcers from the Glasgow (Scotland) Royal Infirmary, reported as his youngest patient a boy, 12 years of age. As a general rule perforation takes place between the ages of 20 and 40, which interval of life in our series comprised 50% of the total number. The average perforated ulcer patient is in a lowered state of health. He is undernourished and complains of indigestion symptoms. Upon interrogation, several said they had observed tarry stools. Only six patients (12%) of the total number denied this past history. However, it is well known, Huddy (4), that a negative history is many times the result of the patient's indisposition to answer questions accurately, because of the gravity of the illness. Sherren (11) had a similar experience, for he found that in 218 cases of perforated duodenal ulcers treated at the London Hospital, only six had no history of indigestion; and the same was true in 248 cases of perforated gastric ulcer. Walton (12) is of the opinion that every gastrc, and the great majority of duodenal ulcers which perforate are of the chronic type. To McGreery (7) induration indicated chronicity of the ulcer, and this was present in all their cases.

Pathology—All perforations are minute in the beginning and rapidly enlarge. In the earlier stages, flakes of lymph may be seen on the surface of the stomach and duodenum. Ninety percent of perforated ulcers are situated on the anterior wall. The perforation is recognized as a round, punched out opening a little less than 1 cm in diameter. The edges of the opening are always indurated and the surrounding peritoneal surface shows recent changes of inflammation.

It is impossible to determine from the appearance of the opening whether it be a perforation of a chronic or an acute ulcer; for in every case there is induration, and one cannot decide whether this is due to an edema, or a fibrosis.

As soon as the abdomen is opened, gas or a little thin, clear, or turbid fluid will escape. Both gas and fluid are without odor, and when the fluid is examined it is found n many cases to be sterile. The amount of gas and fluid will depend upon the length of time that has elapsed since the perforation. If less than six hours, there will be little or no gas and the fluid will be mucoid, clear or nearly so.

Occasionally, more than one ulcer is present. One patient in this series had a perforation of a duodenal ulcer which was sutured at the time of operation. At autopsy, another ulcer 3 cm in diameter was revealed situated posteriorly. The posterior ulcer was covered by a loose layer of plastic exudate and evidently admitted no duodenal content into the peritoneal cavity.

* Read at a Stated Meeting of the Medical Society of the County of Queens, on January 27, 1931.

Most of the perforations take place in or about the pyloric vein, but with the acute inflammatory reaction, it is difficult to determine which side the ulcer is on. In fact, according to Bevan (1) there is little reason for differentiation between gastric and duodenal ulcer in this region, because of the anatomy and physiology: (that is) the duodenal cap or bulb is not a part of the duodenum but a part of the stomach; its blood supply and innervation are the same as those of the stomach and not of the duodenum; and the mucous membrane is separated from the mucous membrane of the duodenum at the line of the sphincter of the duodenal bulb or cap.

Symptoms—Moynihan's (8) classical pathological history, narrated almost twenty-five years ago still applies in making the diagnosis of perforated peptic ulcer. The condition is most frequently mistaken for acute appendicitis. One reason why some medical men fail to recognize perforated ulcers is because in the early stages the pulse rate is practically normal, Deaver (2). Collapse is a variable occurrence and should not always be expected. The temperature in the early stages is normal, sub-normal or but slightly elevated. Even in the later stages it is a mistake to expect high temperature, although it may occasionally occur. However, the history of acute agonizing pain, in a restless patient tossing from side to side, knees and thighs flexed, boardlike abdominal rigidity, shallow respirations, and the appearance of being seriously ill—confirms the diagnosis.

Anesthesia—Ten of the fifty patients (20%) in this series were operated upon under subarachnoid block (spinal) anesthesia. Neocaine .12 gms. was used and the technique employed was that introduced into this country by Gaston Labat (6). Nine of these ten patients recovered. The only fatality occurred in an extremely emaciated old lady, who had sustained her ulcer perforation 22 hours before reaching the operating room. Moreover, a recovery is recorded in a patient whose interval from the time of perforation to operation is accurately placed at 29 hours.

The critical state of the perforated peptic ulcer patient is no contraindication to spinal anesthesia. On the contrary, as indicated by Koster (5) spinal anesthesia effectively prevents shock. The blockade of shocking impulses coming from the operative field has a distinct beneficial influence on the central nervous system and is at least as efficacious in producing the anociassociation of Crile as local infiltration. Almost immediately following the injection, the patient who was restless, moaning with pain, and in many instances in a state of collapse, suddenly becomes quietly subdued and free from pain. He leaves the operating table feeling much better, and usually demonstrates a slowly climbing blood pressure. The greatest drop in blood pressure in our series was from 150 systolic and 70 diastolic to 40 systolic and 10 diastolic—a fall of 110 mm. of mercury.

BLOOD PRESSURE VARIATIONS DURING SPINAL ANESTHESIA—Ten Cases:

Preoperative		*Lowest Readings*	
Systolic	Diastolic	Systolic	Diastolic
120	64	90	60
106	66	106	66
160	80	48	36
120	80	75	60
50	0	45	0
102	64	106	70
110	70	60	0
150	70	40	10
142	110	60	40
110	70	90	55

Spinal anesthesia fulfils all the requirements of an ideal anesthetic for these cases. The complete absence of intestinal distention eliminates the use of laparotomy pads. Because of the considerable muscular relaxation and excellent exposure, recognition of the perforated ulcer area is extremely simplified. The completed operation of simple closure should therefore occupy not more than 25 minutes.

Inhalation anesthetics are best given to patients who have been prepared for operation. Such anesthetics administered without satisfactory preparation in emergency surgery, complicate operative procedures and may lead to grave postoperative sequelae. Spinal anesthesia may be performed without these drawbacks. This is particularly true in emergencies complicated by upper respiratory infections.

Postoperative headaches which occur in about 15% of our cases, we find are instantly relieved by the intravenous injection of one ampoule of caffeine and sodium benzoate, administered slowly.

Methods of Treatment—Of the 50 cases herewith recorded, 46 (92%) were treated by simple closure of the perforation. In the majority of cases omentum was tacked over the suture line for reinforcement. In only one case was an immediate gastro-enterostomy performed at the time of closure. This procedure was added because suture of the large perforation narrowed the duodenal lumen considerably. Another patient, who two years after simple closure presented symptoms of duodenal obstruction, received a gastro-enterostomy. Two of these cases were treated by simple drainage.

The question arises, is simple closure of the perforation sufficient surgery for these unfortunate patients? All agree that where the closure entails an appreciable encroachment onto the lumen of the viscus, an immediate gastro-enterostomy is indicated. But aside from this evident indication, the surgeons' opinions are many, and the operative procedures numerous.

We learned from the follow-up that many patients have felt exceedingly well after simple

closure Those who adopted a restricted diet enjoyed freedom from symptoms Their roentgenograms showed no gastric retention of the contrast media after six hours and little or no pathology about the site of the operation On the other hand, patients who did not submit to post operative medical treatment, suffered the same fate as ulcer patients who had never perforated, namely, pain, indigestion symptoms, etc Our youngest patient, 19 years of age, continued medical treatment for five months Since then he has disregarded all medical advice with the result that he presents at this time progression of ulcer pathology His roentgenograms show a small stomach, with 50% retention after six hours A gastro enterostomy or more radical surgery is indicated to relieve his symptoms

McCreery (7) also believes that a cure can be obtained early in these cases of simple suture if proper postoperative medical treatment is instituted He advances the argument that gastro enterostomy prolongs the operation 20 minutes and opens up to infection the clean lesser peritoneal cavity However subsequent gastro enterostomies occasionally had to be performed upon his patients because of recurrence of symptoms Walton (12) believes that simple suture combined with immediate gastro enterostomy may also be followed by recurrence of ulcer symptoms Besides, gastro jejunal ulcer is still a complication to be considered Patterson (9), reaching as high an incidence as 33% of all gastro enterostomies in some clinics At the New York Hospital, Farr (3) reports 139 cases of perforated peptic ulcer with an operative mortality of 17 9 percent where only the simplest procedures were used This substantiates their views opposing primary gastro enterostomy

Gastric resection as practised by Austrian and German surgeons appears to be too radical a procedure to be consistent with a low primary operative mortality In America, very few proponents have appeared for such extreme measures

FIFTY CASES OF ACUTE PERFORATED ULCERS

Tabulated Statement

Cases					50
Average Age	31	Youngest	19	Oldest	72
Sex					
Male					48
Female					2
Time of Perforation					
Under 6 hours—(36%)					18
Between					21
Between					9
Over 24					2
Types of Operation					
Simple suture of ulcer—(92%)					46
Simple suture plus primary gastro enterostomy—(2%)					1
Simple					2
Secondary					1
Location of Ulcers					
Gastric—(22%)					11
Duodenal—(78%)					39
Diagnosis					
Correct—(90%)					45
Incorrect bladder—(10%)					5
History of Indigestion—(88%)					44
No History—(12%)					6
Traumatic Etiology—(4%)					2
Anesthesia					
Spinal—(20%)					10
General—(80%)					40
Mortality—(40%)					20
General Peritonitis 16					
Pul Embolus 1					
Intestinal Hemorrhage 1					

Conclusions—1 Herewith is recorded an analysis of 50 cases of perforated gastric and duodenal ulcers the youngest patient 19 years of age the oldest, 72 2 A history of indigestion was present in 44 (88%) of the cases 3 Spinal anesthesia seems to be the anesthetic of choice, and will undoubtedly lower the immediate operative mortality 4 Simple closure of the perforation is the preferred procedure If the ulcer pathology becomes progressive a secondary gastro enterostomy operation or more radical surgery may be attempted later 5 At the primary operation one should complete that amount of surgery which will occupy the minimum amount of time

* * * * *

The authors wish to express their appreciation to Drs D E McMahon and Wm J Lavelle for their considerate co-operation

* * * * *

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THE USE OF THE ELECTROSURGICAL SCALPEL IN RENAL SURGERY*

By W. W. SCOTT, M.D., F.A.C.S., Rochester, N. Y.

From the Department of Surgery, the University of Rochester School of Medicine and Dentistry.

IT is not necessary to dwell in detail on the importance of conservation of renal parenchyma in operative procedures upon the kidney. The complete eradication, by surgical methods, of one particular type of renal pathology does not always guarantee against the recurrence of the same process, or the development of another of equal seriousness. Braasch and Foulds[1], Chute[2], Barney[3] and others have shown that renal calculi tend to recur, following their removal, in at least 15 to 20 per cent. of the cases. In the writer's experience, nothing so impressively drives home the doctrine of conservatism in renal surgery as the appearance of a patient suffering from chronic uraemia due to the presence of calculi in the sole remaining kidney. In such cases the patient's life often hangs in such a delicate balance that any slight mistake in operative judgment, technique or preoperative and postoperative care throws the scales in the wrong direction, with death as the inevitable result. Therefore, in such cases, any procedures that tend to increase the chances of success, no matter how slightly, are worthy of the most careful consideration upon the part of all who attempt renal surgery.

Among the more recent contributions of this nature, Deming's[4] study of the effects upon the renal circulation following various forms of elongation of pyelotomy wounds is most instructive. In this work he demonstrates that the elongation of the pyelotomy incision into the posterior surface of the kidney to the lower pole, does not impair the renal circulation providing the retropelvic vessels are not injured. The same writer, in an experimental study of the effect of various types of sutures upon the renal circulation[5] has shown that mattress sutures, passed from the cortex to the pelvis, control hemorrhage quite satisfactorily and impair renal circulation less than any of the various types of deep transfixing sutures. In one of the cases of this series (Fig. 14) we used this suture and found it to be quite satisfactory.

While considering the problems of renal surgery, it occurred to the writer that the electrosurgical scalpel possessed certain qualifications that recommended its use in this work. In 1911 Moore and Corbett[6] clearly demonstrated that the suturing necessary for control of hemorrhage decreased the kidney function more than the actual sectioning of the kidney. Therefore, if by the use of this instrument bleeding could be materially decreased, not only would better and quicker operative work be possible but fewer sutures would be necessary for hemostasis and consequently there would be less loss of renal function. Furthermore, if bleeding were sufficiently controlled by sectioning the kidney with the electrosurgical scalpel, any dangerous complications that might arise from compressing or clamping the vascular pedicle would be completely eliminated. Also it is reasonable to believe that from the standpoint of control of hemorrhage and sepsis, the use of this instrument offers a very satisfactory method of opening multiple cortical abscesses in cases in which nephrectomy is contra-indicated. It is, also, conceivable that in Rovsing's treatment of polycystic kidneys by puncturing the cysts, the electrosurgical scalpel would be of considerable value.

The writer was considerably encouraged in his belief in the value of the electrosurgical scalpel in certain forms of renal surgery by the experimental work of Pearse and Ward[7]. These investigators, working on dogs, were able to remove a large elliptical segment of the kidney extending from the cortex to the pelvis, by means of the endotherm knife, with only a moderate loss of blood. Bleeding from the larger arteries in the renal parenchyma was completely controlled by clamping and coagulating. No ties or sutures were used to control hemorrhage. Where large disc-shaped areas were removed from the renal cortex there was very little bleeding and no sutures were necessary. This experimental work, along with the excellent results obtained by this method in other fields, seemed to justify its use in renal surgery.

The ideal current for kidney work is one that cuts readily and at the same time seals the severed renal vessels with the least possible destruction of renal parenchyma due to coagulation. The machine used in this series was a spark-gap generator capable of developing a current possessing combined cutting and coagulating properties. Because these generators have not been properly standardized as yet, it is necessary to determine by means of animal experimentation with each machine, what adjustments are required to obtain a satisfactory current for renal surgery before attempting to use it on patients. In our experience the radio tube type of generator does not seem quite so satisfactory for renal surgery as the spark-gap machine.

In the following cases the electrosurgical

* Read at the annual meeting of the Medical Society of the State of New York, at Rochester, June 4, 1930.

scalpel was found to be of considerable value in the control of bleeding:

Case 1. L. K., S.M.H. No. 24453, aged forty-seven. May 9, 1929.

Complaint. Pain in right kidney region.

Family History. Unimportant.

Past History. The patient had an appendectomy performed in 1913 and a gastroenterostomy two years later. He denied venereal infection.

Marital. One child. Wife had two miscarriages.

Present Illness. Ten years before admission the patient first noticed a dull pain just above the crest of the right ilium. The pain lasted but a few days and did not radiate. The last attack, which started two months previous to the patient's admission to the hospital, differed from the previous ones in that the pain, which had been more or less constant since the onset, was so severe as to incapacitate the patient for work. This pain did not radiate and, so far as the patient knew, there had been no hematuria.

Physical Examination. This was essentially negative except for indirect right inguinal hernia. The blood pressure was 140/90.

Special Examinations.

Urine. An occasional pus cell and a few red blood cells.

Phthalein Test. The total output for two hours was 75 per cent.

Blood, Wassermann. 3 plus.

Spinal Fluid Study. Globulin—negative. Thirty-eight pus cells to the field. Wassermann, 4 plus

Radiogram. Staghorn calculus of right kidney pelvis. Seven small calculi in lower pole of kidney (Fig. 1).

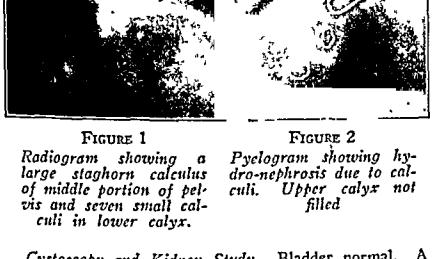


FIGURE 1

Radiogram showing a large staghorn calculus of middle portion of pelvis and seven small calculi in lower calyx.

FIGURE 2

Pyelogram showing hydro-nephrosis due to calculi. Upper calyx not filled

Cystoscopy and Kidney Study. Bladder normal. A number 7 F. catheter was passed to each kidney without meeting obstruction. Urine from each side was uninfected. The differential urea reading was 0.2 gm. per liter on the left side and 1.2 gm. per liter on the right. A stereoscopic right pyelogram was obtained.

Stereoscopic Right Pyelogram. There was a large staghorn calculus filling the pelvis and major calices of the right kidney, preventing filling of the upper minor calyx. The remaining minor calices were enlarged and blunt. In a pocket formed by the enlarged minor calyx, were seven small calculi (Fig. 2).

Operation. Under gas-oxygen anesthesia, by means of the extraperitoneal lumbar approach, the kidney was mobilized and the ureter and pelvis exposed. By extending the pelvic incision into the lower portion of the posterior surface of the kidney parenchyma for a distance of 1 cm with the electrosurgical scalpel, the large staghorn calculus was easily removed. Bleeding was well controlled. It was found that the lower pole of the kidney was quite dilated and it was only possible to locate and remove two of the small calculi without enlarging the incision. Believing that this large pocket in the lower pole offered a favorable site for the formation of more calculi, it was decided to resect this area and remove the remaining small calculi at the same time. A rubber-shod clamp was placed across the vascular pedicle and then, by means of the electrosurgical scalpel, the lower half of the pole of the kidney was resected in the form of a wedge-shaped mass so as to allow better closure of the incision (Fig. 3). The remaining cal-

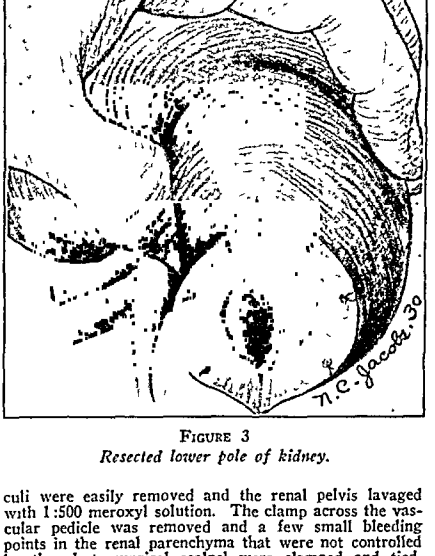


FIGURE 3

Resected lower pole of kidney.

culi were easily removed and the renal pelvis lavaged with 1:500 meroxyl solution. The clamp across the vascular pedicle was removed and a few small bleeding points in the renal parenchyma that were not controlled by the electrosurgical scalpel were clamped and tied. The incision was closed with three mattress sutures of zero chromic catgut placed close to the edges of the wound so as to destroy as little tissue as possible. A thin strip of muscle was placed over the surface of the renal incision and tied in position by means of the long ends of the mattress sutures (Fig. 4). The extended pyelotomy wound was closed with a continuous 00 chromic catgut suture. Bleeding was completely controlled. The kidney was dropped back in place and a rubber tube and cigarette drain were placed for drainage. The muscles and fascia were approximated by a continuous No. 2 chromic catgut suture. The skin was closed with interrupted silk sutures. The patient was in good condition upon leaving the operating table.

Comment. It is our hope that the resection of the dilated lower calyx removed a favorable site for new stone formation and at the same time left a certain amount of kidney reserve that might be of great value if stones developed in the other kidney. While the electrosurgical scalpel did not completely control

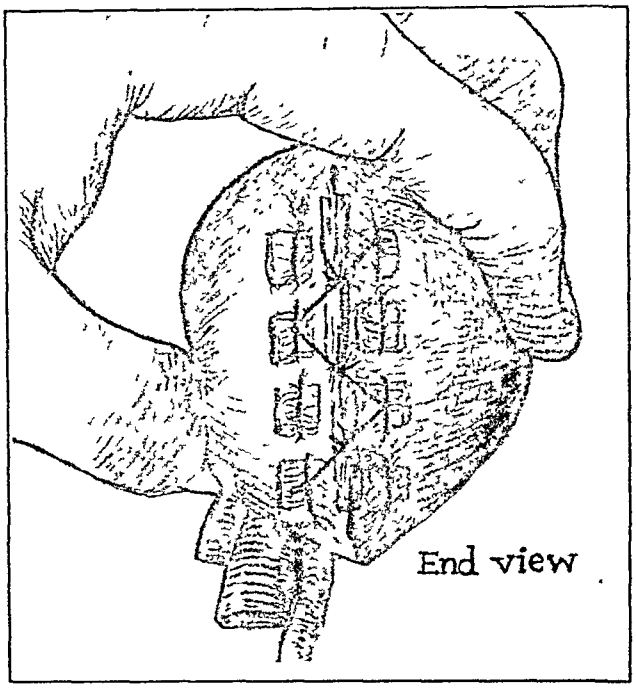


FIGURE 4
Closure of kidney wound.

hemorrhage, it was possible to obtain satisfactory hemostasis with fewer sutures than would have been necessary had it not been used.

Case 2. A K., S.M.H. No. 21141, aged forty-five. October 22, 1929.

Complaint. Pain in the right kidney region and smoky urine

Family History Unimportant.

Past History. In January 1929, the patient was admitted to the hospital and treated for paroxysmal tachycardia. Five months later he received several treatments for chronic antrum sinusitis. His past history was otherwise negative.

Present Illness. Seven weeks before admission, after lifting a heavy object, the patient first noticed pain in the right kidney region which radiated down the course of the right ureter. Two weeks later he noticed smoky urine and burning during urination. These symptoms were present on admission.

Physical Examinatoin. The principal findings on physical examination were myocarditis, emphysema, hemorrhoids and fistula in ano. The blood pressure was 165/105.

Special Examinations.

Urine. Albumin ++, pus +, red blood cells ++.

Blood. R.B.C. 4,620,000. W.B.C. 14,000 and Hb. 95 per cent.

Blood Chemistry. Non-protein nitrogen 31 mg. per 100 c c.

Phthalein Test. Appearance time 4 minutes, output 70 per cent. in 2 hours.

Plain Radiogram. The plain radiogram showed a stone in right renal pelvis (Fig. 5).

Cystoscopy and Kidney Study. The bladder capacity was 500 c.c. The bladder was normal. A number 7 F. ureteral catheter was passed to each kidney pelvis. The urine from the right side contained a few pus cells. No organisms were found on either side. The differential urea reading was 0 3 gm. per liter on the right side and 1 1 gm. on the left. The phthalein appeared on the left side in 3½ minutes and 4 minutes on the right, while the ouptut for one-half hour on the left side was 17 per cent. and on the right 13 per cent. A stereoscopic right pyelogram was obtained.

Stereoscopic Pyelogram. The pyelogram showed a stone in the right kidney pelvis and early hydronephrosis (Fig. 6).

Operation. On November 7, 1929, under gas-oxygen anesthesia, the kidney was approached through the extraperitoneal lumbar route. On exposing the upper pole of the kidney, marked adhesions between the true capsule and the perirenal fat were found. These bands of adhesions were clamped, cut and tied. In doing this a tear about 2 cm. in length, was made in the cortex of the upper pole of kidney, directly over the upper calyx. Bleeding was controlled by a pack and the lower pole of kidney freed. The ureter was then isolated and traced to the kidney pelvis. The stone was located in the upper calyx of the kidney. In view of the fact that a tear already existed in the kidney substance at this point, the writer suggested that the incision be carried down to the stone by means of the electrosurgical scalpel. The stone was easily removed and bleeding was practically controlled by this instrument. The edges of the incision were approximated by two mattress sutures of No 1 chromic catgut placed close to the edge of the wound. Pieces of muscle were placed between the kidney capsule and the suture to prevent the sutures from cutting into the kidney substance. Bleeding was completely controlled. The kidney was dropped back in place and a small rubber tube was placed for drainage. The fascia and muscle surfaces were approximated by a continuous



FIGURE 5
Stone in right kidney pelvis.

FIGURE 6
Early hydronephrosis. Stone in region of ureteropelvic junction.

No. 2 chromic catgut suture, reinforced by three silver wire stay sutures. The skin surfaces were approximated by interrupted black silk sutures. The patient left the table in splendid condition.

Postoperative Treatment. The patient's convalescence was very satisfactory. On December 7, 1929, the patient was operated for fissure in ano and hemorrhoids He left the hospital four weeks later. He has been followed for several months in the out patient clinic and is in excellent condition.

Comment. In this case electrosurgical scalpel practically controlled hemorrhage.

Case 3. T.J., S.M.H. No. 10250, aged forty-one years, October 6, 1929.

Complaint. Frequency, dysuria and pain in right kidney region

Past History Aside from a history of five distinct Neisser infections, the past history was essentially negative.

Present Illness. Since early childhood the patient had been bothered by frequency, urgency, dysuria and pyuria When 35 years of age he passed a calculus from left kidney and, upon x-ray examination, another stone was found in the kidney. A left nephrectomy was performed at that time. Five years later (May, 1926) he was operated upon for appendicitis One month later he became very ill, having chills, fever, nausea, vomiting, pain in right kidney region and complete suppression of urine for a period of four days. Five weeks later he had a similar attack of five days' duration. In March, 1927, he passed three calculi On October 10, 1927 he was admitted to the Strong Memorial Hospital where a diagnosis of right nephrolithiasis was made and a course of oral medication instituted. In December 1928 he was admitted to the hospital complaining of pain in the right lower quadrant and anuria of 20 hours' duration A catheter was passed to the right kidney pelvis and drainage established Three days later a pyelogram was obtained and it was determined that the patient had a calculus in the lower calyx. In view of the fact that the calculus seemed to be in a fixed position in the lower calyx and because the patient was apparently quite well within a few days from the time drainage was established, he was discharged from the hospital with instructions to return each month for observation He was not seen until *ten months* later when he again entered the hospital in complete anuria of about 24 hours' duration

Physical Examination. Temperature 38° C Respirations 20 Pulse 108. Blood pressure 122/68. The patient was a little drowsy and his tongue was coated There was marked tenderness over the right upper quadrant and in the costo-vertebral region The lower pole of the right kidney could be palpated and was found to move slightly with respiratory movements

Special Examinations

Blood Chemistry. The N P N. was 100 mg per 100 c c



FIGURE 8

Hydronephrosis due to calculi in a sole remaining kidney.

FIGURE 7

Calculus in lower and middle calices of kidney

Urine. The patient was in anuria on admission. A ureteral catheter was passed at once to the right kidney and 65 c.c of thick, pussy urine was obtained from which, on culture, grew Bacillus Coli and Bacillus Morgani

Phthalein Test. Three days after admission the Phthalein output for two hours was 25 per cent

Blood Examinations W B C. 7,820 R.B C. 4,000,000. Hg. 72 per cent.

Radiogram The plain abdominal picture showed a calculus in the lower calyx and a new large, faint shadow in the middle portion of the renal pelvis, probably caused by a calculus (Fig. 7).

Stereoscopic Pyelogram There was marked hydronephrosis. In the lower pole of kidney there was a large calculus The middle portion of the pelvis was filled with a large, relatively faint shadow probably representing multiple small calculi. The pelvis was of the intrarenal type (Fig 8)

Preoperative Treatment. Inasmuch as the patient was in anuria, on admission, and his N.P.N. was 100 mg. per 100 c c, a No 9 F. catheter was passed to the kidney

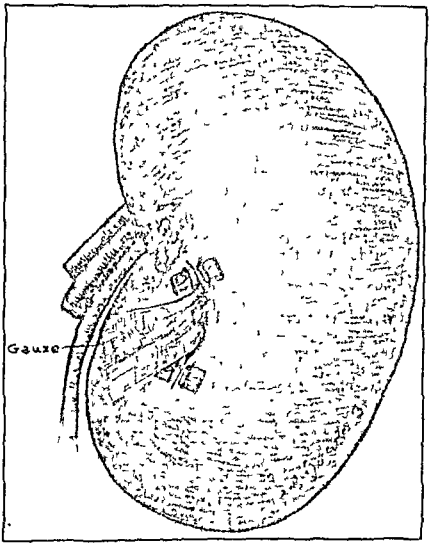


FIGURE 9

Ends of incision approximated by mattress sutures. Gauze pack used to keep rest of incision open.

at once and 65 c c of thick, pussy urine was obtained The kidney pelvis was lavaged with warm, sterile boric solution and the catheter left in place, to maintain drainage. With the exception of a few occasions when the ureteral catheter was removed in order to rest the ureter, the kidney was drained for a period of 20 days At the end of this time it was quite evident that the patient had reached *his maximum condition His N.P.N,* was 60 mg. per 100 c c. and his phthalein output was 30 per cent for two hours During this period fluids were forced by mouth and, in addition, he was given numerous intravenous injections of 5 per cent glucose solution.

Operation, On October 15, 1929 an extraperitoneal lumbar nephrolithotomy was performed, under gas-oxygen anesthesia As the kidney was approached it was found that the fatty capsule was edematous and indurated, the result of a direct extension of an inflammatory process of the kidney. The fatty capsule having been separated from the kidney, the ureter was then located It was found to be considerably enlarged and bound down by scar tissue formation When the ureter was followed to the kidney it was observed that the patient had an intrarenal pelvis and that a nephrolithotomy would be necessary. The kidney was greatly enlarged, irregular, and it was at once evident that the lower half of the renal pelvis was markedly dilated By means of

the electrosurgical scalpel an incision 3.5 cm. in length and penetrating through the pelvis was made in the lower posterior surface of the kidney, in a direction followed by a line extending from the junction of the ureter with the intrarenal pelvis to the extremity of the lower calyx. The course of the incision followed, as accurately as conditions permitted, the direction advocated by Deming. Cultures of the urine from the kidney pelvis showed a massive growth of Staphylococcus aureus and Bacillus proteus. There was but very little bleeding. The large calculus in the lower calyx was first removed. It was then found that the middle portion of the renal pelvis was filled with a large number of small calculi varying from 2 mm. to 1cm. in diameter. By means of a gall-bladder spoon and a thorough lavage with sterile salt solution, all remaining calculi were apparently removed. Because of the history of reflex anuria following the removal of his other kidney, the operator decided tc put a gauze pack in the pelvis rather than a tube. The extremities of the incision were approximated by means of two mattress sutures with No. 0 catgut. These were placed close to the edges of the incision and pieces of muscle were inserted between the sutures and the capsule of kidney to prevent as much as possible interference with the blood supply (Fig. 9). The kidney was returned to its normal position and a rubber drainage tube placed down to the renal incision. The fascia and muscles were approximated by means of a continuous No. 2 chromic catgut suture, reinforced by three silver wire stay sutures. The skin was closed by interrupted silk sutures. The patient left the table in fair condition.

Postoperative Treatment. Although a fluid intake of about 5000 c.c. a day was maintained, his N.P.N. gradually increased for several days after operation until it was 113 mg. per 100 c.c. on the eleventh day (Fig. 10).

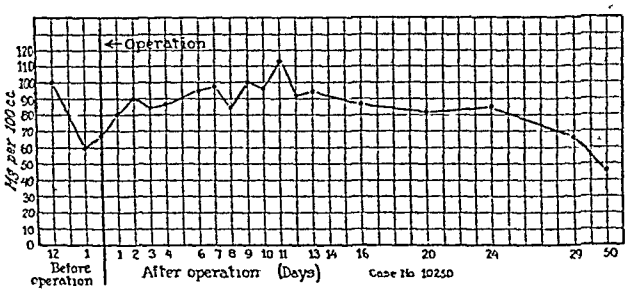


FIGURE 10

Chart of the non-protein nitrogen concentration in blood before and after operation.

He received 500 c.c. of 10 per cent. glucose twice daily from the second to the twelfth postoperative day. After the first five days it was necessary to give 10 units of insulin with each injection of intravenous glucose because of the rise in blood sugar. His wound became badly infected and he developed a marked secondary anaemia. Following a transfusion of 500 c.c. of blood on the ninth day, there was a marked improvement in the condition of the wound. Seven weeks after operation his N.P.N. was 48 mg. per 100 c.c. and his phthalein output 30 per cent. for 2 hours. The patient left the hospital in excellent condition. He has been followed at intervals since his discharge and as yet there has been no new stone formation.

Comment. Bleeding was so well controlled that it was unnecessary to clamp or compress the vascular pedicle and, therefore, the fear of injuring the renal vessels was not experienced. Of course, in the hydronephrotic kidney the blood supply is not as bountiful as in the normal one. The postoperative care is very important in these cases.

Case 4. S.R., S.M.H. No. 12901, aged twenty-two, January 18, 1930.

Family History. Not important.

Past History. Unessential.

Present Illness. On November 1, 1929, following a long walk, the patient first noticed blood in his urine. He consulted his family physician who made a diagnosis of diabetes mellitus and gave him some pills. Not long afterwards he noticed a dull pain in the right kidney region following all forms of strenuous exercise. The pain did not radiate and disappeared with rest in bed. Following the attack of gross hematuria that initiated the onset of the patient's symptoms there was no further bleeding. During the year preceding his admission to the hospital there had been a gradual increase in urinary frequency and a loss of twenty pounds in weight.

Physical Examination. The physical examination was essentially negative. Blood pressure 106/68.

Special Examinations.

Urine. Sugar, trace. Acetone +. Otherwise negative.

Phthalein Test. Appearance time 2½ minutes, output 55 per cent. for the first hour.

Blood Chemistry. Blood sugar 65.4 mg. per 100 c.c. N.P.N. normal.

Radiogram. There was a stone too large to pass in the lower pole of the right kidney.



FIGURE 11

Pyelogram showing stone in kidney pelvis.

Cystoscopic Examination. The bladder was normal. Number 7 F. catheters were passed to both kidneys without meeting any obstruction. The urine from each side was free from infection and the urea concentration was the same on each side. On differential phthalein test, the drug appeared on each side in 2½ minutes and the output for one-half hour was 30 per cent. from each kidney. A stereoscopic pyelogram of the right kidney was made before the catheters were withdrawn.

Stereoscopic Pyelogram. There was a stone too large to pass in the lower minor calyx of a kidney having an intrarenal pelvis (Fig. 11).

Treatment. The diabetic condition was regulated and then a right nephrolithotomy performed.

Operation. Under gas-oxygen anesthesia, the kidney

and upper third of the ureter were exposed by means of the extraperitoneal lumbar approach. It was at once determined that because of the extreme degree of intrarenal pelvis a nephrolithotomy was indicated The stone was palpated in the lower pole of the kidney and then, by means of the electrosurgical scalpel an incision 2 cm. in length was made on the posterior surface of the kidney directly over the lower minor calyx and the stone removed. It was unnecessary to compress or clamp the vascular pedicle to control the bleeding, which occurred from only one point in the incision and was only slight. The edges of the incision were approximated by means of one mattress suture, placed close to the edges of the wound. Pieces of muscle were placed between the kidney surface and the suture as a means of protection against cutting. The kidney was dropped back in position and a rubber tube placed down to the incision for drainage. The fascia and muscles were approximated by a continuous No. 2 chromic catgut suture, reinforced b three silver wire stay sutures. The skin surfaces were approximated by interrupted black silk sutures. The patient left the table in good condition.

Postoperative Course. His convalescence was satisfactory, the patient leaving the hospital three weeks after his operation. He has been followed in the outpatient department because of the diabetes mellitus. He has had no recurrence of kidney trouble.

Comment. Although the patient had diabetes, the convalescence was free from any complications.

Case 5. R.L., S.M.H. No. 29797, aged forty. November 18, 1929.

Complaint. Recurrent attacks of pain in left kidney region

Family History. Not important.

Past History. Unessential.

Present Illness. In December, 1921, the patient had his right kidney removed because of calculi. Two years later he began to notice pain in the left kidney region. This pain recurred from time to time until June 1929 when he developed anuria. A radiogram showed a stone in the lower portion of the left ureter. A ureteral catheter was passed but the anuria persisted until the ureteral catheter was removed six days later. He was sent to the Mayo Clinic and on his way there had another attack of anuria. Just before his arrival at that Clinic he passed the stone into the bladder. The calculus was removed from the bladder by means of a cystoscopic rongeur and an operation for nephrolithiasis advised but refused by the patient. Following his return home he was practically incapacitated by pain in the kidney region. He was first seen by the writer in November 1929 when an operation was advised. In December 1929 the patient passed another calculus and in January 1930 he entered the hospital for study and operation.

Physical Examination. Temperature 37°C. Pulse 80 Blood pressure 120/80. The left kidney was palpable, considerably enlarged but not tender. There was a small hydrocele on the left side of scrotum.

Special Examinations.

Urine. Albumin ++, pus +++, R.B.C. + Bacilli and cocci.

Blood Chemistry. The N.P.N. was 60 mg. per 100 c.c. and the creatinin 3.0 mg. per 100 c.c.

Phthalein Test. The total phthalein output for 2 hours was 28 per cent.

Cystoscopic Examination. Bladder capacity 300 c.c. The bladder mucosa was inflamed and congested. A No. 7 F. ureteral catheter passed easily to the left kidney pelvis. The urine from this side was loaded with pus cells and Bacillus coli. A stereoscopic pyelogram was obtained.

X-ray Examinations.—"Radiogram." The radiogram showed a large staghorn calculus filling the right kidney pelvis and a number of smaller stones in the lower pole of the kidney (Fig. 12).

Stereoscopic Pyelogram. There was extensive hydronephrosis with bulbous enlargement of the minor calices. A staghorn calculus filled the middle portion of the renal pelvis and in the dilated lower calyx were a number of smaller calculi (Fig. 13).

Operation. Under gas-oxygen, ether anesthesia, the kidney was approached through the usual extraperitoneal lumbar route. The kidney was found to be practically cemented in place with scar tissue. The ureter was greatly enlarged and embedded in inflammatory tissue to such an extent that the kidney pelves and upper portion



FIGURE 13

Advanced pyonephrosis due to calculi in a sole remaining kidney.

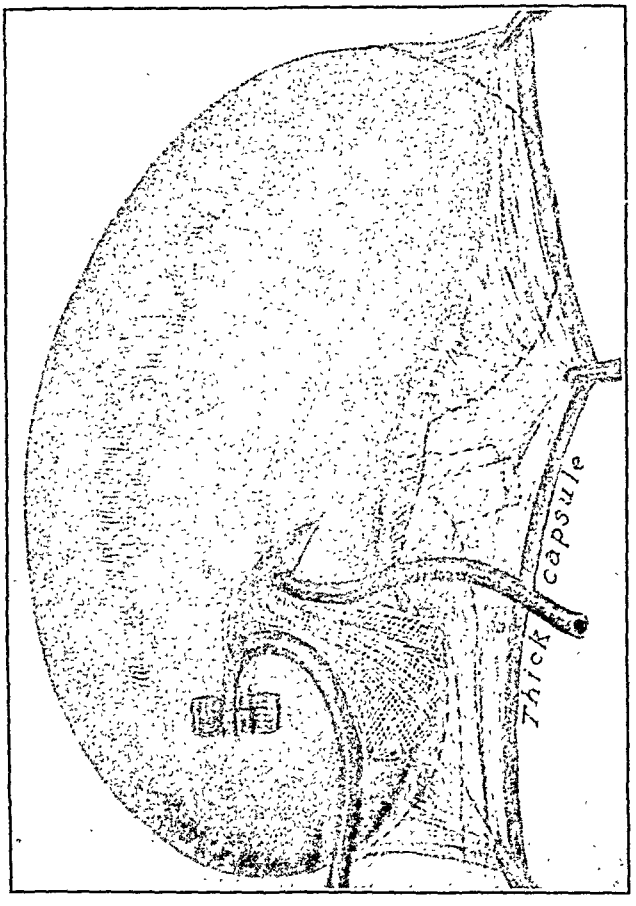
FIGURE 12

A larg ecalculus in middle calyx and many small calculi in dilated lower calyx.

of the ureter could not be clearly indentified At this stage the patient went into profound shock, having a blood pressure of 50/40 and a pulse rate of 120 per minute. He was given cardiac stimulants and 500 c.c. of intravenous glucose. An incision was made through the fatty and true capsules and the kidney exposed by means of an intracapsular maneuver. It was found to be markedly enlarged and of the pyonephrotic type. On its surface were numerous small abscesses, some of them as large as a ten-cent piece in diameter. The patient's condition was so bad at this stage that no attempt was made to free the ureter and pelvis from the surrounding scar tissue. By means of the electrosurgical scalpel an incision 4 cm. in length and extending into the dilated renal pelvis was made on the posterior portion of the lower pole of the kidney. The direction of this incision followed the course of a line extending from a pyelotomy incision down the posterior surface of the kidney to the central extremity of the lower calyx. Bleeding was so well controlled that it was unnecessary to make pressure upon the vessels of the renal pedicle. A large staghorn calculus and many small calculi were removed from the pelvis. The urine in the pelvis was thick and heavily infected. A Dakin's tube was placed in the upper and lower poles of the kidney and held in place by gauze packs. A bleeding vessel in the lower end of the wound was controlled by a mattress suture of 00 chromic catgut placed in the manner described by Deming. The lower end of the wound was approximated by placing a similar suture opposite the first and tying the two together (Fig. 14). Bleeding was completely controlled. A cigarette drain and a rubber tube were placed down to the renal incision for drainage. The muscles were approximated by a continuous No. 2 chromic suture, reinforced by three silver wire stay sutures. The skin was approximated by black silk sutures. The patient's condi-

tion was extremely serious throughout the operation and the operator was compelled to work as rapidly as possible.

Postoperative Course. On the day of operation the patient received 1400 c.c. of intravenous glucose, 5 per cent. solution, and 2000 c.c. of normal salt solution by hypodermoclysis. For ten days a fluid intake of 5000



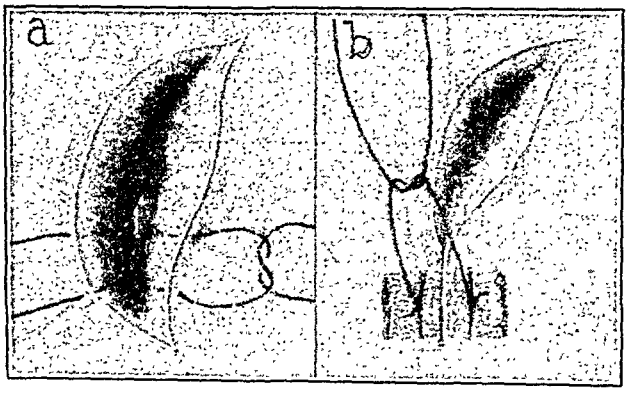


FIGURE 14

Kidney following removal of calculi showing Dakin's tubes placed for drainage and irrigation. a and b Deming suture in lower end of incision.

c.c. daily was maintained. During the first five days the patient received at least 500 c.c. of 10 per cent. glucose each day. In spite of the high fluid intake there was a gradual rise in the N.P.N. for the first two days after operation (Fig. 15). During the first two days the kidney pelvis was irrigated, twice daily, with warm sterile boric solution, by means of Dakin's tubes. Thereafter, until the tubes were removed on the ninth day, 1 per cent. mercurochrome solution was used. On the seventeenth day after operation, the N.P.N. started to drop and seven days later it was 48 mg. per 100 c.c. The patient was apparently in excellent health when he left the hospital. He has resumed his work and when last seen, on May 24, 1930, a radiogram was negative for calculi. His urine was still infected with bacilli but the cocci were no longer present.

Comment. There was but one bleeding point that was not completely controlled by the electrosurgical scalpel. This was easily stopped with the type of mattress suture described by Deming. The combined use of the electrosurgical scalpel and the Deming suture offer a very satisfactory method of controlling bleeding and approximating the edges of the nephrotomy wounds.

Discussion

The result obtained in the use of the electrosurgical scalpel in the above cases would seem to warrant its use in certain type of renal surgery. In only one of these five cases was it necessary to clamp the vascular pedicle and in this instance the lower pole of the kidney was resected. In this case

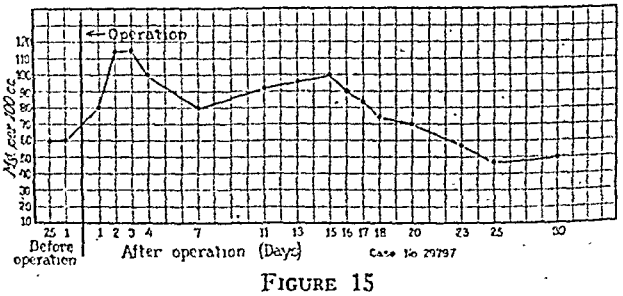


FIGURE 15

Chart showing the non-protein nitrogen concentration in blood before and after operation.

there was less bleeding and fewer sutures were required for its control than would have been necessary had this method not been used. The knowledge that the possibility of renal injury resulting from compressing or clamping the vascular pedicle to control bleeding had been completely eliminated was a matter of no little comfort to the operator, especially when operating upon the patients having calculi in a sole remaining kidney of low functional value. Furthermore, in these cases the bleeding was very moderate, requiring but very little suturing to control and consequently the patient's chances for recovery were increased in proportion to the amount of functional renal parenchyma conserved. Of course, success, in cases of this type depends upon the preparation of the patient for operation and the postoperative care, as well as the conversation of functional renal parenchyma at the time of operation. A mattress suture placed in the manner described by Deming was used in one

of these cases and found to be very satisfactory. It would seem that the use of the electrosurgical scalpel and the Deming suture offer a combination of great value in operative procedures upon the renal parenchyma

Conclusions

The use of the electrical scalpel in operative procedures upon the renal parenchyma greatly decreases the amount of hemorrhage

Because bleeding is better controlled by this method, fewer sutures are necessary and consequently there is less loss of renal function.

The decreases in the amount of bleeding permits quicker and better operative work.

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RECURRENT FIBROCYSTIC OVARIES TREATED BY X-RAY

By J. CRAIG POTTER, M.D., ROCHESTER, N. Y.

FIBROCYSTIC ovarian disease is often treated by palliative measures, such as resection or by puncturing the cysts, when, from a health standpoint, better end results would be obtained from ovariectomy. Pregnancy, however, results often enough to justify these procedures. In the final outcome, recurrences or tender, adherent ovaries are apt to occur. In these recurrent cases, which have had one or more abdominal operations, one hesitates to operate for a return of symptoms, as the ovary must be removed and more adhesions may result. I have treated four such patients by means of *x*-ray with good results. Being unable to find in the literature any cases so treated, I am reporting them.

The first patient, thirty-two years old, had had an appendectomy in 1916. In 1926 the left ovary was resected and cysts in the right ovary were punctured. In 1928 a perineal repair was done. She complained of irregular, painful periods Examination showed a recurrent left cystic ovary, the size of an egg and an adherent, small right ovary. An *x*-ray menopause relieved the symptoms, and the cyst disappeared. Two years later the periods returned with pain, but the cyst did not return. Further *x*-ray to stop the periods has cleared up the pelvic discomfort

The second patient at twenty-seven had an egg-sized, microcystic ovary removed for pain on the right side and frequent, profuse, painful periods There was also a small subserous myomata uteri. A year later the remaining ovary became egg-sized and the periods frequent, prolonged and profuse. A twenty per cent *x*-ray dose to the ovary has reduced the ovary and periods to normal.

The third case had bilaterally resected cystic ovaries. Following operation she had intermenstrual pain each month on the left. The ovary was on that side in a small, tender adherent mass A menopause dose to the left side has stopped the pain, softened the mass, the fornix is no longer tender, and menstruation is regular and normal

The fourth case had an orange-sized, follicular, cystic left ovary removed four years previously and a resection of the right ovary. At forty-two the periods became more profuse and the right ovary the size of a tangerine. A menopause dose of *x*-ray stopped the flowing, and the ovary has become small and strophic. The blood-count is normal for the first time in five years

I am aware that ovarian cysts should be removed, because of the danger of malignancy, the ease of operation, and good end results It is the handling of benign, recurrent, fibro-cystic ovaries, where they have been conservatively operated and have later caused discomfort, that I am emphasizing; also the interesting observation that the pain not only disappeared in these radiated cases but also the cystic enlargement. It would seem unlikely that a pain not associated with ovulation or menstruation would be improved, unless the disappearance of the cysts would decrease the painful pressure and traction The results obtained in these cases suggest that in certain patients the *x*-ray is a valuable means of treating the condition.

THE PLACE OF SPAS IN THE TREATMENT OF CHRONIC DISEASE*

By L. W. GORHAM, M.D., ALBANY, N. Y.

FROM early Græco-Roman times natural mineral water and baths have been utilized in the treatment of disease. Even the Father of Medicine himself, Hippocrates, may be regared as having had some idea of the spa method of treatment. The site of the temple at Cos where he practiced was chosen especially for its natural beauty and pleasant climate. In addition, considerable use was made of hydro-therapeutic and physical methods of treatment, although the psychic effect derived from a mystic ritualism was probably an important feature. At one time there were well over fifty of these temples of health in Greece, many of them situated near some spring whose water was supposed to have a special healing property.

For centuries the custom of seeking relief from chronic ailments by visiting the spas has been generally accepted in Europe, not only by the laity who throng there by the thousands, but by large numbers of well qualified physicians, who have consistently referred patients to these resorts for treatment. It is estimated that at least one million visit the spas of Europe annually.

In our own country, by contrast, this form of therapy has been accorded but slight recognition by the public, and among physicians as a rule there is marked scepticism as to its value. The reasons for this are apparent. Extravagant and unproven claims as to the specific action of mineral waters which are commonly made, plus ignorance as to what really constitutes the spa regime as practiced by modernly trained physicians at some of the old well established spas, have caused the profession in the United States generally to condemn the entire idea or to dismiss all the favorable results as being due entirely to psychic effect.

The claims made by the majority of the spas are fanciful. The type of advertising usually emanating from lay sources would often of itself tend to discredit the spa whose efficacy it is intended to support. The statement that certain waters are curative in a long list of chronic conditions reminds one of the cure-all claims made for the most palpably fraudulent patent medicines.

When one comes to examine in detail the literature from the various spas of Europe especially the lists of diseases for which the particular springs are indicated, one is struck by their great similarity. A small number limit their claims to a few diseases, but this is the exception. One must necesssarily conclude therefore that either the claims made for specific effect of mineral waters are unfounded, or else that the beneficial results apparently obtained are due to a combination of factors in the spa regime—certain broad principles of therapeutics which are common to all spas.

There are two points of view among spa physicians regarding the action of mineral waters. There are those who have an unbounded faith in the potency and specific curative effects of the mineral waters and baths of the particular spa in which they are interested —an action as specific as quinine is for malaria. They believe that the waters contain certain intangible properties which modern science can not measure, and they brush aside all chemical and pharmacologic investigation which has failed to demonstrate specific curative effect of mineral water. When asked to furnish evidence to support their view, such men can only point to clinical results, claiming that the method has lasted for centuries, and is increasing rather than decreasing in popularity. There is however also a group of spa physicians, smaller perhaps numerically, who take a much more rational and more readily understandable point of view. To them the admittedly good results which are often obtained may be explained more simply. They regard the mineral waters as compound drugs whose action on the human organism is susceptible to physiologic and pharmacologic study. They point out that the spa treatment rarely if ever consists solely of drinking or bathing in spring water, but that many other factors, such as rest, diet, exercise, diversion, and climate, play a definite part. They conclude that the application of certain general broad principles of treatment followed more or less at all spas account for the good results obtained. Such men do not believe that mineral waters are inert however, and devoid of physiologic action. Large clinical experience has revealed the fact that certain springs have an aperient effect acting mainly upon the intestine and increasing elimination through this means, and others act principally upon the kidneys producing a diuretic action. There is scientific evidence to show that mineral waters containing iodine may have an effect upon the thyroid. When employed externally, baths containing a high percentage of carbonic dioxide gas have been shown to have a definite objective effect upon the peripheral circulation.

It is quite natural that physicians generally should be more interested in acute forms of

* Read before the N. Y. Academy of Medicine at a meeting held on Jan. 5th, 1931, under the auspices of the Committee on Public Health Relations.

disease, especially where a specific remedial agent is at their command, and in which a clear cut therapeutic success may be obtained. It is equally true however that the problem of chronic disease and its alleviation or cure is a pressing one. The failure of physicians to utilize all legitimate methods of treatment, including physio- and psycho-therapy, has undoubtedly led to the development of many cults. There has been some change since the World War however and the passage of the Workmen's Compensation Act. Our leading hospitals are now generally provided with special departments where various forms of mechano-, electro-, and hydro-therapy are employed. So too there are signs of an awakened interest on the part of the public as to the value of the spa treatment.

The Legislature of the State of New York in 1929 created by official act a commission to make a comprehensive study and survey of the mineral springs at Saratoga with a view to their development along the lines of the best European spas. In the first place the commission sought expert technical advice as to the quality and quantity of the water supply. It also cooperated with the New York Academy of Medicine inviting a committee of five medical men, to visit a number of European spas and to answer the question as to whether or not in their opinion, it was justifiable to recommend the further development of the spa method of treatment at Saratoga.

At the outset the group was rather sceptical to the value of the spas and quite ignorant of the methods employed in them. After a visit, either jointly or separately, to the principal spas of Austria, Czecho-Slovakia, England, France, Germany and Hungary, a total of nineteen in all, the committee unanimously agreed that "The Spas of Europe provide desirable and effective means for the treatment and relief of many chronic ailments."

The information which led us to such a conclusion came from the recognition of the important fact that the spa treatment as practiced by well trained reputable physicians at the best European spas comprises, in most instances, all that is generally deemed advisable and ethical in the treatment of chronic disease in this country.

It is important to define what is generally meant by a spa and by the spa treatment. A spa is a health resort having a natural mineral spring or springs of a distinctive type. The spa treatment on the other hand denotes the therapeutic use of many agents both phychical and psychical.

The physical agents may be enumerated as follows:

Physical Factors:

1. Natural mineral waters for drinking and bathing.
2. Special baths and douches of various types, message douche, needle douche, etc.
3. Other physical methods, such as massage, exercise, mechano-therapy, inhalations, and electro-therapy.
4. Climate, diet, general regime.

Psychical Factors:

1. Change of scene and environment.
2. Removal of business, family, and other worries.
3. Recreation and diversion of various sorts.

It is not merely the taking of a special water or the use of a distinctive type of mineral bath which constitutes the modern treatment at the spas, but rather the application of a combination of rational procedures which are believed to be beneficial in chronic disease.

The regimen is built up about the drinking of, and bathing in, mineral waters; but it includes the strictest and most explicit directions as to rest, diet, exercise and various forms of physio-therapy. The change of scene, the elimination of disturbing home environmental factors, the enjoyment of the beauties of nature, good music and other diversions, all combine to produce a favorable effect upon the body and mind of the patient. Drugs are used when indicated, but constitute a minor part of the general therapy.

Organized and applied in this manner the best spas make available to practicing physicians a variety of places for patients suffering from chronic disease for treatment under medical supervision. In the majority of instances patients come with letters from their home physicians containing clinical and laboratory data bearing on their condition.

The physicians practicing at the spas vary in type and ability as much as they do in any large city. A few outstanding men have had previous connections with large medical clinics and have had excellent clinical and laboratory training. Still others make it a practice to spend part or all of the winter months working in some medical center.

During the pressure of work of the busy spa season it is hardly to be expected that practicing physicians would have time to keep exhaustive clinical records, or do any fundamental investigation. In many of the leading medical schools, however, balneology is taught either as a part of therapeutics or pharmacology, or as a special elective subject. A visit by the students to one of the spas with special lectures on the methods employed is given as

part of the course in some of the universities. In almost every country there exists a national balneological society and the International Balneological Association has a meeting every year. Many European countries have established Institutes of Balneology and Hydrology at certain spas where studies of the physical and chemical properties of the mineral waters are made. In association with these institutes clinical-pathological and *x*-ray laboratories are maintained for the use of the practicing physicians. Physio-therapy is made available in every form and under the direction of specially trained physicians and attendants.

Although no scientific proof exists which indicates a specific direct curative effect of mineral water upon any pathologic condition, the fact remains that thousands of people visit the different European spas annually and in increasing numbers. Clinicians of high standing outside of the spas, while not claiming specificity for the waters, do not hesitate to attest the beneficial effects of spa treatment often surpassing the results obtained in chronic disease at home.

The Advisory Medical Committee which made the survey of the European spas in 1929 for the Saratoga Springs Commission filed its report and made the following recommendations which were presented to the Legislature of the State of New York:—

1. "The committee believes that something of the type of the conservative spas of Europe should be developed in connection with Saratoga Springs, in view of the existence there of springs whose chemical composition is considered suitable for the treatment of certain conditions. The committee is of the opinion that development should proceed in a very conservative way. No attempt should be made to advertise Saratoga in the highly objectionable and misleading manner which is being almost universally employed by the spas of Europe.

2. "It is known that the saline alkaline waters of Saratoga Springs have a diuretic and aperient effect; and there is justification for the belief that the naturally carbonated waters of Saratoga have a physiological effect on the circulation, and that this effect is beneficial in selected cases of circulatory disease. In the judgment of the committee, the situation and climate of Saratoga are ideal for the care of certain forms of heart disease from May to November.

"No attempt should be made to regard Saratoga as a 'cure-all.' Its development should be limited to the treatment of persons chronically ill. This need is particularly felt for patients with diseases of circulation, for the prevention of heart failure and the building up of cardiac reserve, for patients with neurasthenia and the psychasthenias, and with certain chronic metabolic diseases.

3. "The development of Saratoga should proceed along the lines of well-considered policies, administrative and medical. The carrying out of the plan should be gradual, certain features of it being developed ahead of others.

4. "The two immediate needs are: (a) the formulation of a wise medical policy; and, (b) the development of the environment.

5. "With reference to medical policy, the committee recommends:

(a) That a conference be arranged with the officers and trustees of the Medical Society of the State of New York to secure their advice concerning projected developments;

(b) That conferences be held with those among the local practitioners at Saratoga who have shown interest in the development of Saratoga, and in the science and art of balneology, and

(c) That steps be taken toward the establishment of a scientific institute at Saratoga whose functions should be threefold.

The first function would be to provide modern laboratory facilities for diagnostic work, this is to include facilities for radiology, cardiology, basal metabolism, serology, bacteriology, and other diagnostic aids.

The second department, closely linked to the laboratory, would be devoted exclusively to research work in balneotherapy, and other methods of treatment of chronic disease. This department would offer the physicians of the State educational opportunities for the study of the nature and treatment of chronic diseases.

The third department would be given over to the study of the geology of the district and the physical and chemical properties of the waters, this department to be under the direction of a competent modern chemist; while the laboratory and research divisions are to be under the direction of a skilled medical director with a good clinical background, and of a research type of mind. The research and experimental work, as well as the educational facilities, might be associated with one or more medical schools of the State.

The relationship of the institute to the medical practitioners should be worked out in conference with representatives of the State Medical Society and of the local physicians.

(d) In connection with this institute, a fully equipped department of physiotherapy should be developed. It should comprise facilities for the various kinds of physiothermo-, hydro- and electro-therapy, as well as inhala-

toria, gas baths, sun baths, open air as well as enclosed gymnasia, and other features of special therapy.

(e) The institute should be built on State property in close proximity to the bathing establishments. In its directly utilitarian aspects, i. e., in its laboratory work and its physio-therapeutic equipment, it should be built and maintained by the State, although in all probability the charges made for service rendered will cover the cost of its maintenance. For the research work, which would be one of its outstanding features, continuous maintenance should be assured. This institute should be managed by a board of trustees, or a board of scientific control, appointed in a manner which will properly safeguard its purpose.

(f) The selection of the Medical Director and his staff should be the responsibility of the board of trustees or the board of scientific control.

(g) It would, perhaps, be desirable to consider a plan whereby felowships would be granted to young physicians to travel and study abroad, and to organize, at Saratoga or elsewhere, courses in balneotherapy when the opportune time comes.

(h) The clinical material for research purpose could come from both the ordinary patients and the patients who would be accommodated free of charge, or at greatly reduced cost. A rule should be adopted that no one could pursue a course of treatment at Saratoga without medical direction by physicians recognized by the management of the spa."

The commission also stressed the importance of making the environment as attractive as possible, realizing that much of the charm of European spas is due to the care with which opportunities for recreation and diversion out-of-doors have been provided.

In conclusion, I think we may safely say that there is a definite place for the development of the conservative type of spa treatment in the United States. It must necessarily be a slow growth, and should be carried out as already suggested, along broad educational lines, with provision for critical study and proper evaluation of results.

MORTALITY FACTORS IN THYROID DISEASE

By F. H. LAHEY, M.D., F.A.C.S., BOSTON, MASS.

Thyroid disease possesses a quite definite mortality rate either treated or untreated, under operative or non-operative measures. Because of the fact that we have to deal with patients with this disease in fairly large numbers, we have been interested in arraying these factors, in order that we might do everything possible to offset them.

It is unfortunate that hyperthyroidism—and I speak of exophthalmic goiter and toxic adenomata as both under the one head of hyperthyroidism, as I believe that they are one and the same disease—can be and is present so often for a long time without greatly interfering with the patient's activity. This results in delay in diagnosis and delay in treatment,—one of the main factors that produces mortality in hyperthyroidism. Only very rarely does hyperthyroidism appear suddenly, as after a marked emotional strain or shock. The common course of the disease is to appear very gradually and to show very gradual intensification until it has become fully developed. After the disease has become fully developed and the average ambulant pulse rate is 120 or 130 or over this, sudden changes in the disease are possible and not uncommon.

We have no very tangible way whereby we can measure and demonstrate the effect of prolonged toxicity upon the organism, but we do know that in our operative results the highest mortality is in those patients who have had the disease a long time,—a year or over. In fourteen seemingly avoidable deaths out of an unselected operated group of 2,769 patients with toxic goiter analyzed in our Clinic by Dr. H. M. Clute, the disease had been present for over a year, and in all except four had been present for over two years. In this operated group of 2,769 toxic patients there were no deaths in patients who had had the disease a year or less. This factor should, then, always be arrayed before one's mind when patients are carried through long periods of indecisive methods of treatment for this disease.

Age is likewise a serious factor in the mortality of hyperthyroidism. People from the later part of middle age onward who develop hyperthyroidism are in general much more serious problems than are the younger people with more obviously intense states of the disease. In this same group of fourteen avoidable deaths, but two of the patients were under forty years of age, the average age in the remainder being fifty years. One cannot, as stated above, accurately compute the ill effects of prolonged thyroidism on the organism, but it seems evident that the disease causes a constant and unavoidable energy wastage, which can be compensated for in the youthful with plenty of reserve, but results in breakdown, often first prominently evidencing itself by auricular fibrillation, in the middle-aged and elderly, in whom reserve has been at least in

some measure exhausted by work, disease, and merely years of living. One should, therefore, realize that patients with hyperthyroidism, roughly of forty years and over, should be considered as falling into the group with an added mortality factor.

A very obvious indication of the seriousness of hyperthyroidism is weight loss. Weight balance in hyperthyroidism is roughly dependent upon two things,—(1) the degree of increased combustion, and (2) the ability of the individual to compensate for this hypercombustion by an increased food intake. Out of these fourteen supposedly avoidable deaths in 2,769 operated toxic goiter cases, the weight loss in nine cases in which it was known averaged 45 pounds. Patients showing considerable weight loss must therefore be considered as possessing a very definite mortality factor. There are two features to be appreciated about weight loss in hyperthyroidism: (1) that even though the weight be kept somewhere nearly in balance by excessive food intake, nevertheless its reduction into stored weight takes place only at the expense of excessive combustion processes on the part of the organism, and (2) likewise that when weight loss is not compensated for by food intake, the effects of hypercombustion are most evident in the form of great weight loss, which must, even though not demonstrable, produce at least an undesirable effect upon all of the structures of the body.

Patients with marked weight loss must therefore be considered as possessing a serious mortality factor, and its occurrence must be considered as an indication that active measures to check the disease should be undertaken.

Basal metabolism reports are not dependable criteria of the seriousness of the degree or type of thyroid toxicity. In general, the degree to which the basal metabolism is elevated will correspond approximately to the intensity of the disease, but disturbing inaccuracies in the relationship between basal rates and serious states of hyperthyroidism are not rarely, but quite frequently, arising. We have, for example, seen a young man with a basal metabolism rate of +120 pass into a thyroid crisis, and in just the same manner we have seen a more elderly individual with a basal rate of +38 pass into a thyroid crisis. Likewise we have constantly a number of patients with basal metabolism rates as high as +85 to 100 or over who pass safely through subtotal thyroidectomy, and some patients with low rates who do not. In the fourteen supposedly preventable deaths in the 2,769 operated patients with toxic goiter, the average basal metabolism rate was +55, but there was one of +30, one of +34, and one of +36. While, in general, high basal rates may be viewed as possible mortality factors, this must not be construed into the not uncommon position that rates as high as +100 and over are a contraindication for operative procedures. No basal metabolism, no matter how high, possesses in itself sufficient value as a mortality factor to solely constitute a contraindication to surgery.

Just as high basal rates are not a contraindication to surgical procedures, so, on the other hand, low rates are no guarantee that the patient with thyroidism is either in a safe stage of the disease or to be considered a safe operative risk. I spoke before this assembly last year about the apathetic type of thyroidism characterized by relatively low basal rates, by relatively moderate tachycardia, by apathy rather than activation, by relatively little active reaction to stress such as operative procedures.

Apathetic thyroidism is quite contrary to the commonly accepted picture of thyroidism in the form of typical activated thyroidism which is so characteristically accompanied by very obvious danger signals, such as flushed skin, generalized over-activation, rapid heart (140 and over), full, bounding pulse, tumultuous heart action, and emotional excitability. This is the typical and well-known type of thyroidism.

One should have in mind how misleading the atypical apathetic thyroidism may be, and realize that with its low basal rates, its non-activation and its unstriking pulse character, it may well lure one into a feeling of false security which can result in a fatality through failure to realize the serious possibilities in patients with thyroidism of this type.

For a great many years it has been suggested that the thyroid has something to do with the neutralization of the toxins of infection. There is no real evidence at hand to bear out this assumption. Changes in the microscopic findings within the gland when associated with infection have been reported by Cole and Womack, but we, in a series now of 8900 operated goiters, have not been impressed with the fact that infection is any more or less common in patients either with hyperthyroidism or myxedema. We are, however, constantly being impressed with the fact that the occurrence of a severe infection in a patient with hyperthyroidism very quickly and definitely produces an intensification of the hyperthyroidism and constitutes in itself a serious mortality factor with real possibilities of a fatality. I know of nothing which can so quickly (in a day or two) change hyperthyroidism of moderate degree to one of dangerous intensity bordering or passing into an acute crisis, with delirum, vomiting, uncontrollable activation and uncountable pulse rate, as a super-imposed infection, the most common occurrence of which is in the form of follicular tonsillitis. Not infrequently we have seen patients who were up and about, with basal metabolism rates of +35 to +45, with moderate pulse rates, with little or no weight loss, suddenly changed to wildly intoxicated individuals by the

effect of an acute infection. One should realize, then, that infection constitutes a real mortality factor in hyperthyroidism. It demands immediate attention toward the infection in the way of drainage, which unfortunately is rarely possible for several days, if at all. During this time, the situation frequently becomes serious, and emergency measures directed particularly toward the intensified hyperthyroidism must be instituted. The most important of emergency measures are the intravenous administration of fluids and glucose, providing thus the two essential elements for consumption in hypercombustion, the utilization of which doubtless saves the organism from consumption of its own fluids and fuel so necessary for maintenance of ordinary bodily function.

So striking are the reactions of the organism to the effects of high basal rates, particularly in young people, and so immediate is the relief afforded by the introduction of fluids and glucose, both readily available for combustion, that the notion that they protect by providing fuel for the flames in place of fuel from the patient's own organism cannot be avoided.

Pregnancy has always been viewed as a serious complication of hyperthyroidism, and it must be admitted that if permitted to go to full term and the labor is difficult, prolonged, and necessitates the employment of a general anesthetic during a very active stage of hyperthyroidism, it does definitely represent a very serious mortality factor in the management of hyperthyroidism.

We have had it impressed upon us that the administration of a general anesthetic and the undertaking of any procedure of the magnitude of a major operation, exclusive of one directed at the thyroid, will result in a fatality in many of the cases. We have seen deaths from thyroidism following appendectomy, following cholecystostomy, following perineorraphy, and we are so fearful of any operative procedure, other than a thyroid operation, on patients with active hyperthyroidism, that we urge against even tonsillectomy or tooth extraction with an anesthetic in patients with well-developed states of hyperthyroidism. We are so impressed, in patients with this disease, with the possibilities of serious thyroid reactions to non-surgical procedures, that we urge that the thyroid operation always be undertaken first, and that any general surgical operation be deferred, if possible, for at least six months.

From the foregoing remarks, it is evident that we consider that permitting pregnancy to go on to full term in a patient with severe hyperthyroidism provides, in our opinion, a very serious mortality factor. It is at once evident that the avoidance of this undesirable factor can be accomplished in one of two ways: (1) by interruption of pregnancy, or (2) by operation upon the thyroid, and the latter course is by far the more satisfactory to pursue. Interruption of labor, if early, may be accomplished safely, but leaves the patient still with the hyperthyroidism. If, on the other hand, infection occurs, then the hyperthyroidism becomes a serious and at times a dangerous problem.

Interruption of gestation late in pregnancy is a procedure of sufficient magnitude to constitute a risk approaching that of full term labor and delivery.

In a consecutive series of 3,678 patients operated upon in our Clinic for toxic goiter, there were fifteen patients who had toxic goiter and pregnancy,—the incidence being thus 0.41 per cent. Thirteen of these patients had exophthalmic goiter and two had toxic adenomata. There were no deaths. One mother miscarried two days after a long automobile ride to her home eight days after operation, and normal deliveries with normal children occurred in the remaining group of mothers. It seems evident, then, that subtotal thyroidectomy in the presence of pregnancy is not a dangerous procedure, and that the danger of miscarriage following subtotal thyroidectomy is not unduly great.

We strongly urge, then, that the association of pregnancy with thyroidism is distinctly a mortality factor when pregnancy is permitted to advance up to later stages, and that this mortality factor can be avoided without undue risk to the mother or to the pregnancy by early subtotal thyroidectomy before this mortality factor is well developed.

Conclusions

Patients with long standing thyroidism, a year or over, possess a very definite mortality factor.

Patients with marked weight loss likewise possess a definite mortality factor.

Basal metabolism rates are not dependable criteria as related to a mortality factor.

Acute infection in the presence of hyperthyroidism is a definite and dangerous mortality factor.

Pregnancy in its early stages is not a serious mortality factor, but the latter stages of pregnancy with full or nearly full term delivery constitutes a real mortality factor in well-developed hyperthyroidism.

Subtotal thyroidectomy in hyperthyroidism associated with pregnancy can be done with little danger either to the mother or child, and is the safest and best way of avoiding and dealing with this factor.

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THE TREATMENT OF FUNCTIONAL GASTRO-ENTEROLOGICAL DISTURBANCES

By L. PULSIFER, M.D., ROCHESTER, N. Y.

AS an internist who is especially interested in gastro-enterology I find that about sixty per cent of the patients who come to me do so because of functional disorders of the gastro-intestinal tract. Most of these patients have consulted several physicians and, as a rule, have not been very successfully nor, I may say, understandingly treated. To be sure among them will occasionally be a hopeless psychoneurotic or a mentally deranged individual but by far the majority of these patients seem to respond to treatment in a most satisfying manner. It is unfortunate that medical textbooks do not often contain any comprehensive outline for guidance of the neophyte who finds himself confronted with the problem of treating a functional "dyspeptic." I have no delusions that I am offering anything new. However, in an effort to supply such an outline, and with the hope of stimulating a more general interest in the thoughtful treatment of this large class of patients, I will submit the following.

The symptoms complained of are those caused by: Overactivity (principally pain, spastic constipation, diarrhea, and maldigestion with resulting flatulence), and those explainable on the basis of reverse activity (principally fullness, belching, nausea, vomiting, and "bilious" spells).

The findings usually include some of the following: Diffuse abdominal tenderness, tenderness confined to parts of the colon, distension, tympany; and stools which may be tiny caliber, lumpy, mushy, watery, sour, filled with bubbles, or undigested food.

Organic disease in the background may be found at the start, may or may not be suspected, or if present, may become clearly apparent only when those signs and symptoms which are on purely functional basis have been quieted down so that they no longer confuse the picture. The following is a list of those more common organic conditions which one must keep constantly in mind when treating what may seem to be disordered function: Teeth (insufficient for mastication), painful hemorrhoids or anal fissure, diverticultis, appendicitis, gall-duct disease, malignancy, ulcerative colitis, peptic ulcer, coronary disease, pregnancy, nephritis, or other kidney conditions, tuberculosis, tabetic crisis, and migrain.

The status of the *patient's nervous system* and his manner of living must be thoughtfully considered and the question asked, "put in his shoes could I be well or feel well?" Is the mental endowment adequate? Has he migrain, epilepsy, feeble-mindedness, or insanity? Are there acquired neurotic tendencies? What of his upbringing? How does he fit into society? Is he reliable? What of his family and sex life? What stress does he work under? What is the significance of his illness to him, and what of his state of mind? Has he fears, worries, and economic burdens? What of his habits and manner of living? Does he sleep sufficiently? Does he have leisure? Does he smoke or drink? Does he have natural bowel function or does he take physics and enemas? What of his diet? Does he eat wisely, regularly, sufficiently, or too much? Does he bolt his food? Outline a typical day.

One must listen patiently and sympathetically being always kind. He must be naturally interested in the problems of people and must adopt a manner in dealing with the patient that gives positive assurance that he knows what he is about. Often it will take several sessions before the actual facts involved in a definite emotional stress will come to light.

The *examination* must be reasonably adequate to minimize the chance of missing organic diseases and at the same time to impress the patient.

The treatment is first psychic, is closely bound up with the relation between physician and patient, and is largely suggestion. Many of those physicians who believe they get such good results with this diet, medication, or course of treatment, I believe do get good results. However, I am of the opinion that it is not because of their pills nor their diets, but even in spite of their medication, and indigestible diets they may often (with their fine personalities) suggest disturbed minds back into tranquillity and the functional disturbances into oblivion. A determined effort should be made also to remove sources of emotional stress.

Watching always for organic disease in the background, one should next try to give *sympto matic relief.* This may greatly contribute toward getting proper hold on the patient and so encourage him. To this end the following agents are valuable:

Sedatives—usually in small doses over a con siderable time.

Bromide is most often use.d It is surprising how frequently five or eight grains three times a day will relieve distress due to spasm, quiet excessive activity, and overcome spastic constipation. Nervous vomiting may usually be controlled by sixty grains per rectum every eight hours if food by mouth is withheld and adequate liquids given other than by mouth. Luminal sometimes alone and sometimes in combination with bromides in doses of one-eighth to one grain, may be valuable. It is especially effective in preventing and ameliorating migrain disturbances.

Analgesics—such as antipyrene, phenacetine, and the salicylates may give relief from mild degrees of intestinal discomfort.

Antispasmodics—are best used in conjunction with the sedatives, but when used alone may benefit most those patients who are quite stable emotionally. Atropine sulphate, one two-hundredth of a grain for distress due to spasm, or one five-hundredth three or four times a day is very convenient. Tincture of Belladonna, six to ten minims three or four times a day and tincture of hyoscyamus in similar doses are useful.

To promote downward peristalsis: Calomel is very worth while especially in that type of reverse activity designated as biliousness." Doses of one-tenth grain at half hour intervals for four to eight doses will rarely need to be exceeded.

Magnesium Carbonate in doses of two to eight grains taken a little while after eating will often eliminate "heart burn," "crowding," and regurgitation.

Disodium phosphate, four to twelve grains, will occasionally do likewise, and when given an hour before meals may help to stimulate the appetite especially if taken with hot water. This later effect seems to be augmented if bromide is given at the same time.

Calminatives are occasionally of some value.

To slow down overactivity: Opium derivatives are most efficacious. Powdered chalk in teaspoonful doses will often be sufficient, especially in fermentative diarrhea. Tribasic calcium phosphate, and bismuth are of similar value.

Hot packs, electric pads, and hot water bottles are most excellent agents to quiet spasm and aid in the control of pain and diarrhea.

To regain habits of restful sleep, hypnotics are invaluable: Barmidon, Allonal, or Adalin, I have found most satisfactory. Chloral will sometimes serve when others do not. The effect of Luminal too often extends into the next day.

Rest, a few minutes before meals, will be very often a desirable aid toward improvement of the quality of digestion. Of course a placid, happy mental state during meals is to be cultivated. This last is of vital importance. Extra periods of rest during the day may often enable one to store up reserve emotional stability.

The diet should be adequate and, in general, low in laxative quality. Constipation per se will perhaps be more quickly overcome if considerable bulky but chemically bland vegetables are used.

If pain, or distress, or diarrhea is the major complaint at first it will be wise to make the diet almost residue-free, adding bland residue as these symptoms subside. If considerable whole food is found in the stools the "Smooth" diet plan had better be adopted.

In the case of starch indigestion only the more easily digested starches had better be used (such as fine ground cereals and toasted bread), the residue should be restricted at the start, and cream, butter and protein foods should be depended upon for nourishment.

In cases of persistent nervous vomiting everything by mouth may wisely be withheld while fluids are given in other ways, and sedatives by bowel, until the vomiting is under control, then gradually dry foods in small quantities may be taken.

Coffee, much tea, stimulants, and over-smoking had better be avoided.

Increased calories for the malnourished, decreased for the heavy.

Quite often five or six small meals a day will be better tolerated than will three large ones.

Habits of regular eating, and of regular bowel elimination, and methods of induction of normal bowel movements should be taught, *i.e.,* oil enemas to be retained over night, suppositories and small plain water enemas. It should always be the aim to cultivate spontaneous evacuation and methods of induction of defecation should be withdrawn as promptly as possible. Colonic lavages probably definitely postpone the time when normal habitual elimination can be accomplished. They had better be avoided. Leisure of a real kind should be obtained wherever possible with time arranged for work, fun, rest, and exercise.

The prognosis in such cases depends of course primarily upon how fixed in the patient's make-up the abnormal function has become: and almost to an equal degree upon how well the physician understands the true nature of the situation and then can apply the elements of therapy and keep at it, stressing those which affect more particularly the individual problem. Most of these patients improve right soon. Many may relapse temporarily unless followed when a considerable degree of semi-improvement is the rule.

CONCLUSIONS

1. In general, functional gastro-intestinal disturbances are not understandingly nor adequately treated.

2. Organic disease, one must constantly watch for, but the patient should not be allowed to feel uncertainty.

3. The mental status of the patient should be studied, and emotional stress relieved wherever possible.

4. Reinforcement should be given in the form of suggestion and symptomatic relief.

5. The manner of living, eating, and diet, and bowel management should be adjusted according to common sense standards. Catharties and irrigations should be avoided.

6. The patient should be followed and a general plan of treatment persisted in. Improvement is the rule.

PREVENTION OF INJURY TO RECURRENT LARYNGEAL NERVES DURING THYROIDECTOMY*

By ALFRED H. NOEHREN, M.D., BUFFALO, N. Y.

THYROIDECTOMY, if done according to modern methods, is today one of the safest operations in surgery. In no other field of surgery has greater progress been made. Mortality has been reduced to the vanishing point until in most conditions in which thyroidectomy is indicated, the hazard of operation is much less than the hazard of the disease under non-operative treatment or no treatment at all.

Operative and post-operative complications have also been greatly reduced. Hemorrhage, thyroid storm, and tetany are very rare. The one dreaded complication that still remains today is injury to the recurrent laryngeal nerves with its resultant change or loss of voice and difficulty in breathing. Here there is still room for improvement.

It is difficult to determine the actual percentage of nerve injuries, as few statistics are published. Those reported vary all the way up to 42 per cent.[1] Before Mikulicz emphasized the importance of leaving some thyroid tissue behind, Billroth reported paralysis of vocal cords following thyroidectomy in 32 per cent of cases, Jankowski in 44 per cent. After following the suggestion of Mikulicz, Kocher reported a series of 900 thyroidectomies with only 7 per cent injuries.[2] Among recent statistics, Fowler and Hanson found injury in from 1 to 14 per cent. In our last 100 thyroidectomies, careful pre-operative and post-operative laryngeal examination showed that there was some laryngeal paralysis in two cases before operation and in six cases after operation. In only one of these, a very large bilateral nodular intrathoracic goiter with marked pressure on the trachea, was there complete loss of voice or respiratory difficulty. The other five had only slight temporary trouble and today have a perfect voice and no respiratory difficulty.

In reviewing the technique of thyroidectomy with a view to still further reduce the number of recurrent nerve injuries, we have come to the conclusion that the common practice of sewing over the thyroid stump by drawing the lateral capsule over to the pretracheal fascia must at times cause tension or pressure of the nerve.

The recurrent laryngeal nerve, being a non-medullated nerve, is exceedingly sensitive to pressure or traction. It is tucked away behind the thyroid lobe opposite the cleft between the trachea and esophagus. It has often been described by some anatomists (Cunningham, Deaver), as being behind the capsule of the gland (Fig. I.) and that therefore any manipulation anterior to or within that capsule is safe. (Fig. II). It has also been thought that any traction on the lateral capsule pulls the lobe away from the nerve and therefore is safe. (Fig. III). Others (Treves, de Quervain, Gray) have described the capsule as leaving the thyroid gland at the postero-lateral portion of its lobe and going directly backward to the prevertebral fascia, leaving the posterior surface of the thyroid lobe uncovered and in direct contact with the nerve. (Fig. IV.) Lately, Fowler and Hanson have reported that in 200 cadavers examined by them they have found this latter condition in practically every case. In 29 cadavers examined at the University of Buffalo Medical School, we found that in every case where a definite pretracheal fascia could be demonstrated, it left the gland at its postero-lateral surface and joined the prevertebral fascia behind the recurrent laryngeal nerve, thus surrounding in one sheath thyroid gland, trachea, esophagus and recurrent laryngeal nerves.

It is true that there is a very thin transparent fascia surrounding the thyroid gland, the so-called true capsule; but the surgical capsule, the one that is used to anchor sutures when the thyroid tissue itself will not hold a stitch and that is used to fold over the stump, goes back to the prevertebral fascia as described above.

If this, then, is the true anatomy of this region, it naturally follows that when the lateral capsule is drawn over to the midline by suturing it to the pretracheal fascia or to the capsule of the other side it does not pull the remnant of the thyroid away from the nerve, as formerly thought, (Fig. III.) but compresses the thyroid tissue against the nerve. (Fig. V.) This is especially true if the gap between divided fascia and midline is so great or the tissues so adherent that considerable tension is necessary. In cases of persistent oozing, sewing over the stump is the easiest way of controlling it. If this can be done without tension, it may be done with safety, but when there is tension, it is better to place a small iodoform gauze pack over the oozing surface. This can be removed in 24 hours without trouble.

It may be objected that the leaving of a raw surface is bad surgery, causing more absorption of toxic secretion and greater scar formation later on. This, however, is not true, for this surface is immediately covered and protected by the ribbon muscles when these are accurately sewed together. (Fig. VI.) This causes less scar formation in the interior of the gland substance and less absorption of secretion than when the whole mass is compressed and any secretion forced into the circulation.

While local anesthesia is a great aid in preventing injury to the recurrent laryngeal nerve by allowing constant testing of the voice, general

* From the Buffalo Thyroid Clinic.

anesthesia by a skillful anesthetist is now so safe and pleasant that in the ordinary case it is preferred and both the patient and the surgeon spared a great deal of strain. In large adenomatous goiters, especially of the substernal type, this added measure of safety given by local anesthesia should be used. But even in general anesthesia the voice can be tested during the operation.

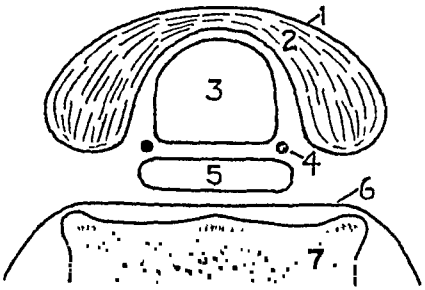


FIGURE 1

Relations of recurrent laryngeal nerve, as often described, with the nerve lying behind the capsule. According to this view, the capsule is part of pretracheal fascia and entirely separate from prevertebral fascia

1. *Pretracheal Fascia.*
2. *Goiter.*
3. *Trachea*
4. *Recurrent Laryngeal N.*
5. *Esophagus.*
6. *Prevertebral Fascia.*
7. *Vertebra.*

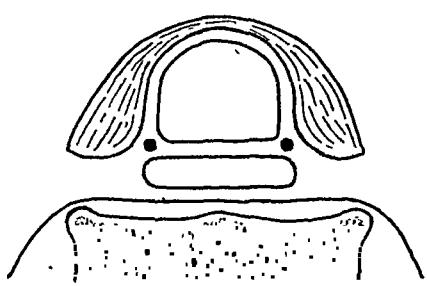


FIGURE 2

Relations after a typical subtotal thyroidectomy. If figure 1 were correct, this nerve would lie behind capsule, safe from any manipulation of thyroid substance in front of capsule.

After trying various methods, we have now adopted the following routine: Three hours before operation, the patient is given from five to ten grains of luminal, as suggested by Bartlett.[4] This relieves the patient of the strain of anticipation while waiting to go to the operating room, makes her less conscious of the trip to the operating room, and greatly reduces the amount of general anesthetic necessary to begin the operation. After the skin incision has been made, the field is injected with one-half per cent Novocain. By making the injection after the flaps have been made, the numerous punctures of the skin with their possibility of infection are avoided

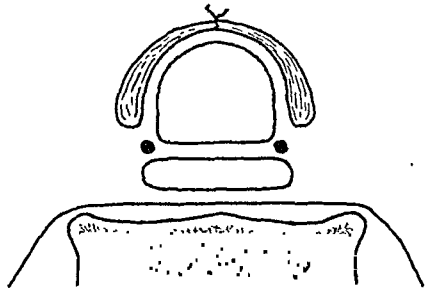


FIGURE 3

If figure 1 were correct, the folding of thyroid remnant to midline pulls it away from the nerve and out of harm's way.

and there is less danger of injecting into the visualized veins. This injection allows still greater reduction of the general anesthetic. After one side has been completed, the patient is allowed to come out of the anesthetic sufficiently to answer

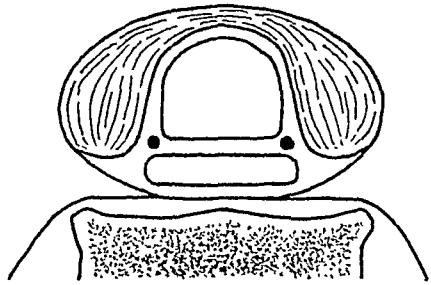


FIGURE 4

Actual relations of recurrent laryngeal nerve. Thyroid capsule leaves side of gland and goes back to prevertebral fascia, leaving posterior surface of gland bare and in direct contact with nerve.

questions. The patient seems to answer reflexly or subconsciously and it is surprising how easily the voice can thus be tested without waking the patient completely or delaying the operation. The operation is then completed under a very light general anesthesia. Thus, by assuring ourselves

after one lobe is removed that the voice is unchanged, we have absolutely protected ourselves from causing injury to both recurrent nerves.

Injury to one nerve is bad enough, but its effect on the voice is only temporary until the cord on the other side compensates for the deficiency of its mate. But injury to both nerves is a tragedy and must be made impossible to make thyroidectomy a justifiable procedure.

But not only does this method prevent bilateral injury, but unilateral as well, for in a difficult case or one where it is necessary to work close

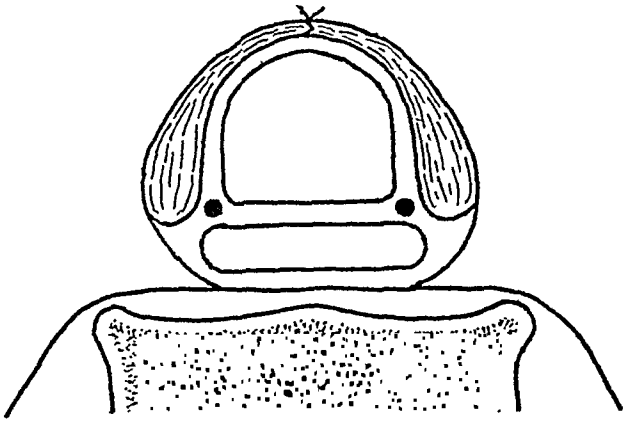


FIGURE 5

Folding over of thyroid remnant tends to compress it against the nerve.

to the nerve, the patient can be kept in more or less continuous conversation, as suggested by Richter.[5]

While voice-testing insures against immediate injury to the nerve, it does not guarantee against later injury by scar formation. It is, therefore, necessary that all the details of technique to prevent scar formation, so well described by Crile,[6] be observed and that suturing of the stumps, as indicated in the beginning of this article, be done, if at all, carefully and advisedly.

CONCLUSIONS

In addition to the many safeguards already described and carried out in the technique of thyroidectomy to prevent injury to the recurrent laryngeal nerves, we would add the following:

1. The postero-internal portion of the thyroid lobe left behind in thyroidectomy should not be disturbed by folding the raw surface over on

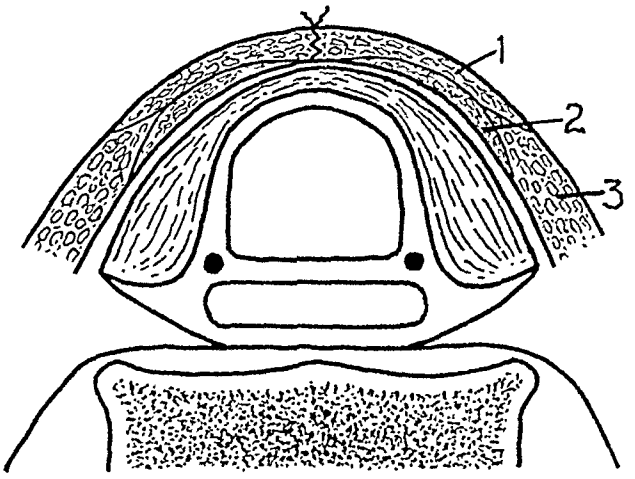


FIGURE 6

Raw surface of thyroid remnant covered by ribbon muscles, preventing compression of remnant and extensive scar formation.

Ribbon Muscles.

1. *Sterno-thyroid.*
2. *Sterno-Hyoid.*
3. *Sterno-C-Mastoid.*

itself. This is not necessary in most cases and is apt to compress the nerve.

2. Removal of the second lobe in thyroidectomy should not be undertaken until convinced that the nerve on the opposite side has not been injured by removal of the first lobe. A method of insuring this result is described.

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LUNG CANCER AND LUNG TUBERCULOSIS

By H. T. PESSAR, M.D., NEW YORK, N. Y.

THAT lung cancers are apparently increasing in frequency is generally conceded. While older statistics indicate that primary lung cancers represent only one per cent of all primary cancerous growths, recent authentic data disclose an increase as high as 10.0 to 15.0 per cent.

It is to the credit of the clinician that primary lung cancers are now recognized ante mortem with precision. The tuberculosis campaign carried on in all civilized countries undoubtedly contributed no small share to our present clinical knowledge of primary lung cancers, enabling us to recognize this disease in its comparatively early stages; for, by his efforts directed primarily to the aim of ruling out pulmonary tuberculosis, the clinician is necessarily led to other chronic pulmonary diseases, of which cancer is assuming greater and greater significance. The point is well illustrated by the following case report from the records of the Mott Haven Tuberculosis Clinic:

A male patient, 50 years of age, was referred to the Clinic on September 16, 1930, for placement in a tuberculosis institution. He told the following story:

He was apparently in good health up to June of the same year, when he began to have pain in the right side of the chest, cough, bloody expectoration, and afternoon temperatures. For the last three weeks he has been feeling very weak and quite ill so that he is hardly able to stand up. His past history, with the exception of gonorrhea and drug addiction, was negative.

Pulmonary tuberculosis might well be the cause of his complaints.

Physical examination: Pulse 126, Temp. 101 (mouth), Resp. 28. Enlarged glands in the axillae. Deep and superficial glands of the neck were found to be enlarged and hard to the touch. Lungs: Dullness to flatness from third rib to base anteriorly on the right side. Respiratory murmur greatly diminished, to absence, in this area, but exaggerated in the upper part above the area of dullness. The physical findings suggested either a tumor mass in the right lung or an interlobar incapsulation of pus. His blood showed a secondary anemia and a negative Wassermann. His sputum was negative. *X*-ray revealed a mass at the hilum extending outward and invading the right pulmonic field, with infiltration towards the periphery.

We made a tentative diagnosis of primary bronchogenic carcinoma, and had the patient admitted to the Cancer Hospital on Welfare Island. Our provisional diagnosis was confirmed, and the patient was immediately put on intensive, deep *x*-ray therapy.

No important developments have taken place in three months. The patient is still alive. The enlarged superficial and deep cervical glands have entirely disappeared under deep *x*-ray therapy. His persistent cough and pain have diminished. There is good reason to believe, judging from the present appearance of Roentgengrams, that the tumor has also diminished in size.

COMMENTS

1. It is not a matter of common knowledge that afternoon rise of temperature, so much stressed in pulmonary tuberculosis, is present in a very large percentage of lung malignancy. The rise in temperature is caused by:

(a) Toxic absorption from degenerated tumor cells.
(b) Infection of the tumor mass.
(c) Absorption from dilated bronchi distal to the obstructing tumor.

2. Blood spitting, while most common in phthisis, occurs in many other chronic lung diseases, and is often seen in bronchiectasis, and not infrequently in chronic bronchitis. A possible malignant etiology should be excluded *when it occurs for the first time* in an individual past middle age.

3. Severe, prolonged pain in the chest is not common in lung tuberculosis uncomplicated by pleurisy, but it is an early persistent symptom in neoplasm of the lung. Its occurrence in an individual past 45 years of age, should put the alert physician on his guard.

4. An impressive feature of the disease is the absence of symptoms in the beginning, markedly contrasted by the occurrence of great prostration later, out of proportion to the amount of involvement.

5. The *x*-ray findings in bronchogenic hilar neoplasm are definite and characteristic—the dense mass at the hilum with infiltration towards the periphery. The infiltration may be actual or due to atelectasis distal to a stenosed bronchus.

6. Since 90% of all primary neoplasms of the lungs are bronchogenic, a change in the intensity of breath sounds is an early and important sign of pulmonary carcinoma. Diminished intensity of breathing *in one lung* in an individual of cancer age calls for a bronchoscopic examination to rule out malignancy.

7. Definite diagnosis is imperative, because prognosis at present is grave; and the only hope for prolongation of life and perhaps cure, lies in early diagnosis followed promptly by intensive deep *x*-ray therapy. This is generally accepted as the best and most conservative form of treatment where applicable.

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Business and Editorial Office—2 East 103rd Street, New York, N. Y. Telephone ATwater 9-5056

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For list of officers of County Medical Societies, see this issue, advertising page xxx

Next Annual Meeting, Hotel Syracuse, Syracuse, N. Y., June 1, 2, 3, 1931.

LEGISLATION

This issue of the Journal will probably be the last one before the Legislature adjourns. One can never be sure what will happen until the law-makers have actually closed their session. The bill sponsored by the Governor's Health Commission was introduced during the middle of the session, and was at once subjected to amendments with the consent of its proponents.

The Osteopathic bill seems to have been defeated in the Assembly, but the fate of the other cult bills seems to be in doubt, owing largely to the habit of legislators to appear to agree with persistent petitioners while expecting the Governor to veto their bills. However the law-makers show an increasing indication to give heed to the advice of the State Medical Society.

PRESIDENTIAL COMMENTS ON CURRENT EVENTS—NO 19

Organized medicine has directed public medical thought in this state for one hundred twenty-five years The initiation of the efforts of medicine to meet its own problems and its public relationships problems furnish some of the finest examples of leadership to be found anywhere Just as today, efforts to initiate advances in the past met with some opposition This is a natural and desirable condition because out of it comes the truth

When the bill to incorporate medical societies in the State of New York was before the Legislature in 1806, it had to contend with powerful opposition because it was feared that the tranquility of the state would be disturbed by the organization of forty incorporated groups of physicians" It was finally shown however that it would "benefit the science of medicine the profession of medicine, and the public, and after the enactment the advances came in the science and relationships of medicine

The health bill before the Legislature now has been the subject of many conferences between the groups who would be responsible for its administration or affected by its provisions It has had the same tests applied that the Public Relations Committee uses to reach its conclusions and now it represents a composite opinion, only with doubt as to its major provision whether general conditions are yet favorable for its enactment

The county health unit was advocated by the Commission primarily in order to enable the smaller and less well to do counties to provide themselves, with state aid, with an effective health service, along the lines mainly of public health nursing, laboratory provision, and clinics for needed purposes If the degree of education regarding county health units is not sufficient and if the capacity of the state to provide enough trained personnel is not sufficient and if too much work is to be suddenly thrust upon county medical societies to set up an effective health organization, then it would be better for this provision to have another year of study

The great substantial provision for tuberculosis has developed no adverse opinion Even in this period of economic depression, confidence is so great in the minds of people that they seem to be willing to appropriate seven hundred fifty thousand dollars to build one district hospital and to buy three sites for the three districts This proposal indicates the greatest progress in any one year since 1909 when the permissive county tuberculosis bill was passed The primary purpose of these three additional hospitals is to bring service to rural counties which are too small to have service of their own The ready acceptance of this somewhat unexpected and novel proposal of three additional state tuberculosis hospitals is a striking evidence of the great impression made on the public opinion of the state by the tuberculosis movement and of the general high standing of the county tuberculosis hospitals The hospital work in tuberculosis is in a virgin field with no preconceived conception of method and it is easier to advance under such conditions that it is in other fields where methods mean a change of old habits and old customs

All other provisions of the bill have been amended to the satisfaction of all interests and particularly to the organized medical profession

The problems of medicine should be solved by the medical profession Continued study and conference will arrive at correct conclusions It took ten years of effort to organize medicine in the state for the benefit of its science and to protect the interests of the public The result is that medical societies became the outstanding influence on the science of medicine, the outstanding influence in protection of the public from imposition of those who assumed the title of doctor, the outstanding influence on public health

In November, 1930, at the annual meeting of the Secretaries of the Constituent State Medical Association, the President of the New York State Society said in a paper on "Public Relations" that "organized medicine can never overcome its troubles without the aid of some greater degree of self appraisal as to whether it is meeting all of its obligations of public service If it does not meet these obligations some other agency will do so just as has been done in other countries This will quite likely be the action of the state and may not be to the satisfaction of the profession The medical profession has two ways open to it One is to fight public opinion and to retreat as slowly as possible The other is to accept the practical philosophy of self appraisal If the result of such self examination warrants it, let organized medicine make proposals to meet the needs of public health organization for its administration and proposal of how to provide adequate medical care when sickness comes This can be approached by a study of relationships and a willingness to cooperate with other agencies, under the expert guidance of the profession of medicine Are we willing to undertake the responsibility of such a study? Self appraisal of our own organization and proposals from our own organization to meet the great problems of health and sickness service will put the profession of medicine in the position that it should be in and in the position that the public expects it to occupy"

WILLIAM H ROSS

CONFERENCE OF COUNTY SOCIETIES IN MICHIGAN

The March issue of the Journal of the Michigan State Medical Society is packed full of interest in all its 132 pages of reading matter. Of special value are the minutes of a meeting of the Council covering 19 pages, and the 32-page stenographic report of the Annual Conference of County Secretaries.

The topics discussed in the Conference were unusually practical, and were presented in a remarkably clear manner, and many are abstracted in this Journal in the department "Our Neighbors," beginning on page 438. The program was as follows:

1. "The Public Relations of Physicians," by Dr. B. R. Cobus, Chairman of the Council.
2. "Medico-Legal Defense," by Dr. Frank B. Tibbals, Chairman of the Medical Defense Committee.
3. "The Trend of Medicine," by Dr. Nathan Sinai, Ann Arbor.
4. "Organization Problems," by Dr. C. W. Waggoner, President Ohio State Medical Society, Toledo.
5. "Important Factors in Operating a County Medical Society," by Dr. Philip Riley, Jackson.

These topics were presented in the form of papers whose importance would have justified their being listed in the index; but since they are not so listed, they will be overlooked by many readers.

It is the policy of the NEW YORK STATE JOURNAL OF MEDICINE to list every article in the index, so that it will catch the eye of the casual reader. Even the news items are listed; if an item is not worthy of a place in the index, it has no permanent value, and therefore should not be printed.

A medical historian or philosopher, wishing to discuss modern trends of medicine and the activities of the medical societies of the states and counties, will have difficulty in discovering his facts, for they are scattered through news items and reports of conferences and meetings. The NEW YORK STATE JOURNAL OF MEDICINE has endeavored to record the current activities of medical societies in two departments:

1. "News Notes," containing the records of the Medical Society of New York State and its constituent county societies.
2. "Our Neighbors," consisting of abstracts from the Journals of other State Societies.

Each item in the two departments is given a double column heading, and is listed in the index.

The size and value of these two departments may be judged by the fact that their annual index filled six pages of the Journal, and contained upward of 1,200 references. This is probably the most extensive of all the bibliographies of current activities of the medical societies of the States and Counties.

LOOKING BACKWARD

This Journal Twenty-five Years Ago

The Interne: Twenty-five years ago medical graduates did not find interneships as available as at present; and there was often a question regarding the necessity of a term of hospital service. An editorial in this Journal of April, 1906, ascribes the value of an interneship to the man himself, and says:

"Now is the season when the student about to graduate in medicine casts his covetous eye around for the hospital whose cangenial walls shall receive him and harbor him for some two years, while he pursues the work which he hopes will culminate in the making of a doctor. He is fortunate, indeed, if he rids himself of the idea that he is after a hospital; he is wise if he is imbued with the thought that he is seeking knowledge and experience. There will be classmates of his who, without becoming internes, will excel him in both of these. The interneship is but an opportunity; there are many others. The earnestness and the fidelity and the thoroughness that he puts in his study tell the story. He can get out of his cases only the knowledge that he works out of them. There is no easy-chair method. Scientific knowledge must be worked for; it is never a gratuity. So let the student try for his interneship: he is fortunate if he gets it—fortunate for the opportunities which it affords. Happy is he if his college has taught him enough of a subject to whet his appetite for more.

"It is not the college, it is not the hospital. It is the animus within the man that shall make him superior. If he has the thirst for knowledge, he shall have it; if he has the longing to perfect himself he shall excel. We have pretty much what we desire: provided always that we are worthy and capable. There is many a country practitioner—who once had the advantages of the help and sympathy of a good preceptor—who carefully studies his cases, thinks about them, reads about them, compares them with previous cases, who is above ready-made diagnoses and ready-made prescriptions,—who is in his art and science a peer, and in his community the well-beloved physician and the noblest type of a well-rounded man."

MEDICAL PROGRESS

Diathermy Treatment of Nephritis.—W. Ewig, in an article in the *Deutsche medizinische Wochenschrift* of January 9, 1931, says that diathermy applied to normal kidneys is followed by marked diuresis, promoting excretion not only of water but also of sodium chloride and nitrogenous substances. Extraordinarily good results from this treatment have been observed in acute glomerulonephritis. Two illustrative cases are described. One of these was in a girl of 13 in uremic coma, with blood pressure 193 mm. Hg and complete anuria for 48 hours. When venesection, pantopon, digitalis, etc., produced no effect, diathermy was applied intensively for 2 hours to both kidneys, with the result that urine was voided immediately. Under further treatment of the same kind, improvement was rapid; all cerebral symptoms had disappeared by the end of the second day; diuresis amounted to 1600 c.c. on the 4th day, and blood pressure was 120 m.m. Hg on the 5th. The urine was free of albumin on the 12th day. In cases of eclampsia it is advisable to combine diathermy of the kidneys with that of the head. Without venesection or lumbar puncture, severe cases have yielded promptly to this treatment, which is especially recommended to gynecologists for use in puerperal eclampsia. Results in chronic nephritis are not so encouraging. After treating a number of cases for months at a time, the author could report no unequivocal successes, although headaches, rigidity of the neck, and similar cerebral symptoms showed some improvement. Favorable subjective effects lasted only a day or two, and diathermy had to be repeated every second day. In subchronic cases and in contracted kidney it is difficult to evaluate the effects of treatment. The method is useful in prognosis, since in unfavorable cases diuresis remains unaffected even with normal rest nitrogen, under repeated control, whereas in more favorable cases improvement is observed within a few hours. It is difficult to specify a standard dosage. In acute glomerulonephritis as a rule 2 treatments a day of 3 to 4 amperes each, and lasting 2 hours, are given. Sometimes an interval of 1, 2, or 3 days is desirable between treatments, inasmuch as diuresis is in some cases better on the day following treatment than on the day the diathermy is applied.

Uses of Diathermy in Medicine and Surgery.—After reviewing the growth of diathermy, E. P. Cumberbatch states that this agency is used to relieve pain and spasm, to raise temperature which is pathologically subnormal, to lower blood pressure which is unduly high, and to aid in the resolution of inflammation. It also aids the tissues in freeing themselves from local and general infection. Surgical diathermy, known as desiccation or fulguration, is of high value in the treatment of morbid tissue which does not extend deeply below the surface. In gynecology diathermy has achieved striking success. By the C. A. Robinson method the urethra and cervix can be safely and painlessly heated to a temperature of 114°F. This high degree of heat aids them in freeing themselves from infection. By this method success has been obtained in 90 per cent of gonococcal cases, and in 80 per cent of non-gonococcal cases. By reason of their deeper situation it is not possible to heat the tubes and ovaries to the same high temperature as the urethra and cervix, but the relatively minor degree of pyrexia that can be produced in the tubes is often successful in bringing salpingitis to an end. General pelvic diathermy is successful in dysmenorrhea, and it seems to influence the endocrine functions of the ovaries. In diseases peculiar to men the most favorable results are obtained in gonorrheal infection, including gonorrheal prostatitis and vesiculitis. In anterior urethritis diathermy is disappointing. In a few cases of senile prostatic enlargement not of long standing, Cumberbatch has been successful in removing the symptoms of obstruction by the use of diathermy. In the treatment of gonorrheal arthritis, it is imperative that the prostate and vesicles (in men) and the cervix uteri (in women) should be subjected to diathermy. This form of treatment invariably brings the arthritis to an end. In the treatment of hyperpiesia and angina pectoris diathermy has proved useful. Its value in pneumonia has been demonstrated by Eaton Stewart. Cumberbatch has found it valuable in the treatment of mucous colitis. In certain skin diseases, notably mulberry nevus, capillary nevus, telangiectasis, pedunculated warts, and pigmented areas, diathermy has been effective. In lupus vulgaris and for epithelioma of the skin diathermic coagulation and fulguration are of value. Glaucoma and gonococcal iritis have been alleviated by diathermy. Xanthelasma palpebrarum can be successfully treated by fulguration. In malignant disease surgical diathermy has scored some meritorious results.—*The Lancet*, February 7, 1931, ccxx, 5606.

Hypoglycemic Reaction from Adrenalin in Cirrhosis of the Liver.—Arturo Tarsitano re-

ports a peculiar behavior of the blood sugar curve in 5 patients suffering with cirrhosis of the liver, 4 being of Laënnec and 1 of Banti type of the disease. All the patients were injected fasting with 1 mg. adrenalin in the morning, and remained in bed during the 3 hour test. The injections were made into the deltoid or pectoral region to assure complete absorption in edematous patients, and the blood sugar was tested every half hour for 3 hours after injection. Instead of an increase in the fasting blood sugar a reduction was observed, a paradoxical adrenalin glycemia. The graphs obtained showed 3 different modes of behavior: (1) a curve that was clearly hypoglycemic, with a return to the initial values in the blood in the 3 hours following injection of adrenalin; (2) a curve just as clearly hypoglycemic, which had not returned to the initial values in 3 hours, and (3) a curve descending irregularly, with the blood sugar values after 3 hours less than the initial fasting blood sugar. It is not claimed that a hypoglycemic reaction is a constant finding in hepatic cirrhosis, for in a sixth patient it did not occur. The cases are reported for their biologic interest. The curves may have been due to a combination of two factors: on the one hand, an absence of glycogenolysis on the part of the liver under the stimulation of the adrenalin, through exhaustion of its glycogenetic reserves; and, on the other hand, a condition of hyperinsulinemia brought about by the exciting action of the adrenalin upon insulinogenesis, by way of the humoral system. It is impossible to exclude the possibility of an influence exerted by sclerosis of the thyroid that nearly always accompanies cirrhosis of the liver, and which would thus furnish a hypothyroid soil having little power of reacting to sympathetic stimuli. While neurovegetative factors may have had an influence, there seems no doubt, when the liver is compromised by a grave lesion, that the hepatic factor is the predominating one.—*Riforma medica,* December 8, 1930.

Cinchophen and Acute Yellow Atrophy of the Liver.—After referring to cases reported in the literature in which cinchophen caused acute yellow atrophy of the liver, William G. Walker describes two cases coming under his observation. The first patient, a laborer 43 years of age, was seen by the author on October 10, 1929, because of jaundice and coma which had lasted for two days. It was learned that the man had taken about twenty-four 4-grain tablets of cinchophen during the third week of the preceding August. Death ensued in less than twenty-four hours. The second patient was admitted to the hospital on January 28, 1930, because of nausea and progressive jaundice. During July, 1929, she had taken one hundred 7½-grain cinchophen tablets for arthritis. The drug relieved the joint pains and caused no distress. Three weeks before entering the hospital she again took cinchophen, and immediately heartburn, nausea, and anorexia ensued. She, nevertheless, continued using the drug until she had taken about thirty 7½-grain tablets. In the course of a few days she became deeply stuporous. Sugar appeared in the urine, but was controlled by insulin. In both cases leucine crystals were found in the urine. In both the administration of physiological saline and glucose solution was without effect, and autopsy showed the typical picture of acute yellow atrophy of the liver. Rabinowitz has, recently, again called attention to the fact that many analgesic remedies contain cinchophen or one of its derivatives, and unless one knows the constituents he may unwittingly prescribe the drug. He further states that toxic effects cannot be prevented by small or intermittent dosage, nor by the simultaneous use of sodium bicarbonate or of large amounts of fluid.—*New England Journal of Medicine,* February 5, 1931, cciv, 6.

The Early Diagnosis of Extrauterine Pregnancy.—Samuel R. Meaker calls attention to the fact that, while the classical picture of early ectopic gestation is well defined, extrauterine pregnancy may present very variable symptoms and signs, often atypical, and sometimes closely simulating other conditions. It may be confused with miscarriage in early uterine pregnancy. In both conditions the history includes a missed period followed by spotting or staining; typical disturbances in breasts, stomach, and bladder; and a certain amount of pain. In both, the examination may reveal a large, soft uterus and some degree of pelvic tenderness. Any type of pelvic inflammatory disease may give rise to irregular staining, gastric and vesical symptoms, lower abdominal pain, enlargement and softening of the uterus, local tenderness, and to masses at the side of the uterus or in the posterior culde-sac. The coexistence of pregnancy and inflammatory disease occasionally produces a clinical picture almost identical with that of early ectopic pregnancy. Torsion of the appendages may suggest ectopic pregnancy. On the other hand extrauterine pregnancy may present an atypical picture. In about 35 per cent of these cases there is no history of a missed period. Mammary, gastric, and vesical symptoms may be absent, or only such as the patient customarily notes before menstruation. Frequently the gravid tube cannot be recognized by palpation. Special diagnostic aids, such as the past history, the temperature, the white blood count, the sedimentation test, the

Aschheim-Zondek test for pregnancy, Cullen's sign, ether examination, and posterior colpotomy, are of limited value. In the suspected case the closest attention should be given to the character of the pain. In the early case pain is irregular in occurrence, severe in degree, and sharp in character, and often radiates to the shoulder, the back, or the thighs. Many patients complain that it hurts them to sit down. The sharp, severe attacks are frequently accompanied by weakness or faintness. If obvious acute inflammation is not present, then any great pelvic tenderness, aggravated by movement of the uterus, is highly suggestive of extrauterine pregnancy. In the early case a short period of observation often serves to clarify the diagnosis.—*New England Journal of Medicine*, February 12, 1931, cciv, 7.

Successful Treatment of Tabes Dorsalis with Endolumbar Salvarsan. — Theodor Brunner calls attention to the results of his 8 years' treatment of tabes dorsalis by means of endolumbar injections of salvarsan. A questionnaire sent to 11 patients who had received the treatment elicited the information that in 6 of the 11 (55 per cent) full functional capacity had been restored over a period of 7, 5, 4½, 2, 2, and 1 years, respectively. Two patients (18 per cent) had functional capacity amounting to 50 per cent, and the other 3 (27 per cent) reported improvement. This means that functional capacity had returned in the first two classes after the second or third treatment, often in an astonishing manner. Step by step with the improvement there was a diminution or total disappearance of the pains. Bladder disturbances ceased, and the general condition grew better, especially the general appearance and the body weight. Serological examination showed that in 4 cases the spinal fluid was completely normal, in 6 cases nearly normal, and in one case, normal before treatment, unchanged. The restoration of the spinal fluid extended to every detail of its qualities as a rule, and took place with extraordinary rapidity. In most cases serological improvement and clinical improvement ran parallel; in a few, however, this agreement was not always present, and the incongruity was not confined to the Wassermann reaction. The reasons for this were not entirely clear. Occasionally very good clinical findings were observed where there was still a pathological cerebrospinal fluid. In both fresh and more advanced cases of tabes, endolumbar treatment should be the first resorted to. At the same time a series of intravenous salvarsan treatments are arranged to follow, alternating with bismuth preparations and also iodine therapy by mouth.—*Schweizerische medizinische Wochenschrift*, January 17, 1931.

Cataract Operation in Extreme Old Age.—R. H. Elliot, writing in the *British Medical Journal*, January 24, 1931, i, 3655, states that he has on four occasions operated on patients 90 years of age or older, two of them being 95 and 96 years of age, respectively. He also includes the report of the case of a man, aged 96 years, operated upon by Kirkpatrick. In addition, Elliot has operated on a very large number of patients between the ages of 80 and 90. It is worth noting that in all five patients over 90 the operation was successful. In none of them was the shock of the operation severe, and in no instance does it seem to have shortened life. In seeking the reason why these patients of advanced years stand operation so well, Elliot thinks the answer lies in the extraordinary vitality that has enabled them to live twenty years and longer beyond what is usually accepted as the allotted span of life. Incidents in connection with the various activities of these patients illustrate the vitality which radiates through these exceptional specimens of the human race. Their protoplasm seems to be of a more active and resistant nature than that of most of their fellows, and this probably makes them good subjects for operation. It is of significance that such people usually have warm hands and feet —an indication of an active thermotaxic center and of excellent circulation.

The Relations between Body and Psyche.—There is a close dependence, according to Ad. Oswald, of the psychic experience upon what befalls the body, and likewise of the bodily activity upon what befalls the psyche. Both parts, psyche and soma, are closely interwoven; they fit into one another continuously, and mutually control each other. When we take into consideration the great number of observed facts which substantiate this inner companionship, this intimate interweaving, and its extension to all bodily functions, the impression is forced upon us that all somatic processes go hand in hand with a psychic experience (though we must admit this is for the most part buried in the unconscious deeps of our being), and that, on the other hand, all the contents of our psyche find a somatic resonance. From this it follows that the two components, body and psyche, are not two realities existing side by side, but are parts of one unitary whole, the psychophysical condition which is life itself. Under this concept the life process appears as a phenomenon which plays its rôle partly in the material and partly in the immaterial ("irrational"). At bottom it is one and the same process, which we see only from a dual point of view, as we do vibrations and light, as "two emanations of one living en-

tity." We can never grasp the homogeneity of the two with our senses, because the power to perceive and to comprehend it is lacking. The ancients saw an inseparable unity in body and mind, which later teachings turned into a dualism. Even though we succeed in getting a glimpse of the psyche as power, the next step, the recognition of the essence of the psychic subjectivity, the nature of the consciousness, remains for us an insoluble riddle, and must so remain as long as our somatic-psychic organization stays at its present stage of evolution. That a further phylogenetic evolution of our being may bring improvements to which this step is possible, is not to be denied *a priori*. An attack of illness depends not only on the type, form, volume, and cause of the disease of the organ, but also upon the psychic nature of the patient. The psyche assists the individual reactiviy to the disease, and in great degree by its manifold attitudes causes one and the same disease to assume a wide variety of forms.—*Schweizerische medizinische Wochenschrift,* January 10, 1931.

Orthopnea.—It was observed by H. Eppinger, D. Lazlo, and A. Schürmeyer that many cardiac patients are unable to remain lying in a horizontal position in bed, owing to difficulty in breathing. After assuming this position, they are obliged in a few moments and with considerable abruptness to elevate the upper portion of the body. This seems to point to some sudden factor making its appearance without warning. It is a well-known fact that many persons on lying down become flushed in the face. It is also well known that the brain pulse after a trepanation almost disappears if the patient is placed in a recumbent position. In the belief that a study of the circulation in the carotid artery and jugular vein would throw some light on the subject of this sudden orthopnea, the authors carried out experiments in a dog placed on a table that could be raised and lowered at will. They found that when the head is lowered the brain circulation is poorer than in its normal upright position. The pulse tracings showed that while the flow of blood through the common carotid decreased, that through the external jugular vein was considerably increased. This could only be explained by the greater part of the blood flowing through the external carotid and the much smaller part through the brain. Again the tracings showed that at the moment the head was lowered the brain circulation decreased while that in the femoral vein increased. This leads to the conclusion that in many uncompensated cardiac cases the venous pressure is essentially higher than in normal persons, and that in those with heart failure the horizontal position causes this venous pressure to rise to a far higher degree than in those who are healthy. We can therefore conceive that under the influence of increased venous pressure the brain, already poorly supplied with blood, is placed at a still greater disadvantage, which may be a cause of orthopnea, explainable by poor circulation through the respiratory center. Since even under normal conditions the brain is poorly supplied with blood when the head is lowered, the venous stasis in the region of the superior vena cava, which increases on lying in a horizontal position, would be likely to increase this circulatory involvement still further.—*Klinische Wochenschrift,* January 3, 1931.

Observations on the Etiology and Treatment of Paroxysmal Ventricular Tachycardia.—Edward H. Schwab reports three cases of ventricular tachycardia, two of the usual type and one of the alternating bidirectional variety. In one case the paroxysms were associated with persistent atrioventricular rhythm, a combination not previously reported in the literature. All three patients were treated with quinidine with uniform success in controlling the arrhythmia. In all cases reported in the literature in which the drug has been used, similar success has been attained. The drug is apparently just as specific in controlling the alternating bidirectional variety as in the usual type, although no definite conclusion can be drawn from one case. The amount of quinidine necessary to produce therapeutic results varies greatly. When the patient's condition is critical, it is perhaps best to administer the drug intravenously. In the first case the patient who had been taking quinidine was given digitalis, and instructed to return for observation. He failed to return and continued taking the digitalis, which was undoubtedly a factor in precipitating the ventricular tachycardia. It is quite generally agreed that digitalis plays an important part in the etiology of this condition. In a review of all the cases of both types, it has been found that this drug has been administered prior to the onset of the arrhythmia in approximately 50 per cent of the cases, and in the majority of these it was taken in excessive amounts. The association of digitalis and ventricular tachycardia is much closer in the alternating bidirectional variety than in the unidirectional form; all the reported cases in which the records are clear, except two, had received the drug in toxic amounts. Because of the close association between coronary occlusion, digitalis, and ventricular tachycardia, digitalis should be administered with extreme caution to patients who give a history of a recent cardiac infarction.—*American Heart Journal,* February, 1931, vi, 3.

LEGAL

CHARITABLE HOSPITAL—LIABILITY FOR NEGLIGENCE OF ITS PHYSICIANS AND NURSES

By LORENZ J. BROSNAN, ESQ.
Counsel, Medical Society of the State of New York

With the exception of those hospitals run as a business enterprise for profit and commonly known as sanitariums, the vast majority of the hospitals in this State are incorporated and operated as charitable, not-for-profit institutions. The question has very often arisen as to whether such an institution is answerable to a patient in money damages for the claimed negligence of one of its physicians, nurses, orderlies, etc.

The law is now settled beyond dispute in this jurisdiction that a charitable, not-for-profit hospital is not responsible for the negligence of its physicians, nurses, orderlies, etc., so far as a patient of the hospital is concerned, unless the hospital has failed to use due care in the selection of the particular individual causing the injury. The rule applies with equal force whether the patient in the hospital is a ward patient or a private patient. It is also well established that the burden of proof that the hospital has failed to use due care in the selection of a particular physician, nurse, orderly, etc., rests upon the plaintiff, and it is also well settled that a single act of negligence on the part of anyone connected with such an institution in his relations with the patients of the hospital does in any wise establish or tend to establish the general incompetency of such individual so as to render the hospital liable.

The distinctive features of a charitable, not-for-profit institution are very well stated in one of our great encyclopedias of law (Corpus Juris) as follows:

"Their (charitable hospitals') principal and distinctive features are that they have no capital stock and no provision for making dividends or profits, but derive their funds mainly from public and private charity and hold them in trust for the object of the institutions. In other words, the test of whether an enterprise is charitable is whether it exists to carry out a purpose recognized in law as charitable, or whether it is maintained for gain, profit or private advantage."

Of course the principle here enunciated does not apply to a private sanitarium or to any hospital run as a business enterprise for profit. Institutions of this character are liable for the negligent act of their employees upon the doctrine of respondeat superior, in exactly the same manner as any corporation is liable under the law for the negligence of its agents, servants or employees acting within the scope of their authority.

Through a number of well considered cases in this State, it has been definitely established that physicians, nurses, orderlies, etc., are not in law considered to be the agents, servants or employees of the hospital; the law treats them as independent contractors, each liable to the patient for any wrong that the patient may suffer at his hands from negligence, but involving the hospital in no liability.

Exactly what a charitable hospital undertakes to do with respect to a patient is very well stated in one of the leading cases as follows:

"The business of a charitable corporation maintaining a hospital is to furnish to those who are ill facilities for skillful treatment and care. It does not contract to heal or attempt to heal a patient through the agency of others. At the most it undertakes to permit the use of its facilities and to supply others who will heal or attempt to heal on their own responsibility."

The reason for the rule here discussed, as well as its application to the acts of physicians and nurses so far as the hospital is concerned, is very clearly stated in a leading case on this point as follows:

"Certain principles of law governing the rights and duties of hospitals when maintained as charitable institutions have, after much discussion, become no longer doubtful. It is the settled rule that such a hospital is not liable for the negligence of its physicians and nurses in the treatment of patients. . . . The hospital remains exempt though the patient makes some payment to help defray the cost of board (citing cases). Such a payment is regarded as a contribution to the income of the hospital to be devoted, like its other funds, to the maintenance of the charity. The second ground of the exemption is the relation subsisting between a hospital and the physicians who serve it. It is said that this relation is not one of master and servant, but that the physician occupies the position, so to speak, of an independent contractor, following a separate calling, liable, of course, for his own wrongs to the patient whom he undertakes to serve, but involving the hospital in no liability if due care has been taken in his selection. On one or the other, and often on both of these

pital has been held immune from liability to patients for the malpractice of its physicians. . . .

"It is true, I think, of nurses as of physicians, that in treating a patient they are not acting as the servants of the hospital. The superintendent is a servant of the hospital; the assistant superintendents, the orderlies, and the other members of the administrative staff are servants of the hospital. But nurses are employed to carry out the orders of the physicians, to whose authority they are subject. The hospital undertakes to procure for the patient the services of a nurse. It does not undertake through the agency of nurses to render those services itself. The reported cases make no distinction in that respect between the position of a nurse and that of a physician (citing cases); and none is justified in principle."

At this point it should be noted that the rule exempting charitable hospitals for the negligence of those connected with the hospital does not apply in this jurisdiction unless the injured party is a patient in the hospital. A review of one of the leading cases is sufficient to demonstrate the distinction thus created.

An action was begun against a charitable institution by a plaintiff who was injured while engaged in making repairs on a boiler in defendant's premises. At Trial Term the complaint was dismissed on the ground that the defendant was a charitable institution, and the Appellate Division unanimously affirmed. The plaintiff then brought the case to the Court of Appeals, where it was held that under the facts disclosed in this case the defendant was not immune from liability simply because it was a charitable institution.

It is interesting to note that in other jurisdictions the doctrine of exemption has been extended beyond the rules laid down in this State. For example, in a recent case in Missouri an action was brought by the plaintiff who was employed as an elevator operator in a building owned and used by a charitable institution. The upper floors of the building, however, were almost entirely rented to tenants engaged in various business pursuits. The plaintiff was injured while about to descend from an upper floor, after having discharged a passenger. In the action brought against the charitable institution based on its alleged negligence in failing to provide certain safety devices, the defense was that as a charitable organization it was exempt from liability for negligent injury, and that its status as such organization was not affected by its leasing of rooms. The court held for the defendant and ruled that the income from the rented rooms was devoted to the general charitable purposes of the defendant and thus was impressed with a trust which could not be diverted to pay damages.

It must be borne in mind that the exemption accorded to a charitable, not-for-profit institution is not a defense in an action brought by the patient against any individuals connected with the hospital for their alleged negligence. Although the hospital is exempt under the circumstances and for the reasons here stated, the individuals connected with the hospital remain liable for their individual acts.

ALLEGED NEGLIGENT OPERATION DURING PREGNANCY

The plaintiff in this case consulted the defendant, a physician and surgeon, giving a history of having given birth to a child about five months previous, and complaining that subsequent to said birth her menstruation had been irregular and said menstruation was followed by a thick, creamy foul-smelling discharge. She also complained of pain.

The doctor made a diagnosis of retroversion, prolapse of the uterus, endocervicitis and a rectocele.

The doctor suspected that she feared another child-birth and desired him to perform an operation upon her. He did not at any time suggest or agree to perform a curettage.

The woman was hospitalized and the doctor performed an operation for suspension of the uterus, cauterizing the cervix and performing what is known as an Emmett perineorrhaphy. Her recovery being uneventful she was discharged in about four weeks.

Shortly thereafter, the patient instituted a suit against the doctor, in which it was alleged that the defendant doctor had advised the plaintiff that it was necessary for him to perform an operation upon her uterus to straighten it, and also to perform a curettage, and that defendant was negligent in that (first) he failed to perform the curettage which he had advised the plaintiff he would perform, and (secondly) that he failed to recognize that the plaintiff was pregnant at the time.

Incidentally, it should be noted, that a few months after the institution of the suit the plaintiff was delivered of a normal child, and her physical condition was very good.

When the case was brought on for trial the plaintiff's lawyer attempted to negotiate some sort of a settlement, but the attorney for the defendant, confident that the doctor had in no way been guilty of malpractice, refused to settle the case at any figure and insisted that the matter be tried in court. The plaintiff's attorney then consented that the case be dismissed upon the merits, thus terminating the matter.

CLAIMED NEGLIGENT TREATMENT OF FRACTURE OF HUMERUS

In this case a patient was referred to the defendant doctor for surgical treatment of an injury to her right arm which had been sustained from a blow received while riding in an automobile with her arm out of the window Upon examination the doctor found that she had a spiral fracture of the lower third of the right humerus He immediately took her to the operating room of the hospital, put her under gas and oxygen anesthesia and attempted to reduce the fracture. As the arm was badly swollen, he found reduction was impossible at that time and, therefore, put the arm in a splint and had an X-ray picture taken which showed the fracture not reduced. He then put the arm in suspension and skin traction until the swelling subsided. He adjusted the traction from time to time for about two weeks, when he had another X-ray picture taken which showed the position of the bones to be satisfactory. The doctor then applied plaster splints moulding the fragments. A picture taken through the splints showed an almost complete reduction with almost perfect alignment.

The patient then left the hospital and visited the doctor at his office on several occasions, at which times the splints were removed and reapplied as appeared necessary to the doctor. After several weeks the doctor found the arm solid with good callus, and the patient was able to move her arm freely and could straighten it to about thirty percent of full extension. She complained, however, of pain in the arm at the point of fracture. The doctor advised her to exercise the arm and, if the pain continued, to return to him and he would have further X-rays taken.

However, the patient never returned to the defendant but subsequently went to another physician about two months later who discovered that the fracture was ununited. This physician advised her to return for treatment to the first doctor but she refused, and at her request the second physician performed an open operation and by means of bone graft succeeded in causing her to have a good end result.

Suit was instituted against the first doctor by the patient who claimed that he had negligently treated her and failed to properly reduce her fracture, and that solely through his negligence the plaintiff was compelled to undergo a surgical operation to remedy her condition. The action was brought on for trial before a judge and jury, and a verdict was rendered in favor of the defendant doctor.

NEEDLEBREAK DURING NOVOCAINE INJECTIONS

The defendant in this case, a specialist in neurology, was called to the home of a woman whom he found in bed suffering from what appeared to be sciatica of the left leg. He decided to give her injections of novocaine saline solution in the epidural space. After sterilizing the needle and the field, he made two injections and was attempting the third when, while forcing the fluid into the cavity or space, the patient suddenly jerked her body upwards. The doctor heard the needle crack. He took it out and found about one inch missing.

The doctor probed a bit for the needle and, as he could not find it, decided that it had dropped down into the space. He arranged for the patient to call at his office a few days later, at which time she was much improved in her sciatica. The doctor took an X-ray picture of the region which showed the location of the needle. He then made an incision over the spot, probed for the needle but was unable to locate it. As he did not think it wise to attempt to chisel the bone in order to lift the needle out, he sent the patient home and later after the wound had healed he made a second attempt to remove the needle. At this time another incision 1½ inches long was made, but the doctor was again unsuccessful. For the reason that the needle was giving the woman little trouble, the doctor then concluded that it would be best to allow the foreign body to remain in the leg. When the doctor last saw the woman, the wounds at the points of incision were completely healed and the patient seemed to suffer no discomfort of any kind.

Actions were started by the patient and her husband in the Supreme Court by the service of summonses, the patient apparently intending to charge the doctor with malpractice in permitting the needle to enter and remain in the woman's body. Complaints were not served with the summonses, however, and at the request of the attorney for the plaintiffs the defendant's counsel agreed that the time for the plaintiffs to serve their complaints should be extended for a period of several weeks. The plaintiffs' attorney failed to serve either of the complaints, and after nearly three years had elapsed motions were made in behalf of the defendant to dismiss the actions by reason of the delay of the plaintiffs' attorney. Upon the hearing of the motions, the court granted the same and dismissed the actions.

NEWS NOTES

COMMITTEE ON PUBLIC RELATIONS

A meeting of the Committee on Public Relations was held in the Albany office on Friday, March 13, 1931. There were present Drs. Sadlier, Fisher, Johnson, Hambrook and Lawrence. Drs. Mitchell and Ross were excused because of illness.

The sub-committee composed of Drs. Johnson and Hambrook, having arranged an appointment with Commissioner Parran for 9.30 A. M., invited the other members of the committee to accompany them. They discussed with the Commissioner the question of how hospitals should be selected for endorsement as county general state-aided institutions. Two instances were available where institutions not financially successful under present management, had applied or were about to apply to their local boards of supervisors to be taken over and reorganized as county state-aided general hospitals.

During the conference the law under which the Commissioner must act was carefully considered and it was noted that under the general municipal law county boards of supervisors may, by vote of the people, take over or establish and operate general hospitals at the expense of the county. If State aid is desired, the board of supervisors must secure control of the hospital in like manner by submitting the proposition to the voters of the county or secure legislative authority for acquiring the hospital by resolution.

The next step in the procedure is to make application to the Commissioner of Health for State aid, giving reasons and a statement of budget. If the Commissioner is persuaded that there is a need for such general public health hospital and is satisfied with the budget, and statement from the board of supervisors is satisfactory, he shall agree to the request of the Board and include in his budget for the next year an amount of money equal to one-half that appropriated by the supervisors for the conduct of that hospital during that time.

The Commissioner is bound in no way to make this appropriation except from year to year, nor is he bound to accept conditions or a statement of budget from hospitals except by investigation he satisfy himself they are reasonable. He requested that the Committee on Public Relations be agreeable to assisting him, if he felt he needed assistance, in determining requests of this character that may come to him in the future.

It was reported that public welfare workers feel that physicians coming out of medical schools at the present time should have a wider acquaintance with the new public welfare law before they start to practice. The justice of this criticism was admitted by the committee and at Dr. Fisher's suggestion, seconded by Dr. Hambrook, the chairman was authorized to communicate with the deans of the medical schools, asking that adequate provision be made for acquainting medical students with the provisions of the public welfare law.

It was also suggested that there is still considerable difficulty in certain counties with regard to the administration of the law and a motion was made and passed that Dr. Ross be invited to describe the procedure followed in Suffolk County in arriving at an understanding between the County Society and the commissioner of public welfare as to the manner in which the work should be administered in that county—this write-up to be published later as a pamphlet from this committee.

The date for the next meeting was tentatively set as Thursday, April 16th, in Albany, and the Executive Officer was asked to invite the proper persons to represent federated labor.

A series of five-minute health talks on the legislative program proposed by the New York State Health Commission is being broadcast by radio from station WGY, under the direction of Dr. Thomas Parran, State Commissioner of Health. This first one of the series was given on March 4, by Dr. W. H. Ross, President of the Medical Society of the State of New York, who developed the idea that the Commission considered the distribution of medical service by municipalities, rather than its production by physicians.

Another talk of the series was that given by Dr. James E. Sadlier, Chairman of the Committee on Public Relations, who said in part:

"The three great groups that are working to prevent disease throughout this state are, (1) The State Department of Health, (2) The Medical Profession of the State, and (3) Lay Organizations working in the health field. These three groups are cooperating, coordinating and harmoniously working together for the betterment of public health. Perhaps the most important change that is recommended by the State Health Commission is to make the county the unit of local health administration.

LEGISLATION

BULLETIN NO. 8—MARCH 11, 1931

Since our last bulletin the following bills have been introduced:

Senate Int. No. 1,256-Hofstadter (Assembly Int. No. 1,630-Austin), to amend the Mental Hygiene Law by providing for the removal or commitment of insane or apparently insane persons for care, treatment or observation for limited period, to psychopathic wards. Referred to the General Laws Committee.

Senate Int. No. 1,315-Buckley (Assembly Int. No. 1,500-Sullivan), adds new article 11-a and repeals section 181-a, of the General Business Law, relative to nurses' registries. Referred to the Committee on General Laws.

Senate Int. No. 1,319-Wicks (Assembly Int. No. 1,887-Gimbrone), adds new section 20-a, Public Health Law, requiring health officers in cities of more than 50,000 to devote entire time to duties of office and not engage in the practice of medicine. Referred to the Health Committee.

Senate Int. No. 1,345-Brereton (Assembly Int. No. 1,865-Porter), amends section 21-c, Public Health Law, by providing appointment by health officers of public health nurses must be approved by district health board. Referred to the Health Committee.

Senate Int. No. 1,346-Brereton (Assembly Int. No. 1,864-Porter), amends section 20, Public Health Law, to permit health board of a consolidated district to include in estimate of expenses sum for employing a nurse in connection with business of a lying-in asylum and for public health work. Referred to the Health Committee.

Assembly Int. No. 1,687-Kahan, amends the Education Law by providing medical inspection of school children shall include services of physicians and dentists. Referred to the Education Committee.

Assembly Int. No. 1,723-Doyle, adds new section to the General Business Law, prohibiting broadcasting of any speech or remarks relating to medicine or using medical terms or to diagnose any disease or to recommend cure, unless by a duly licensed physician. Referred to General Laws Committee.

Assembly Int. No. 1,724-McKay, amends the Education Law by prohibiting the practicing of optometry from house to house or on the streets or highways. Referred to the Education Committee.

Assembly Int. No. 1,855-Cornaire, amends the Workmen's Compensation Law by listing as occupational diseases fibrosis of respiratory tract due to exposure to silica or rock dust. Referred to the Labor Committee.

The anti-vaccination bill has been introduced in the Assembly—Int. No. 1,702-Wemple.

Action on Bills

The Hickey-Piper optometry bill—Senate Int. No. 441, Assembly Int. No. 727—has passed the Senate and advanced to third reading in the Assembly.

The Cilano-Esmond qualified psychiatrists bill—Senate Int. No. 344, Assembly Int. No. 442—was killed in the Assembly.

Hearings

March 18—2:00 P. M.—Before Joint Committees on Finance and Ways and Means—the Wicks-Hutchinson health bill, Senate Int. No. 993 (Print No. 1,111); Assembly Int. No. 1,362 (Print No. 1,491).

Please note the date of this hearing and send such advice as you may have prior to that time; also communicate with the committees before whom arguments on the bill will be heard.

PLEASE NOTE THE FOLLOWING: The osteopathic bill has been amended and reported out of the Education Committee in the Assembly. Last week we were given the opportunity through our Executive Officer, of discussing this bill before the Assembly Committee on Education and we stated that we were unalterably opposed to granting osteopaths the privileges accorded by the bill, on the ground that they had had no training whatever in the use of drugs. This morning we are advised that the following restrictions upon the use of drugs have been placed in the bill: That osteopaths be permitted to use only antiseptics, anesthetics, narcotics, vaccines, serums and antitoxins. We must put up, immediately, vigorous opposition to this bill if we mean to prevent its passage by the Assembly as we did last year. *Communicate immediately* with your Assemblymen and have all of your friends do the same. Last year the Assembly was flooded with letters from friends of the osteopaths. It is no exaggeration whatever to say that the leader of the Assembly received hundreds of letters not only from citizens of his district, but from persons all over the state. We cannot urge too strongly that you do your utmost to assist us in developing opposition in the Assembly to this bill.

SPECIAL BULLETIN—MARCH 17, 1931

The amended osteopathic bill is enclosed—Senate Print No. 1,658. It is before both Houses. In the Senate it is on General Orders and can be called out for a vote at any time. In the Assembly it was advanced last night to third reading and may come on the calendar for final reading on Thursday; or probably. Because it is a highly controversial matter, it may be post-

poned until Monday evening when action may possibly be taken.

Certain features presenting themselves this year must be thoroughly appreciated:

1. Ex-Deputy Commissioner Augustus Downing of the Department of Education is the author of the bill;

2. The impression prevails very generally that the Department of Education is not opposed to the bill. Actually, we know this impression is false, but the Department has made little or no effort to repudiate it;

3. In the Senate the bill is sponsored by Mr. Fearon, whom you all know very well, and in the Assembly by Mr. Tellier, who has been its sponsor for several years;

4. Only two or three legislators have told us that they have had letters from home opposing the bill, while almost every man has shown us quantities of letters from osteopaths and their friends in favor of the bill.

Unless each one receiving this bulletin immediately communicates with his legislators and persuades as many other persons as he possibly can find to do the same, the osteopathic bill will be passed by both Houses within another week. It remains with you as to whether this shall happen.

SPECIAL BULLETIN—MARCH 19, 1931

Assembly Int. No. 2004-Robinson, would give hospitals a lien upon the automobile patients that have been so expensive in recent years. You will observe that this carries no provisions for nurses and doctors. We think it wise to urge the passage of this bill without insisting upon the doctor and nurse being included at this time, profiting by our experience in previous years when we insisted upon such an amendment and lost the whole bill. If this bill can be enacted, it will be easy in another year to have it amended so as to make special provision for doctors and nurses.

Assembly Int. No. 2037-Hartshorn, has a bearing upon a certain type of activity in the vicinity of large industries, particularly in New York City. We are told that certain physicians are conducting their offices in the manner of dispensaries, but are not under the Dispensary Law because they mark their offices as clinics or with some other particular designation. A survey made by the Department of Labor a year ago pointed out that many of these places are not above criticism and this bill aims to rectify that condition and bring the physicians under proper supervision.

BULLETIN NO. 9—MARCH 20, 1931

Since our last bulletin the following bills have been introduced:

Senate Int. No. 1469-Wicks (Assembly Int. No. 1955-Austin), amends the Public Health Law by giving the county health commissioner equal authority with a local board to investigate and abate public nuisances affecting health. Referred to the Health Committee.

Senate Int. No. 1491-Gates (Assembly Int. No. 1981-C. P. Miller), amends the Workmen's Compensation Law by providing board may within three years instead of one, from date of accident, reclassify a disability. Referred to the Labor Committee.

Senate Int. No. 1511-Webb (Assembly Int. No. 2017-Rice), amends the Education Law relative to physically handicapped children, by defining as a physically handicapped child, "A person under 21 years of age who by reason of a physi- ect or infirmity, whether congenital or ac- by accident, injury or disease, is or may ected to be totally or partially incapacitated lucation or for remunerative occupation." ed to the Education Committee.

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Anothe ay Int. No. 1596-Schackno (Assembly Int. Robinson), amends the Lien Law to s a lien on rights of actions, suits, laims or demands of a person admitted to a hospital on account of personal injuries. Referred to the Judiciary Committee.

It will be recalled that a lien bill was before the legislature two years ago and met with such powerful opposition that it did not get out of committee. We urged that doctors and nurses be included in that bill. It seemed to us afterwards that probably it would have been wiser to have favored the bill as it was written and after it had been enacted a year or two, have it amended so as to include doctors and nurses. We shall try such policy this year.

Senate Int. No. 1617-Byrne, amends the State Charities Law and the Penal Law for the licensing of hospitals. This is the hospital bill that we favored last year. It has been introduced this year simply in order that it may be printed and studied. No effort will be made to advance it. Referred to the Judiciary Committee.

Senate Int. No. 1625-Gates (Assembly Int. No. 2132-C. P. Miller), amends the Workmen's Compensation Law by providing time limit for contracting disease under this section shall not bar compensation in case of employee who contracted disease in employment with same employer by whom he was employed at time of disablements. Referred to Labor Committee.

Assembly Int. No. 2127-Dickey, adds a new

section to the Public Health Law, directing State Health Commissioner to establish a bureau for enforcing provisions with respect to habit-forming drugs. Referred to the Health Committee.

Senate Int. No. 915-Fearon; Assembly Int. No. 1277-Tellier—osteopathic bill. See special bulletin of March 17th. (Page 425.)

Senate Int. No. 263-Hastings, medicinal liquor bill, has passed the Senate.

Assembly Int. No. 491-Story, health commissioner appointed by mayor, has been amended to make it essential that the appointee be a member of his county medical society.

Senate Int. No. 441-Hickey, optometry bill—has passed both houses and gone to the Governor.

Assembly Int. No. 2037-Hartshorn, amending the charities law with regard to dispensaries and clinics, has been reported out of committee.

Assembly Int. No. 636-Porter, chiropractic bill, has been reported out of committee in the Assembly.

* * * * *

The following Assembly bills have been reported killed in committee:

Int. No. 52-Horn, amending the Workmen's Compensation Law.
Int. No. 143-Vaughan, anti-vivisection bill.
Int. No. 221-Cuvillier, motor vehicle compensation law.
Int. No. 236-Esquirol, occupational diseases.
Int. No. 344-Livingston, state insurance fund.
Int. No. 432-Byrnes, physiotherapy.
Int. No. 451-Gimbrone, occupational diseases.
Int. No. 492-Theodore, free choice surgeon.
Int. No. 575-Esmond, psychiatric clinics.
Int. No. 584-Moffat, occupational diseases.
Int. No. 785-Coughlin, occupational diseases.
Int. No. 786-Coughlin, free choice.
Int. No. 980-Story, occupational diseases.
Int. No. 1030-Gimbrone, sale of habit-forming drugs.
Int. No. 1462-Foody, sale of methanol.
Int. No. 1464-Gimbrone, free choice.
Int. No. 1687-Kahan, medical inspection of school children.
Int. No. 1723-Doyle, broadcasting medical terms.
Int. No. 1855-Cornaire, fibrosis due to silica dust.

* * * * *

On Wednesday the Wicks-Hutchinson health bill was given a hearing before the joint Finance Committees. There was a very large attendance. Before the hearing began the Department of Health announced extensive amendments to the bill, which changed its character very materially. Very little opposition was presented; certain medical men objected to the mandatory phase and the provisions in the original bill made for the treatment of venereal diseases, but the amendments, which provide that venereal disease treatment should be accorded only those who are unable to pay a private physician, had removed most of that objection. Representatives from two county boards of supervisors also appeared in opposition to the bill. Probably more than a score of organizations had representatives there to speak in favor of it. The bill still rests with the Finance Committees. The Assembly Ways and Means Committee has just been accorded the privilege of continuing its deliberations to the end of the session, instead of being obliged to give up its bills to the Committee on Rules, as is the custom of the other Assembly committees ten days prior to adjournment.

BULLETIN—MARCH 23, 1931

To County Society Legislative Chairmen:

Enclosed you will find the following bills:

Late Print No. 2293 of Assembly bill Int. No. 817—Mr. Story, to amend the Penal Law in relation to clinics in hospitals. You will notice that the bill has been amended so that it shall apply only to clinics that may be hereafter established.

There is also enclosed a copy of the hospital licensure bill in which we were so interested last year, amended and introduced in the Senate only.

Int. No. 1617—Mr. Byrne. The object in having the Bill introduced this year was simply that it might be printed and an opportunity given us to study it during the coming year. It will not be advanced.

Very truly yours,

HARRY ARANOW
WALTER A. CALIHAN
JOHN J. RAINEY
Committee on Legislation.

GENESSEE COUNTY

The Medical Society of the County of Genesee held a special meeting on March 16, in Batavia, and adopted the following resolution:

Whereas, His Excellency, Hon. Franklin D. Roosevelt, Governor of the State of New York, did appoint a Special Health Commission in May 1930 to study the Public Health needs of the people of the State of New York and the extent to which these needs are being met under existing legislation, and

Whereas, the Medical Society of the County of Genesee met in special session March 16, 1931 to consider the findings and recommendations of said Commission, and

Whereas, we, the members of the Medical Society of the County of Genesee, have repeatedly gone on record as favoring home rule, and

Whereas, we are of the opinion that free medical service, regardless of the individual's social standing, lowers public morale and encourages pauperism, therefore, be it

Resolved, that it is the consensus of opinion of the Medical Society of the County of Genesee, in meeting assembled this day, that the recommendations of said Special Health Commission violate the principle of home rule, and be it

Resolved, that this Society, with the exceptions stated below, hereby protests the enactment of this bill:

(I) We are aware of the urgent need of immediate legislation to provide for the building of additional sanatoria for the treatment of all forms of tuberculosis and are, therefore, thoroughly in accord with this recommendation.

(II) We feel that the New York State Institute for the Study of Malignant Disease, situated at Buffalo, N. Y., in the County of Erie, known also as the Gratwick Laboratory, has in the past, and is now, rendering admirable service to the community in research, diagnosis and treatment of cancer. We approve of additional State Institutions of this type.

FRANK R. HALL,
Secretary.

RENSSELAER COUNTY

A regular meeting of the Medical Society of the County of Rensselaer was held on the evening of March 10 at 8:30 P. M., at the Troy Hospital. The session began with the following scientific program:

Dr. M. E. De Luca—Ruptured Gastric Ulcer.
Dr. J. B. Burke—Foreign Bodies in the Orbit.
Dr. H. V. Foley—Valvular Heart Disease and Complications.
Dr. F. J. Noonan—Acute Cholecystitis and Appendectomy.
Dr. W. T. Diver—Different Types of Goiters.

Dr. Leo S. Weinstein and Dr. Helmar Howd were elected to membership.

The greater part of the business session was devoted to a discussion of the County Health Department feature of the public health bill sponsored by the State Commission on Public Health, as outlined in this Journal of February 15, page 230. The provisions of the law and its scope were introduced by Dr. Wm. B. D. Van Auken, Chairman of Committee to study County Health Law.

Dr. Leonard, President of Sanitary Officers Association of New York State, gave a lengthy talk on several aspects of the bill, including the recent changes effected by his organization.

Dr. Robert E. Plunkett spoke of the advantages of the bill to the medical profession.

The total time of the discussion was about an hour and one-half, and most of the time was taken protesting against its compulsory and economic features. It seemed to the members that the enactment of the bill would be a step towards state medicine. The following resolution was adopted:

WHEREAS an act has been presented in the Senate of New York requiring the establishment of County Health Units which we believe will very materially increase the financial cost of public health work, and

WHEREAS we have not yet found sufficient proof that a corresponding increase in the value of the health service rendered to the taxpayers and inhabitants of New York State, will be obtained by the enactment of this proposed bill, therefore be it,

RESOLVED that the Medical Society of the County of Rensselaer hereby protests the enactment of this bill until further study and experimentation of its provisions are made.

The Health Bill was further discussed at a meeting of the organization of the Medical and Allied Professions held on the evening of March 16, in the health center auditorium. There were present about 20 physicians, 10 dentists, and 40 nurses. The president, B. S. Booth, M.D., presided, and E. W. Briggs, D.D.S., was secretary.

Dr. Booth explained that the organization of Allied Professions had been in existence since the Compulsory Health Insurance Bill was introduced, and that its objects were to bring a united front against destructive health legislation, and to support constructive legislation.

The resolution of the Rensselaer County Medical Society was read. Dr. James F. Rooney gave an address which explained the origin of

the bill, its socialistic character, the more recently proposed amendments, their relation to the dental profession, the obvious provisions of the bill which set up a bureaucracy of health, and the possible ultimate tendency towards the establishment of state medicine.

Dr. Nathan J. Patterson, chairman of the legislation committee of the New York State Dental Society, spoke on the interrelation of the dentist to the medical profession, making clear that what affected one would eventually affect the other. He too, was of the opinion that the bill as presented was a step toward state control of the allied professions. He regretted that no dentist was a member of the Governor's Commission for the study of the public health and the distribution of medical service.

Dr. J. H. Collins of Schenectady and Dr. R. E. Plunkett of the State Department of Health, spoke in favor of the bill. They were of the opinion that a careful study of the bill would show that it was not as harmful as it might appear. Dr. Plunkett stated that he had visited many such county health units in Ohio and with one exception the medical profession at large in those counties were benefited by the county health unit.

At the close of the meeting, which lasted about two hours, a resolution was adopted protesting against the Wicks Bill as printed.

ONEIDA COUNTY

The annual meeting of the Oneida County Medical Society was held on January 13th in the Hotel Utica, Utica, N. Y. A feature of the meeting was the official address of the retiring president, Dr. H. F. Hubbard of Rome, in which he traced the growth of preventive medicine and predicted that the present accelerated growth for the next twenty-five years would result in the elimination of infectious diseases; while the growth of administrative medicine would lead to the distribution of all medical service by the State.

Dr. G. M. Fisher, past-president of the Medical Society of the State of New York, described the recent progress in establishing the principle of the free choice of a physician by an injured workman under the compensation law. Dr. Fisher also urged the wider practice of periodic health examinations.

Dr. Halsey J. Ball, District State Health officer traced the great reduction in the number of diphtheria cases in Oneida County, and also the reduction in scarlet fever cases.

Dr. Richard H. Hutchings, Superintendent of the Utica and Marcy State Hospitals, was elected President. Dr. Hutchings has been a leader in the movement for the early recognition of mental derangements. He has been unusually successful in persuading patients to accept hospital treatment in the early stages of psychiatric troubles.

Other officers elected were:

Vice-President, Dr. E. M. Griffiths
Secretary, Dr. William Hale, Jr.
Treasurer, Dr. H. D. MacFarland
Librarian, Dr. T. Wood Clarke

Members of the Board of Censors: Drs. W. B. Roemer, E. E. Powers, H. F. Hubbard, B. P. Allen, B. L. Rockwell.

Delegates to the House of Delegates, Drs. G. M. Fisher and Hyzer W. Jones. Alternates, Drs. Charles Quinn and Dan Mellen.

TIOGA COUNTY

The regular quarterly meeting of the Tioga County Medical Society was held at the Ahwaga House, Owego, Tuesday, March 3rd. Dr. Silas Molyneaux and Dr. Matthews, his assistant, of Binghamton, N. Y., were the speakers. The following members and guests were present: Dr. W. A. Moulton, Chairman of Candor; Dr. F. Terwilliger, Secretary, Spencer; Dr. Cady and Dr. Brown, of Nichols; Drs. Bailey, Carey and G. S. Carpenter, of Waverly; Drs. Bauer, Peterson, Wilson, Hyde, Capron, Fisher and Beck, of Owego; Dr. H. L. Knapp, Sr., and Dr. H. L. Knapp, Jr., of Newark Valley; Dr. A. Max Fisher, Spencer; Dr. Lyons, of Ulster, Pa.; Drs. Naylor and Noteware, dentists, of Owego; Mr. Harry Tompkins, County Welfare Commissioner and Mr. Leon Baird, Deputy Commissioner were present as guests of Dr. Bauer. Miss Maynard, who is in Tioga County to give a course in Home Nursing, and the County Nurses Miss Agnes Oldfield and Miss Elizabeth Pinney were also present. Mrs. Leslie Fancher was the guest of Dr. Hyde.

After a short business meeting, Mr. Tompkins spoke to the group on the "Hospitalization of County Cases." Dr. Molyneaux gave a very interesting talk on the "Diagnosis and Treatment of Conditions in the Abdomen." Dr. Matthews followed with a paper on "Jaundice." Many questions were asked and interesting discussions followed both papers.

A moving picture on the making of lenses for spectacles was shown by Dr. Hyde, the machine being operated by Mr. Francher. This film showed the making of glasses from sand, potash, lime and soda through the various processes necessary to the completion of the finished lenses.

F. TERWILLIGER, *Secretary.*

BRONX COUNTY

A regular meeting of the Bronx County Medical Society, held at Elsmere Hall, 170th Street at College Avenue, on February 18, 1931, was called to order at 9 P. M., the First Vice-President, Dr. Smiley, in the chair. Dr. Smiley explained that the President, Dr. Gettinger, was unavoidably absent on account of his being present at the White House Conference on Child Health at Washington.

The Chairman thanked the Committee who had made the arrangements for this meeting and welcomed the members to the new meeting hall.

The following candidates were elected to membership: Drs. Joseph Blasenstein, Eurelio Giordano, Frank H. Granito, Jacob I. Lamstein, Lewis Palay, Samuel J. Weitzen and Leo Wilson.

Dr. Bick presented the Report of the Social Committee on the Beefsteak Dinner held on January 28th. The profit on the affair is to be devoted to the relief fund.

Dr. Podvin reported on a meeting held at the Academy of Medicine of the Coordinating Committee, consisting of the Presidents of the five County Societies and one additional representative of each County Society. This Committee is the result of the meeting of the State Committee on Public Relations held about a month ago, at which it was suggested that a supplementary Committee on Public Relations be formed. Dr. Ludlum, President of the Medical Society of the County of Kings, was elected Chairman, and Dr. Thomson, of the same Society, was elected Secretary. After enumerating the matters considered by the Committee, Dr. Podvin emphasized the importance of the meeting in that it may be possible to have our problems adjusted by getting united action on the part of the five County Medical Societies.

The Chairman, Dr. Smiley, then elaborated upon the report. He stated that this Committee has the promise of full sympathy and cooperation from the State Society. He concluded by emphasizing the importance of united action on the part of the five County Societies and asked for the cooperation of the members.

The Scientific Program then proceeded as follows:

Paper

The Various Types of Infections of the Urinary Tract in Children (Lantern Slides),

by A. Hyman.

I. J. LANDSMAN, M.D., *Secretary.*

A regular meeting of the Bronx County Medical Society was held at Elsmere Hall, 170th Street at College Avenue, on March 18, 1931, at 9 p.m. with the President, Dr. Gettinger, in the Chair.

Drs. Milton Greenberg, Aaron Kurtsman, Michael M. Marolla and Charles J. Mehlmann were elected members.

Dr. Magid, Chairman of the Committee on Medical Economics, reported that a Fee Schedule for Compensation Cases has been presented to the Committee.

Dr. L. A. Friedman, Chairman of the Committee on Public Health, reported on the matter of diphtheria immunization. The recommendations of the committee to offer to the Commissioner of Health the services of the Bronx County Medical Society to administer toxin-antitoxin, and to cooperate with the Department of Education in the examination of pupils at high schools, were approved.

Action on the resolutions adopted by the coordinating committee of the five county societies and approved by the Comitia Minora, was then declared in order. These resolutions provided that "The Bronx County Medical Society recognizes the principle that the physician must be paid for his service in order to function as a useful and contributing member of society; and that when physicians work in out-patient clinics they should receive remuneration for professional services rendered." It was moved and carried that the Society go on record as approving the resolutions.

The following resolution was adopted by a rising vote:

"Whereas, The Bronx County Medical Society having sustained a severe loss in the death of its honored associate, Stratford F. Corbett, M. D., be it

Resolved, That the Bronx County Medical Society record the sense of its loss in the death of Dr. Corbett and that a minute thereof be placed on the records of the Society.

The scientific program consisted of a paper entitled "Varieties and Treatment of Circulatory Failure," by Marcus A. Rothschild. The paper was discussed by Drs. Alexander Goldman, David Greenberg and Sydney Steiner.

I. J. LANDSMEN, M.D., *Secretary.*

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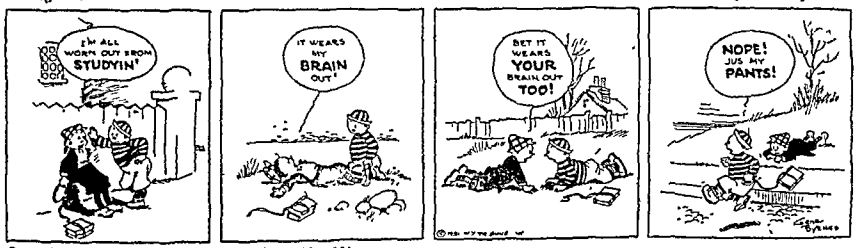
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THE DAILY PRESS

Reg'lar Fellers — There's the Rub — By Gene Byrnes



From the New York Herald Tribune, March 13, 1931

BASEBALL LINGO

Doctors have their due proportions of baseball fans who enjoy the peculiar language of the sport page, and in addition every scholar among them will treasure a biographical note connected with the origin of the slang. The New York *Times* of February 13 says editorially:

"Charles Dryden is dead after ten years of invalidism. The public, which he once entertained with an astonishing ingenuity of reportorial style, has forgotten him. His first imitators in sports reporting were conscious of following his lead. But now his jokes and weird tropes and strange periphrastics are embodied in many articles without realization on the part of the authors that Mr. Dryden was the father of their style.

"For some years he wrote about baseball for the newspapers. He never took the game seriously, and his purpose was to entertain his readers while adhering closely to a news account of what happened. He would write thus of an ordinary incident:

"'At this juncture of the proceedings Mr. Napoleon Lajoie, descendant of a Marshal of France, lumbered determinedly to the batsman's place. He shook himself, spat upon the ashen baton of his calling, glared at the pitcher like Polyphemus at Æneas, took a mighty grip upon the quarterstave, swung like a baboon across a tree-top—and fanned, gentle readers.'

"Under Mr. Dryden's influence this sort of spoofing had a great vogue, and many works of fiction are indebted to it for style."

THE SPLINTER AND HEALTH

The New York *Times* of February 24 has this to say editorially about the splinters in compensated accidents:

"Thirty-five splinter accidents a day would seem, at first, a small number for the 7,000,000 people or more of the New York City population district Even though the man of the house goes in for fewer chores than once upon a time with hammer, chisel and knife, there would still be in our degenerate days enough opening up of wooden containers, driving in of nails for clothes and adjustment of tight-stuck windows to account for more than three dozen splinters a day. The mere sharpening of pencils in New York City business offices would foot up more than that, not to speak of glass splinters.

But the State Department of Labor is speaking of compensated splinter accidents. Office workers and heads of families operating hammer and chisel are not under the compensation laws, and even the insured worker must have suffered a splinter accident severe enough to cause a week's idleness. The total compensation so distributed amounted in 1929 to $350,000. Nearly always it is a case of infection following upon a neglected breaking of the flesh and failure to remove the foreign body—the latter a precaution which the uninsured public might well keep in mind."

DEATH BY WAR AND AUTOMOBILE

A comparison of the number of deaths caused by war and by motor cars is frequently the subject of editorials such as the following one from the *New York Times* of March 12:

"A pamphlet on motor-vehicle accidents prepared by the Travelers Insurance Company of Hartford bears the title 'Worse Than War.' In the World War the A. E. F. lost 50,510 men in battle and fatally wounded in eighteen months; in the past eighteen months 50,900 persons were killed by motor accidents in the United States.

"In 28,000 of the fatal accidents in 1930 there was nothing wrong with the vehicles mechanically. Nine out of every ten persons killed during that year were victims of accidents in which the drivers had had more than a year's experience at the wheel. Most of the accidents occurred in clear weather. Sunday was the heaviest casualty day. Forty-two of every 100 fatalities happened in the night-time. Most of the drivers at fault were exceeding the speed limit, driving on the wrong side of the road, or failing to grant right of way. Obviously the inside of a motor car is safer than the street, for 'the deaths of pedestrians amounted to 122 per cent more than the fatalities among the occupants of colliding cars.' "

The editorial writer closes with the impractical conclusion that "users of motor vehicles must be led to feel their responsibility at all times and in all places."

Another editorial writer in the same issue of the *New York Times,* commenting on the discovery in Pennsylvania that 2,000 applicants for motor licenses were blind in one eye, gives his estimate of the defects of Sunday drivers on the Jericho Turnpike, Long Island, as follows:

Total number of drivers	75,000
Blind in one eye	20,000
Blind in both eyes	10,000
Slightly maniacal	10,000
Intoxicated	10,000
Show-offs	10,000
Criminal insane	5,000
Terrified	5,000
Inattentive	4,500
Normal	500

PRIMITIVE WORDS IN MODERN SPEECH

The Lantern Column of the New York *Herald Tribune* of February 7, discusses the modern use of primitive words in a way that is delightfully serious and comic, and says:

"A minister of Perth Amboy, was shocked the other day to hear his little daughter murmuring, over and over, the mystic and sinister words:

'Umfa glug, umfa glug.'

"She had learned the words, she said, from a book taught in the public school—V. M. Hillyer's 'A Child's History of the World.' The good minister investigated and discovered that the work in question is shot through with damnable evolutionary doctrine. It teaches that our cave-man ancestors had hair all over their bodies, that they slept on the ground at night, that they were bloodthirsty and that, worst of all, 'they talked to each other with some sort of grunts—umfa umfa—glug glug.'

"The minister pointed out the heinous passages to the superintendent of schools, who promptly banned the offending book from the curriculum, regarding the two words as peculiarly bestial and degrading, unworthy of *homo sapiens* at however a primitive stage of his development.

"We, on the contrary, regard umfa and glug as two highly expressive, peculiarly human words. 'Glug! glug!' is admittedly one of our favorite indoor noises. And recently at a night club we heard two men, one a Columbia professor and the other a song writer, express their opinions of a blonde who was galumphing around. One said: 'Dumb cluk.' The other said: 'Infra dig.' Combining the two we get something very close to the cave man's verdict: 'Umfa glug!'

"Glug is even easier to justify than umfa. The modest syllable 'ug,' indeed, permeates the whole broad field of human endeavor. The baseball player can slug, the boxer is a pug, the criminal is a plug-ugly or a mug who is put in the jug. Man's eternal passion for gold is symbolized by the nugget, the ecstasies of love are suggested by the hug, and the demon of drink resides in the jug. The mother's endearing words to her child, 'Snug as a bug in a rug,' has a cave-woman sound. We have emerged from the era of the horse (plug) into the machine age (chug, chug)."

BOOK REVIEWS

MEDICAL AND SURGICAL YEAR-BOOK Physicians Hospital of Plattsburg (Vol 1, 1929) Octavo of 322 pages illustrated Plattsburg, N Y, The William H Miner Foundation, 1930

It is a very high order of institutional effort that is set forth in this book Here is a hospital that is able to set up an educational standard which is a model for every other institution of the kind which aims to give a proper scientific account of itself and fully serve the profession and the sick A wide range of topics is ably covered Those responsible for the plan behind the Year-Book and for the Year-Book itself, deserve the highest praise The Physicians' Hospital of Plattsburg is well named and is happily able to fulfill *every* obligation which we assume to be incumbent upon a hospital—not always a realizable ideal A C J

LECTURES ON COLONIC THERAPY Its Indications, Technic and Results By O BOTO SCHELLBERG Octavo of 55 pages, illustrated New York City, The Oboschell Corporation, 1930 Paper, $2 00

The subject of intestinal stasis lends itself to the oretical considerations which if expressed in suitable medical language may seem entirely convincing This handbook is a privately printed publication by a gentleman who bears no credentials or degrees to introduce him to the sanctum sanctorum of medical science And yet the arguments which are advanced seem so well prepared as to warrant the attention of the physician He reiterates the established theories on the subject

The real purpose of the book, however, is to interest the reader in the Schellberg apparatus for colonic irrigation and *these nicely written theoretical dissertations* serve only as a basis for the writer to introduce himself to the medical profession EMANUEL KRIMSKY

ANNUAL REPRINT OF THE REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION FOR 1929 With Comments that have appeared in THE JOURNAL. Cloth Price $1 Pp 81 Chicago American Medical Association 1930

This is the volume in which the Council annually collects the reports on articles found unacceptable during the year This edition contains also several interesting preliminary reports on preparations which show promise but for which the evidence is not yet sufficient to justify acceptance by the Council Reports are given on the products rejected by the Council

NEW AND NONOFFICIAL REMEDIES, 1930 Cloth Price $1 50, Pp 481, xlvii Chicago American Medical Association, 1930

The present edition contains all of the features that have in the past made New and Nonofficial Remedies such a reliable and efficient a guide to the physician who wishes to inform himself on the newer medicinal preparations logical classification of preparations with authoritative articles on each class, complete and carefully written descriptions of preparations elaborate indexes, and a useful cumulative list of references to the literature on articles not accepted by the Council

SURGICAL CLINICS OF NORTH AMERICA Published every other month by the W B Saunders Company, Philadelphia and London Per Clinic Year (6 issues) Cloth $16 00 net, paper, $12 00 net

Vol 10 No 1 February, 1930 (Mayo Clinic Number) This Mayo Clinic issue is as usual most instructive The authors have presented a large number of rare and exceptional cases well worked up, described and illustrated This wealth of selected cases has left little room for summaries of more of the commonplace surgical conditions, which many readers of the Clinics look forward to

Vol 10, No 2, April, 1930 (Chicago Number) This issue contains many valuable papers written by men of exceptionally high standing in the surgical world It is worthy of the closest study

Vol 10, No 3 June, 1930 (New York Number) The New York Number explores many surgical fields, shedding light on various controversial topics The selection of cases is admirable, the illustrations adequate and the presentation excellent

Vol 10, No 4, August, 1930 (Southern Number) The authors of this issue have succeeded in collecting and presenting a series of intensely interesting cases relating to all phases of practical surgery The volume is as usual well illustrated

Vol 10 No 5 October, 1930 (Pacific Coast Surgical Association Number) Most of the leading surgical *clinics of the Pacific Coast are represented in this issue* The selection of topics is excellent and their presentation interesting and clear The authors have very properly avoided the unique in surgery devoting more space to practical considerations of the more commonly met with diseases

Vol 10 No 6 December, 1930 (Philadelphia Number) This issue brings many important surgical observations to the attention of the reader With Deaver, Jackson Babcock and many other prominent names on the contributors' list of the number, its interest and value are assured Malignancies of the large bowel are discussed in detail by several authors Forty pages are *devoted to pathologic fractures almost constituting a* monograph on bone tumors

Besides the above topics which are of interest to every surgeon some highly specialized subjects are discussed as well GEO WEBB.

TEXT BOOK OF EMBRYOLOGY By FREDERICK RANDOLPH BAILEY, A M M D and ADAM MARION MILLER A M, 5th revised Edition Octavo of 687 pages illustrated New York, William Wood & Company, 1929 Cloth $7 00

This book has been entirely revised The section on the development of the nervous system is the most complete *of any text book published* The *section on blood* has been improved by the addition of new illustrations and scientific data An excellent text-book for physician and student H P MCT

APPLIED PHYSIOLOGY By SAMSON WRIGHT M D Second Edition Octavo of 510 pages illustrated New York and London, Oxford University Press 1928 Cloth $5 50 (*Oxford Medical Publications*)

This work is based upon the various courses of lectures given by the author in both the hospital and college departments of the Middlesex Hospital Medical School Throughout the volume stress is laid upon the dictum that *physiology* is one of the *fundamental* medical sciences without a proper knowledge of which one can never be a clinician in the real sense of the word With such a point of view to start with the reader is not surprised to find innumerable references to and discussions of the various human ailments that are the result of disfunction of one or more of the physiologic processes The chapters on the nervous system are excellent as is the section on carbohydrate metabolism which contains an

unusually clear description of the action of insulin on the deranged sugar metabolism of the diabetic.

The book is copiously illustrated and is very well indexed. The volume would be a worth while addition to any physician's library. FRANK E. MALLON.

ESSENTIALS OF MEDICAL ELECTRICITY. By ELKIN P. CUMBERBATCH, M.A., B.M. Sixth Edition. Octavo of 443 pages, illustrated. St. Louis, The C. V. Mosby Company, 1929. Cloth, $4.25.

This is a revised edition of a former work by the same author. It covers very thoroughly the action of electrical currents on the human system. It also describes how the various currents are produced.

The electrical treatment of paralysis has been entered into very thoroughly and the chapter on testing of electrical reactions of muscles covers the entire subject.

The plates showing the proper points for electrical stimulation will be of great help to one in doing this work.

Surgical diathermia is touched upon as is medical diathermia, as static, Faradic, Galvanic and low volt varying currents.

This work should be particularly valuable to the physician wishing to treat neurological conditions.

CHARLES F. McCARTY.

MENTAL ASPECTS OF STAMMERING. By C. S. BLUEMEL, M.A., M.D., L.R.C.P. (Lond.), M.R.C.S. (Eng.). 12mo of 152 pages, illustrated. Baltimore, Williams & Wilkins Company, 1930. Cloth, $2.50.

"A book written primarily for school use but also intended for use by the stammerer who must rely on self-training."

A small book written simply and clearly.

The author properly views stammering as a thought disturbance rather than a speech defect. We speak as we think.

The principles of speech correction and their application are discussed. A chapter is devoted to that very important subject, the proper parental influence, attitude and home environment.

It is a constructive book to place in the hands of stammerers or their parents. L. FEINER.

AIDS TO THE MATHEMATICS OF PHARMACY. By ARTHUR W. LUPTON, M.C., Ph.C. 16mo of 95 pages. New York, William Wood and Company, 1930. Cloth, $1.50.

This little volume contains a number of simplified calculations of aid in the problems encountered in pharmacy. It is intended more to meet the needs of the pharmacist than of the physician. FREDERIC DAMRAU.

A TEXT-BOOK OF GYNECOLOGY. By ARTHUR HALE CURTIS, M.D. Octavo of 380 pages, illustrated. Philadelphia & London, W. B. Saunders Company, 1930. Cloth, $5.00.

The best text-book on gynecology the reviewer has ever read. It reduces gynecology to its simplest form, and makes an otherwise difficult subject easy. It is intensely practical, direct, and free from all the theoretical considerations which so often confuse the student. The general practitioner, anxious to review modern gynecology, and the general surgeon who does pelvic surgery might well read it. The chapters on gonorrhoea and pelvic inflammation should interest gynecologists.

C. A. G.

TROPICAL MEDICINE IN THE UNITED STATES. By ALFRED C. REED, M.D. Octavo of 410 pages, illustrated. Philadelphia and London, J. B. Lippincott Company, 1930. Cloth, $6.00.

The object of this book is to present a serviceable guide to the physician in the U. S. in his contacts with tropical medicine. A surprisingly large area of the U. S. falls within the boundary of hot climate. Wet heat is exemplified the year around in the Gulf and South Atlantic States. Dry heat is found in the Southwest from the plateau region to the Pacific Ocean. Dry or moist hot summers still further extend the range of climatic influence on disease.

Tropical medicine means the application of the principles of alleviation, cure and prevention of disease to disease and to health preservation in hot climates. Tropical medicine thus becomes the practice of medicine in hot climates. The term is not limited solely to those diseases peculiar to hot climates but it takes cognizance of the increasing necessity for civilized man to live there for longer or shorter periods.

In the U. S. many tropical diseases are endemic and serious. Others have a sporadic distribution and may be seen unexpectedly at any time as undulant fever. Others are of occasional occurrence and their recognition is easily missed or delayed because they are not expected. Others may be seen in imported cases.

This volume treats of all the diseases under these headings from all views and angles. To recent medical graduates, to practicing physicians, even to non-medical persons especially travelers, business representatives, missionaries, and nurses, it can be well recommended as a useful clinical pocket guide to the study of tropical medicine. HENRY M. FEINBLATT.

DICTIONARY OF BIOLOGICAL EQUIVALENTS German-English. By ERNST ARTSCHWAGER. Octavo of 239 pages, illustrated. Baltimore, Williams & Wilkins Company, 1930. Cloth, $4.50.

This volume is a German-English dictionary of 15,000 biological terms. Because medical papers frequently include biological terms which can be found in neither the general nor medical dictionaries, the book should be a useful addition to the library of the physician who reads or translates German medical literature.

FREDERIC DAMRAU.

BEHAVIOR PATTERNS OF THE ALIMENTARY TRACT. By T. WINGATE TODD, M.B. Octavo of 79 pages. Baltimore, Williams & Wilkins Company, 1930. Cloth, $1.00. (Beaumont Foundation Lectures, Series No. 9.)

Under this title are collected a series of lectures given by Dr. Todd before the Wayne County Medical Society.

This is a small volume crowded with the most interesting and important basic data necessary in the appreciation and understanding of the functions of the gastro-intestinal tract.

Some four hundred students of the Western Reserve under the careful guidance of Dr. Todd were studied. The response of the digestive system to stimuli of all kinds, both local and central, was registered by means of X-ray study and with serial studies and motion picture reductions. The behavior pattern to such stimuli as water, milk, heat, cold and emotional factors as observed and recorded by the author are not only of interest but of practical significance. IRVING GRAY.

RECENT ADVANCES IN CHEMOTHERAPY. By G. M. FINDLAY, M.D. Octavo of 532 pages, illustrated. Philadelphia, P. Blakiston's Son & Co., Inc. 1930. Cloth, $3.50.

The foreword states "The greater part of the work is necessarily devoted to a study of the action of chemical agents on diseases due to helminths, protozoa and spirochaetes, for as yet little progress has been made in the chemotherapeutic treatment of bacterial diseases, and still less in those of virus infections." This volume deals with "the treatment of parasitic diseases by chemicals with the object of destroying the specific parasites of the disease."

It is devoted to a large extent to tropical diseases, but there are chapters on diseases which are of frequent occurrence in temperate climates, e.g., syphilis, tuberculosis, etc.

This monograph contains a wealth of information on the chemical nature and clinical results obtained with a very large number of substances. A bibliography is appended to each topic discussed. M. J. SHEAR

THE FACTOR OF INFECTION IN THE RHEUMATIC STATE. By ALVIN F. COBURN, M.D. Quarto of 288 pages, illustrated. Baltimore, The Williams & Wilkins Company, 1931. Cloth, $6.00.

Coburn points out the correlation between rheumatic disease and the incidence of streptococcus hemolyticus in the upper respiratory flora of cases observed in the Presbyterian Hospital of New York. A report is made of the work of MacKenzie, Hanger and others which showed positive skin reactions to intracutaneous injections of a hemolytic streptococcus nucleo-protein in rheumatic patients and negative results in normal individuals. This interesting work, the final importance of which remains to be demonstrated, is advanced to show a possible relationship between the streptococcus hemolyticus and the rheumatic state.

The illustrations and diagrams are numerous and well done, but the book on the whole, is verbose and suffers from an overabundance of case histories, some of which might profitably have been shortened or omitted, to reduce the size of the book. Several chapters are devoted to a summary of previous bacteriological work in rheumatic fever and of interesting clinical observations made of the numerous cases of this disease studied in the preparation of the book.

A useful feature is the attention devoted to a somewhat neglected phase of this subject, rheumatic pneumonia. The observations confirm those of Rabinowitz and form an important clinical study of the pulmonary complications of rheumatism.

One cannot permit one statement to pass unchallenged—two cases of adiposity following chorea are reported, with photographs and the statement made that these changes are perhaps an objective indication of cerebral changes, possibly in the region of the hypophysis. In the absence of morphological proof, one would rather be inclined to attribute these changes to the high caloric diet and restriction of activity so often employed in the treatment of chorea and rheumatic states.

MILTON PLOTZ.

OBSERVATIONS ON THE COURSES OF DIFFERENT TYPES OF BRIGHT'S DISEASE AND THE RESULTANT CHANGES IN RENAL ANATOMY. By D. D. VAN SLYKE and others. Octavo of 130 pages, illustrated. Baltimore, Williams & Wilkins Company, 1930. Cloth, $3.00. (Medicine Monographs, Volume XVIII.)

This monograph is a scholarly presentation of diseases of the kidney observed clinically over a period of years upon patients having various pathological renal conditions. The writers follow the classification of Volhard and Fahr, and the recent work of Addis. The types of renal disease are called (1) Hemorrhagic (glomerulonephritis) and (2) Non-hemorrhagic, which includes (a) arteriosclerotic (Nephrosclerosis) and (b) Degenerative (nephrosis, lipoid or amyloid.)

These conditions are carefully reviewed in sixty-six histories illustrating the various steps in the development of the diseased condition.

The monograph is one of the best and most complete presentations upon the subject of nephritis that has appeared recently. It will require careful study but will repay for the time spent on its study. The tables and illustrations are excellent. HENRY M. MOSES.

PRACTICAL APPLICATIONS OF HEREDITY. By PAUL POPENOE. 12mo of 128 pages. Baltimore, Williams & Wilkins Company, 1930. Cloth, $1.00.

This is a small volume written in popular style, and fascinates one because of its intrinsic worth and its easy style. When the reader picks it up, he will not want to stop reading until he has completed the book. The writer is thoroughly conversant with his subject and gives many facts which are not found in the ordinary book on heredity. His remarks on the role of heredity in superior children, in the genius, and in criminals are extremely interesting. This volume is one well worth possessing, as an interesting addition to the more technical books on heredity, which you may already have in your library. JOHN F. W. MEAGHER.

A COMPILATION OF CULTURE MEDIA for the Cultivation of Microorganisms. By MAX LEVINE, Ph.D. and H. W. SCHOENLEIN, M.S. Octavo of 969 pages. Baltimore, Williams & Wilkins Company, 1930. Cloth, $15.00. (Monographs on Systematic Bacteriology, Volume 2.)

This work is the second volume of the Monographs on Systematic Bacteriology, prepared at the request of the Society of American Bacteriologists. It covers a highly technical and specialized field; it is essentially a reference book for the laboratory where bacteria, yeasts, and molds are cultivated.

The authors searched the literature exhaustively and obtained the formulæ for about seven thousand culture media. By classifying varients with the basal media, they reduced this number to about twenty-five hundred. These twenty-five hundred are here given, with all details necessary for their preparation. Each medium is discussed under the following heads: Constituents; Preparation; Sterilization; Use; Added Nutrients; Variants; and References to the original literature.

Naturally the value of such a comprehensive work will depend largely upon the ease with which the investigator can find the formula he needs. The authors have made this book very practical and easy to use, first, by arranging closely related media together; and second, by having no fewer than four complete indices: a Medium Name index; an Author index; a Constituents index; and a Use index. Thus the familiar oleate blood agar of Avery may be found as Avery's Oleate Blood Agar; under *O. T. Avery*; under *Oleate* and also *Sodium oleate*; and finally, under *Influenza Bacillus*.

As a reference book, this work is indispensable to every bacteriology laboratory. ARNOLD H. EGGERTH.

ROSE AND CARLESS' MANUAL OF SURGERY. By CECIL P. G. WAKELEY, F.R.S., Edin., and JOHN B. HUNTER, M.C. Thirteenth Edition. Octavo of 1592 pages, illustrated, with radiographic supplement. New York, William Wood & Company, 1930. Cloth, $11.00.

This text, now in its 13th edition, was initiated in 1898 as a result of the radical changes effected in the practice of surgery by the work of Pasteur and Lister. The style of the book is peculiarly English and this peculiarity is pleasing. The reason for this is that the essentials of any subject are stressed with no names applied to methods or operations except occasionally. For the student this is a distinct advantage.

The 13th edition has been brought up-to-date in every respect even including such recent methods as the Orr treatment of compound fractures and osteomyelitis. Although the book is not a monographic work several authors have contributed to its production. It is a well balanced and comprehensive surgical textbook.

The 13th edition of Rose & Carless well deserves an important place on the bookshelf of the student and surgeon. R. F. BARBER.

OUR NEIGHBORS

TREND OF MEDICINE IN MICHIGAN

The March issue of the Journal of the Michigan State Medical Society contains a stenographic report of the Annual Conference of County Secretaries, held on January 22, in which Dr. Nathan Sinai of Ann Arbor gave an address on the "Trend of Medicine." The doctor said, in part:

"A bird's-eye view of our whole system of medical care brings out the striking point that almost a million and a half individuals derive their livelihoods and, let us hope, their satisfaction in work, from supplying the various medical services. We would expect to find, when we come closer in our view of the system, some cohesion between the members of this great group, some unity of thought, some definiteness of objective, and some likeness in the method of approaching the objective. However, a closer view reveals that almost the opposite of these expectations exists.

"We find that the great group is broken into smaller groups, and that these are set off from each other in what amounts to almost watertight compartments. In one compartment we find the 145,000 physicians; in another compartment, the 65,000 dentists; and so it goes—compartment by compartment. Not only do we find little contact between the compartments, but we also see evidence of antagonism, animosity, and friction between the groups."

Doctor Sinai then discussed the production and distribution of medical science as follows:

"Medicine has been criticized because the distribution of the results of scientific research has not even nearly kept pace with the production. It is a fact that during the past half century the machinery of production has been modernized and speeded up until today the warehouses of medical science are bulging with results that should be made available to the general population. It is also true that in spite of this high rate of production the methods of distribution still involve the use of the ox-cart."

Dissatisfactions among doctors, dentists, nurses, public health workers, and the public are then discussed as follows:

"It is an inexorable law of progress that human movements shall expand until the very expansion itself results in a haziness of objective. This haziness produces, both within and without the movement, a dissatisfaction, and from the dissatisfaction there comes an effort at concentration and an attempt to clarify objectives. The great movement in medical care has apparently reached the stage of dissatisfaction; the evidences are to be seen on all sides. The physician, speaking generally, is dissatisfied. The same is true of the dentist, the public health worker, the nurse, and the public.

"The physician is dissatisfied, on the average, with his income, and with what he terms 'encroachments' by public and private agencies upon his field of private practice.

"The dentist is also dissatisfied with his income and, though to a lesser degree, fears encroachments upon his field of private practice. Generally speaking, the dentist's dissatisfaction is somewhat less tangible than that of the physician. Dentistry as a whole views the criticisms of medicine and is fearful lest it find itself, in a few years, in the same position.

"The nurse is dissatisfied. In the whole economic chain of medical care, it is becoming more and more apparent that the nurse is the weakest link.

"The dissatisfaction among public health workers is two-fold, and concerns itself not so much with personal income as with conditions of work. Public health workers point to the dividends that have accrued from their efforts and are unable to understand why money for the expansion of these efforts is not forthcoming. The complaint is also made against the lack of interesting preventive medicine and preventive dentistry by private practitioners in both fields. As a result of this dissatisfaction one may see that there have arisen two schools of thought in public health. One school, the smaller, holds the view that preventive medicine must be made available to the population by the state; the other school holds the view that this service should come through the private practitioner, as a result of public demand. Even this second view does not place the private practitioner in an enviable position because there is an implied presumption that preventive medicine must be forced upon him.

"Finally, we come to the most dangerous dissatisfaction—that of the public. In this country the only method the public has for expressing a dislike is through the process of legislation. Changes may take place as a result of an orderly progress we call evolution, or as a result of a disorderly or explosive process called revolution. Revolution is never necessary; it is costly, and results in much debris. If we examine the history of any such process we find that the causes were present and observable long before the explosion

(*Continued on page* 440—*adv. xii*)

Increasing the effectiveness of the SALICYLATES...

THE MODERN trend in salicylate medication favors the concomitant use of alkalis, to neutralize the acid toxins of the bacteria of rheumatism, and to lessen the cardiac dilation associated with rheumatic disorders.

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We also invite correspondence upon specific cases in any locality.

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(*Continued from page* 438)

occurred, and its occurrence was brought about by inattention, wilful or otherwise, to these causes."

Discussing medical insurance, Dr. Sinai said:

"When the demand for medical insurance arose, in the majority of the early systems developed in each country organizations such as insurance companies, lodges, mutual aid associations, et cetera, were already in existence and were powerful both politically and financially. The task of interpreting the demand for insurance fell to these already organized groups, since they had been dealing to a greater or lesser degree with problems of medical insurance. As was to be expected, the plans developed and presented to the medical organizations outraged and medical principles of ethics, practice, and pride. The result was, in most cases, an antagonistic attitude on the part of the profession so that the insurance plans developed bore no imprint of medical thought. However, regardless of the antagonism of the profession, legislation was enacted and the profession was abruptly forced into compliance with regulations in the development of which they had had no hand.

"The process of change, once the systems were adopted, was and still is a very slow one. The best evidence of this is presented by the changes in the British system brought about through nineteen years of effort on the part of the profession. Almost invariably a few months after the medical insurance system has been adopted the medical sentiment has been 'Why were we not prepared?'

"The more recent health insurance legislation bears the stamp of medical thought. The outstanding example of this is the law adopted in France in 1930. In that country the professional groups met the problem squarely, had prepared a program, and, as a result, France today offers an excellent example of a procedure almost exactly opposite to that followed by the professions in Germany and England."

In conclusion, the speaker said:

"The part the professions are to play in the future trend of medical care is obvious. If there was ever a need for professional groups to pause and objectively study movements in medical care, the need is now pressing. If there was ever a need for forgetting petty animosities and energy-consuming antagonisms, within the professions and between professions, the need is here. Changes that take place may be directed by the professions or there is danger that they will be directed for the professions."

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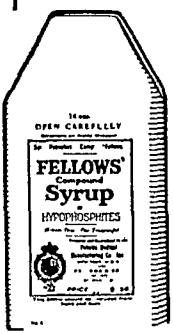
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is such that under its influence one observes a rapid increase of appetite and a marked elevation of tone.



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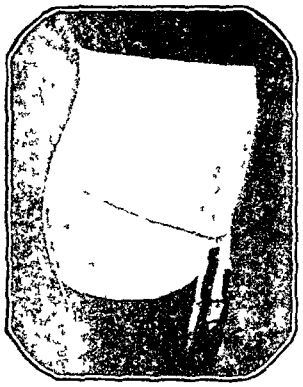
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PUBLIC RELATIONS IN MICHIGAN

The question of the public and civic relations of physicians is receiving serious attention in practically all the State Societies. The Journal of the Michigan State Society for March reports the following remarks by Dr. B. R. Cobus, Chairman of the Council, before the Annual Conference of County Secretaries on January 22, 1931:

"First there is your relationship to your local public. In these last years it has become a rather favorite pastime of a good many lay writers and too many graduate doctors to write articles slurring the doctor and slurring medicine as it is practiced. It is a sort of revolt against the physician. Much of this is due to the fact that the physician has kept too much aloof from the public. Enthusiastic lay individuals of your community have felt that they must do something for the public in the way of clinics of various sorts. They have taken control of the clinics, of the baby clinics, the tuberculosis clinics and others, and now it is the clinic of mental hygiene. While they have used the doctor, who is the important wheel in the operation of any of these social clinics, they have given him every little opportunity to express himself in regard to the policy. The doctors themselves have been rather largely to blame because they have stayed aloof and have not made the necessary exertion to inject themselves into these groups.

"I would urge you, secretaries of county societies, to do more than you have done in the past to get into these various activities which are going along in your town, and to see if you cannot show the people that you are interested and, by virtue of your profession, intelligently interested in these health activities.

"The other day in Grand Rapids there was a meeting of a group of osteopaths. I was interested to see in the paper that they had sent speakers to several of the high schools, to tell the pupils the advantages of the study of osteopathy and to urge them to take up osteopathy as a vocation. I can't remember ever seeing a similar activity on the part of any one of us. Perhaps we feel that we could not conscientiously urge a young men to go into medicine, that the returns are not commensurate with the money and time expended and the effort which much be given to make a living. And yet I notice that a doctor is always pleased when his son goes into medicine and follows in his footsteps."

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YOUR patient begins with a tablespoonful  continues with a teaspoonful  and finally stops it altogether  Surely, there is no clearer way to demonstrate  the therapeutic value of AGAROL  in the treatment of constipation.

Besides, Agarol is so easy to take. No oiliness, no artificial flavoring to get used to. Agarol can be mixed with water, fruit juices, milk, with semi-solid food, used as a salad dressing in place of mayonnaise. Serves you better—serves your patient better.

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AGAROL is the original mineral oil and agar-agar emulsion with phenolphthalein. It softens the intestinal contents and gently stimulates peristalsis.

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PATIENTS suffering from High Blood Pressure need medical treatment. They should not be subjected to self medication or permitted to decide the dosage or the period of time during which medication should be used.

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☐ I use ampuls. Send your list of formulæ.
☐ **Special April offer, 200 Pulvoids for $1.00, cash with order.**

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BUDGET OF STATE SOCIETY OF MICHIGAN

The March number of the Journal of the Michigan State Medical Society contains the minutes of the session of the Council held January 21, 1931, at which the following budget for 1931 was proposed:

ESTIMATED INCOME

3,450 Members' dues at $10.00	$34,500.00
Interest Earnings	1,500.00
Reimbursements About	1,500.00
	$37,500.00

EXPENDITURES

Medical Defence—3,450 at $1.50	$5,175.00
Journal Subscriptions—3,450 at $2.50	8,625.00
Rent, Light, Telephone, Power	1,800.00
Annual Meeting	1,000.00
Post Graduate Conferences	3,000.00
Legislative Committee	1,000.00
Printing and Postage	500.00
Council Expense	1,500.00
Joint Committee on Public Health	1,000.00
Delegates to Am. Medical Association	750.00
Stenographic and Clerical Help	3,000.00
Secretary's Salary	6,500.00
Committee Expenses	500.00
Contingent for Society Expense	3,150.00
	$37,500.00

JOURNAL BUDGET

INCOME

Subscriptions	$8,700.00
Advertising	8,500.00
	$17,200.00

EXPENSES

Printing and Mailing	$11,500.00
Editor's Salary	3,500.00
Editor's Expense	900.00
Contingent	1,300.00
	$17,200.00

CHARGES FOR INSURANCE CERTIFICATES IN MICHIGAN

The March issue of the Journal of the Michigan State Medical Society contains a letter from Dr. F. C. Warnshuis, Secretary of the State Society, outlining the suggestion made by the Council that doctors should charge insurance companies two dollars for each blank form filled out for purpose of informing the company regarding the cause of death of insured persons. The communication especially urges all members to refuse

(*Continued on page 446—adv. xviii*)

THEELIN, Female Sex Hormone in Crystalline Form, Now Available

THE specific directing energies of the human body are gradually being brought to light—Adrenalin, Pitocin, Pitressin, Thyroxin, Paroidin, and now, in chemically pure crystalline form, an ovarian hormone which regulates a part of the intricate mechanism of the female reproductive system. The credit for the isolation of this hormone goes to Dr. E. A. Doisy, professor of bio-chemistry at St. Louis University, St. Louis, Missouri. The new preparation has been christened "Theelin" by its discoverer, ("*thelu*" being Greek for the female sex). Its manufacture has been entrusted to Parke, Davis & Company.

The therapeutic indications for Theelin are functional amenorrhea and scanty menstruation. It is also being used in cases of artificial and natural menopause, sexual frigidity, delayed puberty, lack of sexual development, and functional sterility. The ovarian preparations which have been heretofore available have been used in the above-named conditions and in many others with varying degrees of success. Theelin, being the pure principle, can be expected to give distinctly better therapeutic results in any condition in which ovarian therapy seems to be required.

Theelin is carefully standardized. The method of assay was developed by Dr. Doisy and the potency of Theelin is expressed in terms of rat units. Theelin, P. D. & Co., is furnished for clinical use in aqueous solution containing 50 Doisy rat units per cc., and for the present is marketed only in packages containing six 1-cc. ampoules.

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New York City

(*Continued from page 444—adv. xvi*)

to fill out a blank unless they receive the fee. The letter says:

"Insurance companies have imposed too long upon physicians. They have and are now profiting by reason of the expert opinions and advice obtained from physicians without paying for it. Such imposition should no longer be tolerated. It is estimated that these insurance corporations are receiving approximately a million dollars' worth of opinions and expert testimony from physicians without remunerating the physicians.

"The average doctor fills out about 20 to 50 such blanks a year. Does he relish making a contribution of $40 to $100 per year to corporations?

"Insurance representatives, when a doctor declines to fill out a blank, advance several 'sob arguments': 'The patient or the relative is being deprived of his money,' etc. Do not be persuaded by his argument. A united front and a firm stand by every doctor will cause them to accede to our demands.

"Members when filling out a blank after receiving a fee, should not answer any of the following questions:

For what diseases have you attended the patient?

Has he ever had tuberculosis?

Have any relatives died of tuberculosis or heart disease?

What is his present physical condition?

"If you answer these questions you impart 'confidential information' and become liable for damages through suit by the patient or his estate. Within the year several doctors have been sued and judgments rendered against them for having imparted this confidential information to insurance companies. A release will not protect you in court. You are warned to be careful in the answers you give.

"Please impress upon all your members the imperative necessity of complying with the requests and recommendations contained in this communication.

"By direction of the Council."

ANNUAL REGISTRATION IN MICHIGAN

The Committee of the Michigan State Medical Society to study the question of annual registration, reported favorably to the Council on January 21, as follows, according to the Journal of March:

1. Twenty-two states of the Union require annual registration of physicians. While annual registration was opposed in most of these states when the suggestion was first made, at the present time, after this legislation had been enacted, the

(*Continued on page 447—Adv. xix*)

(Continued from page 446—adv xeni)

members of the profession in these twenty-two states are unanimous in their expressions of the benefits that are being derived from such annual registration.

2. The chief benefits that Michigan will derive from annual registration are:

First, the ascertaining of an authentic, up-to-date list of all physicians duly authorized to practice medicine and surgery.

Second, annual registration will expose unlicensed and illegal practitioners and will enable the Board of Registration in Medicine and the law enforcement officers of the state to institute prosecution against these illegal and unregistered practitioners.

Third, it will enable the state to rid itself of undesirable and unregistered practitioners and will be to the benefit of the public as well as the profession.

3. In view of these and other benefits that the committee perceives, your committee does recommend that the state society approve the plan of annual registration.

NEEDED ACTIVITIES OF THE MICHIGAN STATE SOCIETY

Dr. F. C. Warnshius, Secretary of the Michigan State Society, gave an annual report to the Council on January 21, which was printed in the Journal of March, and which contains the following suggestions regarding the immediate extension of the activities of the State Society:

"1. The completion of the survey that will indicate the distribution of Michigan physicians.

"2. A definite schedule of public meetings in each county, sponsored by the County Society and conforming to the plan of the Joint Committee on Public Health Education.

"3 A series of clinics or conferences, conducted at central regional points, that are devoted to demonstrating prophylactic health measures and instructing our members as to how to definitely render such preventive services to their clientele. Our members are overlooking these opportunities and need inspiration and instruction in order that they may avail themselves of the returns obtainable from this type of professional service.

"4. The appointment of a special committee of nine to be known as the Committee on Medical Service. The duties of this committee to be to gather information and data on clinical services; secondly, to formulate a plan whereby County Societies or groups of societies may establish centralized clinics that shall render medical services to the indigents and to those who are unable to assume the full financial burden of their medical care."

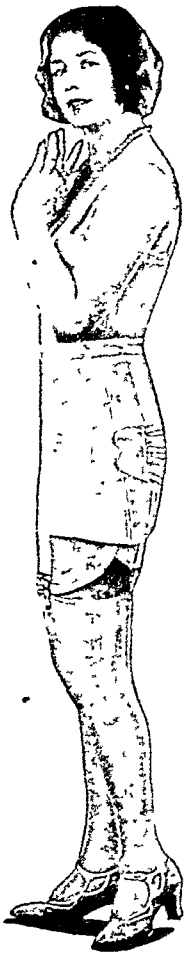
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Supporting Corset

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The Pomeroy is ideal for this purpose, for it is so designed that the uplift is given by the corset itself with no need for additional belt or other contrivances. The intersecting laces give an extra upward and backward lift which further helps the muscles of the abdomen to give the necessary support.

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MALPRACTICE SUITS IN MICHIGAN

Two curious malpractice suits were reported to the Council of the Michigan State Medical Society on January 21, 1931, by the Medico-Legal Committee. The Michigan Journal for March says:

"A mother, herself a trained nurse, reported fear of infection of her children from a female school teacher, rooming in her house. The health officer took some smears from the vagina of the school teacher and found many intra-cellular diplococci and on report of his findings to the School Board the teacher was discharged. A few months later, the health officer was sued for an alleged error in diagnosis, this claim being based on the failure of a Detroit physician to find gonococci at a later date and a statement from the pathologist at the State University that no gonococci were found four months later.

"Assuming the correctness of the clinical and microscopical diagnoses which the health officer was able to prove by his slides, the question then is, what is the duty of a health officer in enforcing quarantine in dangerous communicable diseases and whether the School Board should have suspended and not discharged the teacher, and whether action, necessary to the protection of many little girls, would have been taken without violation of professional confidence, unjustifiable in a private physician.

"The whole controversy, which split the good people of this village into two adverse camps, resulted in dropping the suit against the doctor on the reinstatement of the teacher. The doctor wanted to fight for vindication, but wisely decided to let time vindicate him.

"Another case of general interest, arising in 1923, was disposed of in 1930. It involved four doctors and a private hospital. A formerly prominent surgeon asked to operate in a gall-bladder case in this private hospital, took his own sponges thus relieving the hospital, at least in some degree, of legal responsibility for the sponge count. The operating room nurse first reported a sponge as missing, then as found, but there was talk about the hospital and next few days of a missing sponge. The history of the patient for the next few months strongly suggests, to a surgically trained outsider, a foreign body in the abdomen, for the wound kept breaking open.

"Four and one-half months later, another operator opened the abdomen and found a sponge, and with it demonstrated to the family the correctness of his diagnosis. When the case approached trial last summer, the family doctor was dead, the sponge finder also dead, rendering his discovery impossible of legal proof. The operating surgeon had retired from practice and was living outside the United States and Mr.

(*Continued on page 450—adv. xxii*)

SEDATION
WITHOUT
LANGUOR AND DROWSINESS

In NERVE STRAIN
MENTAL IRRITABILITY
NEURASTHENIA
HYSTERIA

ACCORDING to the reports in the medical literature, Abasin can be freely administered during the day without causing drowsiness or interfering with the patient's mental and physical activities. Compared with the bromides, it is more reliable in action and better tolerated. Furthermore, it is almost tasteless and is conveniently administered.

ABASIN
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"Sedative Pure and Simple"

DOSE: 1 or 2 tablets (4 or 8 grains) three times daily.

HOW SUPPLIED: Tablets of 4 grains in tubes of 10 and bottles of 100.

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WINTHROP

Winthrop Quality has no substitute

134M

(*Continued from page 448—adv. xx*)

Barbour arranged a settlement by an insurance company for $250.00."

Dr. F. B. Tibbals, Chairman of the Medical Defense Committee of the Michigan State Medical Society addressed the county secretaries assembled in Annual Conference on January 22, on the subject of Medico-Legal Defense. The Journal of February quotes him as saying that the charges in malpractice suits fall into four classes:

1. Competence of the doctor, but this complaint is seldom urged, it being assumed that being licensed by the State of Michigan to practice medicine, the doctor is competent.

2. Negligence is the offence that is usually charged.

3. Non-consent, or assault. A doctor is not "allowed to do things to people medically or surgically without their consent thereto and the charge of an operation without consent therefore is not infrequently brought. This legally constitutes assault."

4. Breach of contract. The doctor is required to display only the ordinary degree of knowledge and skill that prevails in his community, but he must not promise too good results.

There are three general causes for malpractice suits:

1. The dissatisfied patient. "We all have patients in whom our results are not as satisfactory as we hoped for; and so the dissatisfied patient is always present with every doctor.

2. "The second factor is the hungry lawyer. There are lots of men entitled to practice law who are not particularly successful from the financial standpoint and who are, like the struggling young doctor, looking for business of any kind. That class of men I call the hungry lawyers. They are in every community, they are looking all the while for some opportunity to get money out of somebody else."

3. "The third factor is the jealous doctor. If you take the combination of the hungry lawyer, the dissatisfied patient and the jealous doctor, then you have a malpractice suit. This malpractice suit would never have started without the introduction of Factor No. 3. Unless there is in every community some doctor who feels a little sore at Brown, who feels that he should have had this patient, who is a trouble-maker, you never can get that case started. If you once get the case started it cannot succeed in court unless some doctor is willing to take the stand

(*Continued on page 452—adv. xxiv*)

Avoid Unnecessary Pain!

The experiments of Dr. Raymond Gregoire and Albert Frouin of the Pasteur Institute, in Paris, have proved that tin is the great enemy of the staphylococcus which is the organism causing boils and an excellent remedy for boils.

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·MARCH·APRIL·
·MAY·

1931



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2% Solution

It stains, it penetrates, and it furnishes a deposit of the germicidal agent in the desired field.

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THE IDEAL LAXATIVE-ANTACID

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Supplied in 4 oz., 12 oz., and 3 pt. bottles.

THE CHAS. H. PHILLIPS CHEMICAL CO.

New York and London

(*Continued from page 450—adv. xxii*)

against the doctor defendant and testify that his treatment was in some way improper."

In conclusion, Dr. Tibbals said:

"Let me call attention to one more thing. We have a lot of cases that are absolutely unnecessary, that are brought as offsets to the doctor's bill. If you and all your members just fix firmly in your minds the fact that we have a statute of limitations in Michigan for adults, of two years, and let over two years go by before you attempt collection of your bills, you will save a lot of trouble."

New York physicans could well give heed to the general procedure of the principles to be followed when threatened with a malpractice suit. The Journal of the Michigan State Medical Society for February gives the following directions for action when a suit is threatened:

"There seems to be considerable misunderstanding as to what course should be pursued when a member is threatened or is sued for malpractice. The Medico-Legal Committee of the State Society will defend every member in good standing through all the courts. In order that there may be no entanglements and that proper legal protection may be given, members are urged to observe the following instructions:

"When threatened with suit or when served with a bill of complaint for malpractice, notice should be immediately given to the Medico-Legal representative of your local county society. Notice should also be immediately given to Dr. F. B. Tibbals, chairman of the Medico-Legal Committee, 410 Kresge Building, Detroit, Michigan, together with all papers or notices that may have been served upon you.

"It is important that a member does not discuss either with an attorney or with the plaintiff any of the facts or details concerning the suit. Pursue a course of absolute silence and await full instructions from Dr. Tibbals. Do not engage any local attorney, but await instructions that will be given to each member in regard to the employment of legal talent. This procedure is absolutely essential and imperative in order that you may be surrounded with the fullest protection.

"Members are urged, when attending fracture cases, to have an X-ray picture made before any attempt at reduction or treatment, and also to have several X-ray pictures taken during the course of treatment and upon the final discharge of the patient. Failure to do so makes procedure for defense difficult.

"Remember, in all suits or threats of suits, to immediately send a full report to Doctor Tibbals."

BAD ACCOUNTS IN OHIO

The March number of the *Ohio State Medical Journal* discusses bad accounts editorially and gives rules for giving legality to a bill. The article says:

"Experience has shown that most of the bad accounts could have been avoided if proper care had been exercised at the start in securing necessary complete and accurate data at the patient's first visit.

"For example, it is a fact that about 75 per cent of the delinquent accounts in the average doctor's ledger are cases whose names are either misspelled, or whose first names are not given, or for whom adequate information is not available.

"Some of that writer's suggestions for the physician or his secretary in their efforts to eliminate delinquent accounts are:

(1) In taking the patient's name, be sure that the surname is correctly spelled and printed out

(2) Always ask for the full first name as well as the middle initials of the patient.

(3) Record the occupation of the patient, or of the patient's husband or parent, as well as the concern where employed.

(4) Record carefully the residence address, and if a business address is available, record both it and the residence.

(5) Take extreme precautions with persons who give a rooming place, or office building as their address. In all such cases find out the permanent home address.

(6) Take extreme precautions with patients who have no telephone at their residence address. Possession of a telephone is a good indication of the patient's ability or willingness to pay his bills.

(7) Get detailed information on all persons who give an out-of-town address. Get cash payment in such cases if possible.

(8) Always ask any new or unknown patient who referred him to the doctor, and record that person's name and address on the ledger card."



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MEMBERSHIP IN MISSISSIPPI

There seems to be a fairly even proportion of county society members among the physicians throughout the Nation. The proportion in New York State is about 75 per cent. The proportion in the several councillor districts of Mississippi is discussed in the March number of the *New Orleans Medical and Surgical Journal* as follows:

"Comparative figures are always interesting, even though it has been said that 'comparisons are odious,' and with us they give us a fairly good idea as to how effectively the question of organized medicine is being sold in the various parts of the State. Without them we do not know the weak points—where a district contains one or two especially live societies we sometimes get the idea that the whole district is active when such may not be the case.

"These are the 1930 membership percentages:

9th District	77	per cent
6th District	75	" "
3rd District	72	per cent
8th District	72	" "
2nd District	68	" "
1st District	66	" "
5th District	65	" "
7th District	61	" "
4th District	59	" "

"These figures do not truly reflect the activities of the different Councilors and no such suggestion is intended. A live man may have an unusually stubborn bunch of mavericks in his district and certainly no one can blame the Councilor or the 7th District, who has only been in office about four months, but they do show that conditions in some parts of the State are far from satisfactory. These figures are obtained from the roll of members and the lists of eligible physicians that were checked by the County Secretaries."

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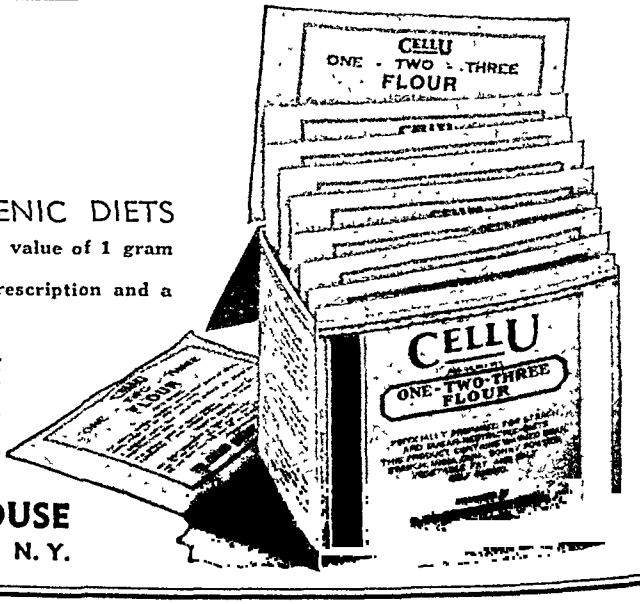
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OLLECTION AGENCY IN DELAWARE

The February number of the *elaware State Medical Journal* ntains the following editorial on e collection bureau run by one the county societies:

"The report of the Committee 1 the Physicians' Credit Bureau the New Castle County Medical ociety, which was presented to e Society last month, was not ie to impress an economist or rill a medico. In brief, it showed at approximately $1,100 had en collected out of some $26,000 orth of claims placed with the ureau; in other words, after a ear's efforts, only four per cent f the claims had been collected.

"It was evident to some of the iembers, and in fact, to some of ie committee, that neither the ype of organization nor the meth-ds proposed could reasonably be xpected to be successful."

The editorial says that the Com-ittee of the society "will con-der most seriously the so-called Memphis Plan' the essentials of hich are: a credit bureau incor-orated, owned, and operated by ie Society; a trained credit man-ger in full charge, with trained, onded collectors 'on the street'; membership fee of perhaps $35 or the first year (present service osts $60), with diminishing fees s the bureau becomes better es-ablished; commissions to the bu-eau probably not to exceed 35 er cent in any case, and in most ases only 15 per cent; and a ham-ier and tongs policy that makes ie debtor respect the doctor and is collection bureau. This plan as performed wonders in Mem-his, Birmingham, and Washing-on; and while Wilmington may ave more than its share of con-irmed dead beats and hard-boiled ggs, the experience of other cities ives assurance that the returns vould be many times the four per ent return of the present plan.

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ECONOMICS OF DOCTORS IN KENTUCKY

The March number of the *Kentucky Medical Journal* opens with the following article on the economic status of the physicians of Kentucky:

"This period of general depression, upon which a terrible drought has been superimposed, presents complex problems for solution. No other self-respecting, self-sustaining group, unless it be the farmer and miner, has suffered more injury during this period than the medical profession The Editor of the Journal has heard heart-rending stories of privation from doctors and doctors' families in recent months. In previous disasters, not only in this country, but in lands beyond the sea, similar conditions have been ameliorated by the familiar historic record of the Red Cross, which has provided not only food and clothing, but medical supplies and service.

"Even in this crisis the medical profession in Kentucky maintains its firm conviction that the practice of medicine is inherently an individual responsibility. We are opposed to the state practice of medicine We believe that every individual should be free in the choice of his physician for personal services. We believe that every private practicing physician should receive his compensation from his patients in proportion to the services rendered. We are opposed to the panel system or any other form of socialism in medicine.

"While maintaining these principles and demanding their protection, we realize that there are certain public problems in medicine for the solution of which official organizations must be maintained by appropriation, Federal, State and local. Among these are the care of the delinquent, the insane, the defective and the criminal, and those broad community problems which are recognized under the general title of public health.

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The titles in the Anglo-French Library of Medical and Biological Science, published in the U. S. by The Macmillan Company, cover a variety of subjects in medicine and surgery. Written by American, French and British authors of distinction, this series of monographs opens the way to a popular appreciation of medicine and surgery in its international aspects. Outstanding in the series is Draper's DISEASE AND THE MAN about which *American Medicine* states "The book throughout is admirable, challenging and holding attention and presenting with great dexterity the theory of constitutional types." Another book in the series is Thomson and Colledge's CANCER OF THE LARYNX which the *Journal of the American Medical Association* considers ". . . an important work. As in most English papers and books, the style is clear and the statements are made in a precise and logical manner." See page vii.—*Adv.*

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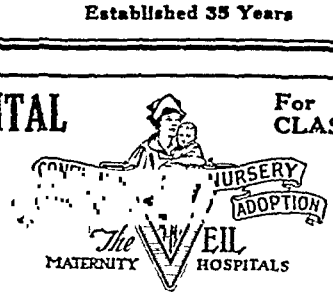
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VOL. 31, No. 8 NEW YORK, N. Y. April 15, 1931

DIVERTICULA OF THE OESOPHAGUS*

By FRANK H. LAHEY, M.D., BOSTON, MASS.

DIVERTICULA of the oesophagus are divided into two groups, one, the traction diverticulum, described first in 1840 by Rokitansky; and pulsion diverticulum, described first in 1767 by Mr. Ludlow. Traction diverticula are always in the oesophagus itself. They are usually found on the anterior wall of the oesophagus and most commonly at a level corresponding to the bifurcation of the trachea. They occur at any age. They are characterized by a funnel shape as shown in the illustration, Number I. They rarely cause any serious symptoms during life due to the fact that the end of the sac is usually directed either upward or at least horizontally and rarely downward, and due also to the fact that the wall of the diverticulum consists of all the muscular coat of the oesophagus and so the sac readily tends to empty itself and does not accumulate material in it as does the pulsion type and so produce symptoms.

Because these diverticula cause but few symptoms, a discussion of treatment is not necessary except to mention that when they do cause symptoms, they are usually midly obstructive in character and can be overcome by dilatation of the oesophagus with olive-tipped bougies. It is obvious that being within the chest cavity, it is not feasible to apply surgical procedures to this traction type of diverticulum and also, fortunately, it is not necessary.

Pulsion diverticula, on the other hand, are not located in the true oesophagus, but are located at the junction of the pharynx and oesophagus and so have been termed pharyngo-oesophageal diverticula. They are always located at the pharyngeal dimple, a weak point in the posterior wall of the pharynx just below the transverse fibers of the inferior constrictor and within the two sets of oblique fibers which come off from the inferior constrictor, the crico-pharyngei.

It is probable that this muscular arrangement has considerable to do with the development of these pulsion diverticula which occur so constantly at the same level opposite the cricoid cartilage, always rising from the posterior aspect of the pharyngo-oesophageal junction, and usually with their sacs directed toward the left side.

One recalls that the process of propelling food from the mouth to the oesophagus consists of the contraction of the constrictor fibers until the bolus of food is propelled into the oesophagus. It is probable that the cause of a bulging of the mucous membrane through the point marked "x" on illustration number V is a result of neuromuscular incoordination whereby the inferior constrictor fibers force the food onward, but the oblique crico-pharyngei fibers, shown in illustration V, do not relax to permit the food to pass on into the oesophagus. This, then, results in a bulging through the pharyngeal dimple, the weak point between the oblique fibers of the crico-pharyngei marked "x" in illustration V. At least, insofar as any information we have up to the present time, this is the most probable cause of the mechanical production of these pulsion diverticula.

When the pouch protrudes from this weak point in the posterior wall at the junction of the pharynx and oesophagus, it usually is directed toward the left side, and since the oesophagus is situated between the prevertebral and pretracheal fascia, so the sac of the diverticulum as it bulges to the left side is located just in front of the prevertebral fascia and behind the pretracheal fascia. The location of the sac as relates to the prevertebral and pretracheal fascia is of surgical importance, as this has a great deal to do with the high percentage of fatalities which follow one-stage operations on those lesions. When leakage occurs, it extends between these two fascial planes into the mediastinum and produces thus a fatal mediastinitis.

* Read at the Annual Meeting of the Medical Society of the State of New York, at Rochester, N. Y., June 4, 1930.

It is due to the fact also that the sac of the diverticulum is located in front of the prevertebral and behind the pretracheal fascia that the enlargement of these sacs is directed downward into the mediastinum, and this accounts for the occasional occurrence of the enormously dilated sacs, as shown in illustration number IV, located so deeply in the chest, being guided into the mediastinum by downward extension between these two fascial planes as the sac gradually descends and enlarges.

One observes symptoms in oesophageal diverticula of the pulsion type in relation to the size of the sac. The symptoms are quite in contradistinction to those of traction diverticula. The wall of the oesophageal pulsion diverticulum does not possess the musculature

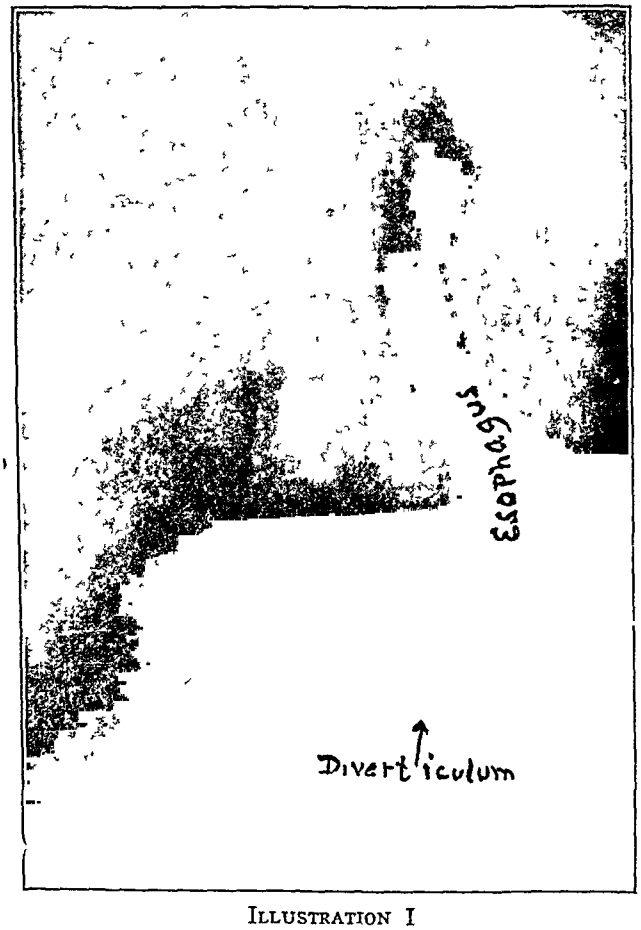


ILLUSTRATION I

This is a typical traction diverticulum. Note that the direction of the diverticular sac is slightly upward or horizontal so that food does not tend to accumulate in the sac. Note that the level is at about the level of the bronchi.

fibers of the oesophagus, the sac does sag downward, so that its lowest point is lower than its entrance, and so tends more and more to accumulate fluid and food, thus producing symptoms from its earliest origin.

The earliest symptoms of oesophageal diverticulum are those which go with the very small sac, as shown in x-ray illustration number II. It will be noticed in this x-ray that the sac represents no more than a small bulging through the posterior wall of the pharynx with the accumulation of but a small amount of bismuth in it. In diverticula of this type, the earliest symptoms are the accumulation of small amounts of mucus and food in such a sac as this, for which the patient not infrequently hawks for a considerable period of time in an endeavor to empty it. Not infrequently at this stage of the diverticulum development there is a complaint of a foreign body, or a scratchy feeling, in the throat. Not infrequently there is present considerable salivation and at times a choking sensation. Due to the fact that small particles of food lodge in this small sac there is a fear of swallowing because of the feeling that food may stick in the patient's throat. These are the symptoms

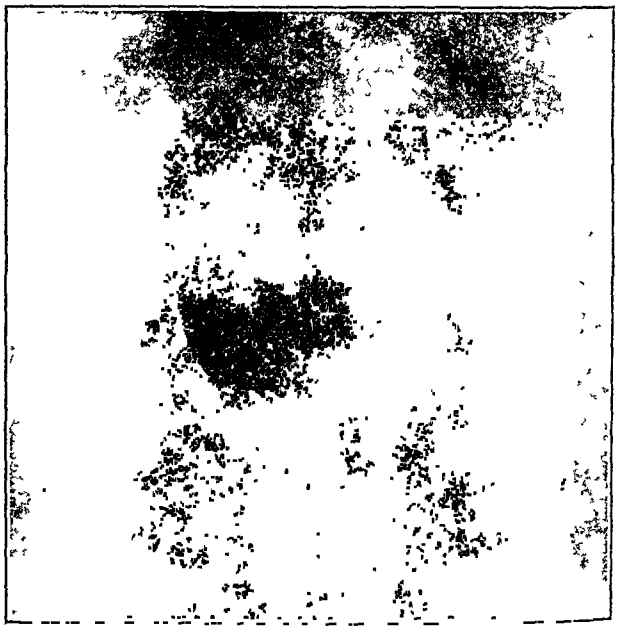


ILLUSTRATION II

This is an x-ray of the earliest stage of oesophageal pulsion diverticulum. At this stage the sac has no neck and consists only of a bulging of the oesophageal mucosa and submucosa through the pharyngeal dimple. It is unwise to attempt operation at this early stage: one, because the symptoms at this early stage are insufficient to justify removal and two, because the size of the sac is so small that it does not lend itself to two-stage removal

which are associated with the earliest types of oesophageal diverticulum.

When the sac has reached sufficient size, illustration number III, to hold considerable fluid or food, symptoms then become of a much more definite character. These symptoms consist of the sticking of large particles of food, then smaller particles, until finally semi-solids and liquids enter the sac and distend it, and

eventually, when the sac becomes large enough, produce complete obstruction, illustration number IV.

The obstruction which occurs in oesophageal diverticula is at first in some measure due to the distension of the sac, but eventually is largely due to the fact that the enlarged sac pulls the lateral opening into the diverticulum downward, converts it into a transverse open-



ILLUSTRATION III

This is a small but fully formed sac. Sacs of this size produce definite and often troublesome symptoms for which removal is indicated. The removal of small diverticular sacs of this size by a two-stage procedure presents certain technical difficulties, a plan for the overcoming of which is described in the technical article referred to in the text.

ing, and makes the true opening into the oesophagus a narrow slit-like orifice laterally located, into which food does not pass readily, but tends, rather, on descent to pass first and more readily into the oesophageal diverticulum. When the sac has attained sufficient size, as in illustrations number III and IV, food which has been taken at a previous meal is always returned, although at irregular intervals and more at one time than another. Patients with these diverticula are often able to so press upon the sac that they can expel the food which has accumulated within the sac. They often complain of gurgling noises due to the mixture of air, fluid and food within the sac which is moved about by motions of the head. One should recall that the regurgitated material from the sac does not contain hydrochloric acid and may thus usually be differentiated from vomitus. X-ray, as shown in illustrations numbered III and IV, characteristically demonstrate the pulsion oesophageal diverticula as to their size, location and shape. It will be observed in the x-rays, illustrations

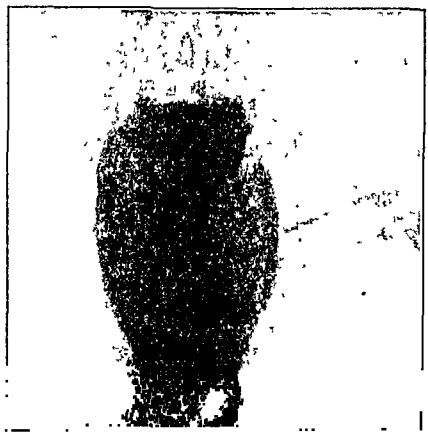


ILLUSTRATION IV

This is the fully developed oesophageal pulsion diverticulum which has extended partly into the mediastinum. This is the stage of diverticular development at which troublesome symptoms are present and at which operation is urgently demanded. This is also the stage at which the diverticulum lends itself well to the two-stage procedure permitting implantation of the sac into the wound with its dome well above the skin level and making the second stage removal easy and satisfactory.

III and IV that the location of the neck of the diverticulum is always constant. It is always opposite the level of the cricoid cartilage, always originating from the pharyngo-oesophageal junction, and the sac always descending downward, usually of a spherical or pear-like shape, occasionally drawn out into the shape of a finger of a glove. A definite fluid level will always be seen at the top of the sac, and the narrowing of the sac as it approaches the opening into the oesophagus will quite constantly be observed. There is no other picture in the neck shown by bismuth x-ray which even simulates pulsion oesophageal diverticulum, and the lesion may be accurately diagnosed by means of the bismuth x-ray.

There are but two methods of treatment for pulsion oesophageal diverticulum One, in the early stages of the diverticulum, oesophageal dilatation, not infrequently makes these patients quite comfortable. During the stages when the sac is relatively small, the opening

of the oesophagus being largely transverse, olive-tipped bougies may be passed without difficulty and dilatation at the neck of the sac not infrequently makes it possible for these patients to swallow much more easily. We have seen a number who have been kept comfortable for a good many years by this method. Its disadvantage is, however, that the sacs are left in place, they still increase in size, and the patients are increasing in years, so that when the operation becomes eventually necessary—as it will in a great many instances—the patients are poorer risks than they would have been had the sac been removed at an earlier stage in their life.

The other method of treatment must of necessity be solely surgical, consisting of the removal of the sac.

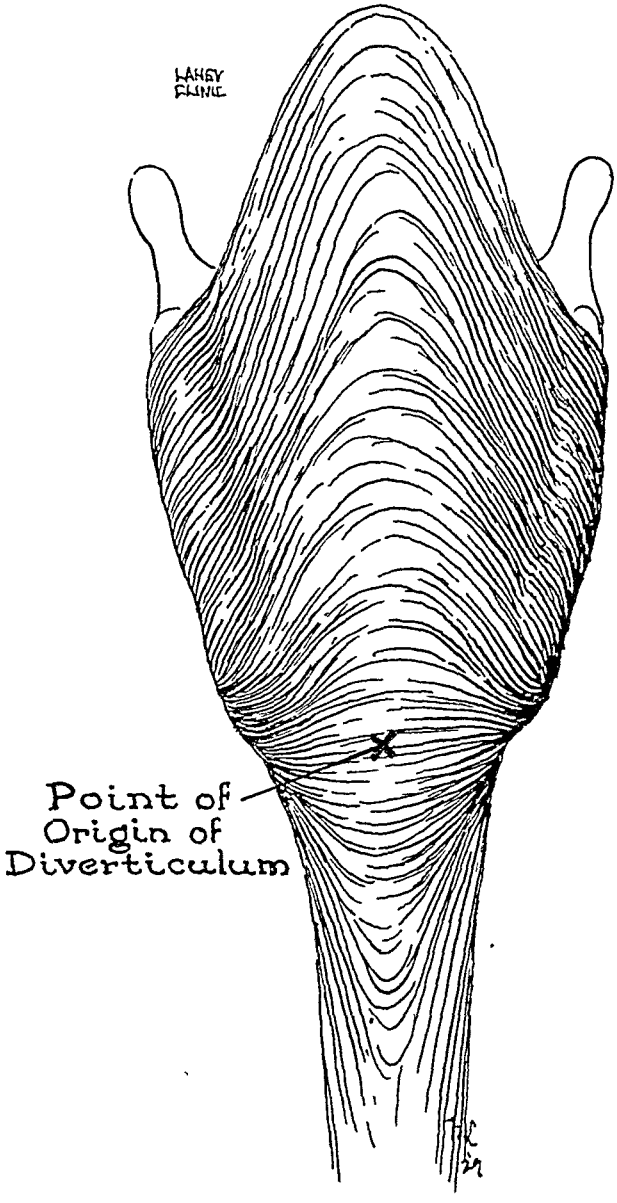


ILLUSTRATION V

This is a diagrammatic illustration of the posterior wall of the pharynx showing the transverse fibres of the inferior constrictor and the oblique fibres of the cricopharyngei. X marks the weak point between these transverse and oblique muscles called the pharyngeal dimple through which the bulge of oesophageal mucosa and submucosa takes place to form the pulsion type of oesophageal diverticulum always at the same level; always at the same point on the posterior pharyngeal wall.



ILLUSTRATION VI

This illustration diagrammatically demonstrates the posterior position of the sac in relation to the oesophagus and the relation of the neck of the sac to the cricoid cartilage.

We have now operated on twenty-seven patients for pulsion oesophageal diverticulum. The average age of the group has been fifty-eight years, their ages being as follows: 42, 42, 43, 46, 46, 48, 48, 51, 52, 54, 55, 55, 59, 60, 60, 61, 62, 64, 65, 67, 68, 70, 70, 72, 76, and 80. All of these patients are swallowing quite well. Three or four require the occasional passage of olive-tipped bougies. All were operated on in two stages. A majority have been done with local anaesthesia. There has been no mortality.

As relates to the operative plan of management of oesophageal diverticulum, it is evident that the operation itself must excise the sac of the diverticulum in order to relieve the patient of the symptoms. All of the early operations for oesophageal diverticulum consisted of exposure of the sac through a lateral incision in the neck, excision of the body of the sac, suture of its neck with catgut, and the in-

troduction of a drain. As stated earlier in the paper, the danger of this procedure is that of leakage, the leakage tending to extend down along between the planes of the prevertebral and pretracheal fascia, from which tract the sac has been removed. When leakage occurs along this tract, as is frequently the case in one-stage procedures, a fatal mediastinitis follows. It was this fatal mediastinitis that produced such a high mortality in early cases when the sac was excised and sutured, in the one-stage procedure.

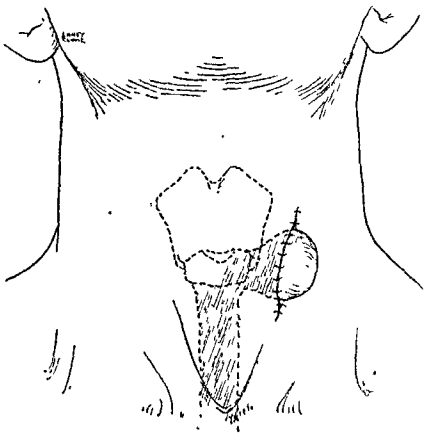


ILLUSTRATION VII

This illustrates diagrammatically the principle of the two-stage removal of oesophageal pulsion diverticula. The sac has been completely dissected from its bed behind the oesophagus. The angulation so constant at the neck of the sac has been dissected clear and the sac has been so implanted in the wound that its dome is higher than its neck and so food does not tend to accumulate in it between the first and second stages of the operation.

It is a well-known fact that primary suture of the oesophagus not infrequently does not result in first intention healing. When one realizes that the oesophagus is filled with infected material and that as the result of swallowing it is constantly in muscular motion, it is understood why primary suture at this location often fails and leakage occurs.

Some years ago a plan of two-stage removal of the oesophageal diverticula was described by Edwin Goldman, providing a method which overcomes practically all of the dangers of leakage, and, at least so far in our hands, has eliminated all of the mortality of this operation.

The plan of two-stage prodedure is shown in illustrations numbered VI to IX, and consists of exposure of the neck of the sac through a lateral incision in front of the left sternomastoid, complete dissection of the wall of the sac, great care being taken not to open it, the implantation of the dissected sac in the wound, the dome of the sac being higher than its neck, so that foods and fluid will not accumulate in it, and closure of the wound about the implanted sac. This sac is allowed to remain in the wound for ten to twelve days until complete healing has taken place about it, and complete obliteration of the fascial planes in the neck has occurred. At the time of removal of the sac, if it is a large one and leaves behind it a deep cavity in the mediastinum, a cigarette drain is also inserted into the mediastinum

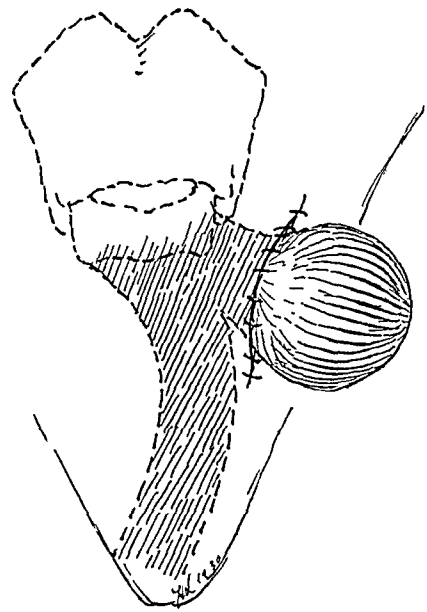


ILLUSTRATION VIII

This shows the serious errors in the two-stage surgical management of oesophageal pulsion diverticula. Note first that so much of the oesophagus has been pulled out into the wound that the oesophagus is angulated and often obstructed. Second that the sac of the oesophagus has not been sufficiently dissected at its lower angle, resulting in its implantation in the wound so that food is directed into it between the first and second stages, producing thus often distension and necrosis of the sac. This failure to dissect the neck of the sac and implant the dome of the sac high produces a partition following the second-stage removal, along which food is directed keeping the sinus in the neck open a long time after removal of the mucous membrane at the second-stage procedure.

cavity to hasten the formation of protective granulations so that, should leakage occur at the second stage, there will be no danger of ensuing mediastinitis.

It is unnecessary to go into an explanation of the technical steps of the operative procedure, a recent description of which, by the author, will be found in *Surgery, Gynecology and Obstetrics* for August, 1930, Volume LI, under the title of "The Surgical Management of Pharyngo-Oesophageal Diverticulum Based upon an Operative Experience with 21 Cases," and the illustrations numbered VI to IX depict the plan of the two-stage procedure.

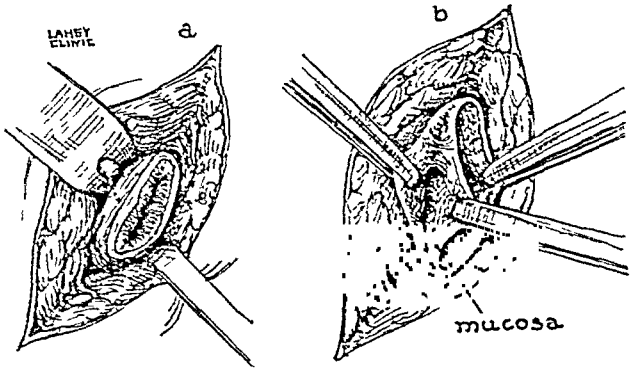


ILLUSTRATION IX

This shows the diverticulum sac cut off in the wound and the mucosa being separated from the submucosa. This separation is carried out almost down to the diverticular open into the oesophagus and the mucosa cut off. The non-mucous lined submucosal canal is then packed with boric ointment gauze and allowed to close by granulation which it usually does within two weeks if the sac has been implanted high in the neck so that food does not escape down its canal.

In large diverticula the sac can be cut off flush with the skin and the mucosa separated from the submucosa without opening the wound.

Following the removal of oesophageal pulsion diverticula, one should always remember that the scar which results from excision of the neck of the sac and cicotrization at the neck will produce a certain amount of distortion of the upper oesophageal canal. It will also produce in the beginning a little difficulty in swallowing and for several months the patient should be instructed to return at first, once every five weeks for two or three months, and then every two to three months for a year, for dilatation of the oesophagus with olive-tipped oesophageal bougies.

We have learned from our experience in bougieing these patients postoperatively that there is considerable distortion of the oesophageal canal and so it is difficult to readily introduce the olive-tipped bougie past the point of operation. One should be careful never to forcibly introduce the bougie, as the point of the bougie may not be directed along the oesophageal canal, but against the wall of the oesophagus, and excessive pressure may well produce oesophageal rupture and a fatal cellulitis. We have never seen this happen, but with some of our experiences in dilating these cases post-operatively we can readily appreciate that it could happen. For this reason, we urge that when these patients' return for oesophageal dilatation, they should be instructed to swallow a piece of silk string two days previous to their visit for dilatation, upon which can be threaded the olive-tipped bougie, which will guide the bougie readily by the obstruction when tension is made upon the string.

Conclusions

There are two types of oesophageal diverticula,—traction and pulsion.

Traction diverticula do not require operation. Pulsion diverticula usually eventually require operation. One-stage operations for pulsion diverticula are dangerous. Two-stage operations are safe and do not require a long stay in the hospital.

Pulsion diverticula should be bougied for several months post-operatively, and bougies should not be passed except when guided by a previously swallowed silk string.



ADDRESSING LAY ORGANIZATIONS ON THE HEALTH EXAMINATION

By C. WARD CRAMPTON, M.D., NEW YORK, N. Y.

From the Committee on the Periodic Health Examinations of the Medical Society of the State of New York, C. Ward Crampton, M.D., Chairman, New York; Luzerne Coville, M.D., Ithaca; W. Warren Britt, M.D., Tonawanda; Frederic C. Conway, M.D., Albany; Marion C. Potter, M.D., Rochester; Walter D. Ludlum M.D., Brooklyn; Guy H. Turrell, M.D., Smithtown Branch; Nellis B. Foster, M.D., New York City; Walter A. Calihan, M.D., Rochester.

THE general Federation of Women's Clubs of the Parent-Teacher Organizations of New York State are sending a message to their local membership clubs throughout the whole State requesting to hold one or more meetings on the health examination for women. They also are requesting them to apply to the Medical Society of the State of New York for speakers on this subject. In response to these requests the following notes and suggestions for medical speakers have been prepared by the Health Examination Committee of the Medical Society of the State of New York. The outline is in two parts:

1. The address itself.
2. The Scientific Background of the Speaker.

PART I—THE ADDRESS

Importance of the address:—You, the speaker, have been asked to discharge one of the most important functions of organized medicine,—to give competent authoritative helpful advice to the public.

You represent the state and county societies, but even more, the age-old service of the doctor to the people. You have an important duty. In some respects it is new. It will do good, it may save lives. You are a personal representative of all of us. You are now the authority.

With all of our good wishes behind you, represent us with modesty, confidence, dignity and power.

Preparation.—Prepare your speech. Write it out, if possible, and rehearse it aloud beforehand. Many of the best speakers do this. Do not read from the manuscript too closely, if at all.

Speak twenty minutes. (A prominent minister once said about sermons:—"Very few souls are saved after the first twenty minutes.")

Have it understood that you will answer questions afterward. If you have your audience with you, you can then give them a few minutes more. Always less than they want, never more.

The Chairman's Introduction:—What the Chairman has to say in her introduction is important. Write out for her what you wish her to include, which will probably be the following:—

1. The importance of the speech.

2. The General Federation of Women's Clubs, and the Parent-Teacher Association of New York State have, in a State conference, passed approving resolutions.

3. The medical auspices should be stated, i. e., surely your own County Medical Society, possibly the State Society, if convenient.

4. Your own name, stated as a practising physician who has given special study to this subject.

5. Ask the chairman not to embarrass you by making your introduction laudatory.

Advance Notice:—A good advance notice in the public press will swell the audience and increase the results of your talk. Confer with the President or Secretary of your County Society, or the responsible publicity officer. Confer also with the person who has invited you and arrive at a conclusion as to the proper method of getting your notice in.

If it can be done, see to it that the following elements are included:

1. The exact hour and place.
2. The organization that holds the meeting, the speakers and the important points on their program, some interesting item of news in connection with the matter, and the title of your address.
3. Who are invited to attend?

Report of the Meeting:—If agreeable to all concerned, have a reporter present and see that he has the following in his notes:

a. Credit to the Women's organization, local and State.

b. Mention of the auspices of the County Society is essential.

c. The fact that there is a state-wide campaign, however, makes good "news."

d. Select one or two of your more important statements. Have them typewritten and see that they get to the reporter for verbatim quotation.

Title of the Address:—The following titles are suggested:

1. "Health Examinations for Women." This is matter-of-fact but uninspiring.

2. "The best health insurance for children," i. e., keep father and mother alive and well for the children's sake.

3. "Nature's warnings are too slow," i. e., pain does not warn in time in tuberculosis, cancer, nephritis, diabetes, etc."

4. "A stitch in time,"

5. "A new medical idea,"

6. "The Chinese Doctor,"

7. "Prophetic Medicine,"

8. "What Brains are for,"

9. "This Day's Madness," i.e., the quotation from Omar Khayyam, "Yesterday, this day's madness did prepare."

These titles illustrate the value of foresight, and the importance of a health examination.

Purposes:—1. You want all your hearers to go at once, to their own physicians and apply for a health examination; in other words, the purpose of your address is action.

2. There are two incentives toward action—1, emotion and, 2, intelligence. The stronger of these is emotion, (i.e., something that moves).

The most compelling incentive to action is negative—the pain and fear series. This appeal is easy to make effective; use it cautiously, never directly. While the main argument in favor of the health examinations is the avoidance of danger, the emphasis can be placed upon the *avoidance* rather than the danger. Use positive rather than negative motives, i.e., safety, avoidance of pain and disability. The examination costs less than an illness, and, as someone has said, an illness usually costs less than a funeral.

A health examination not only discovers illness so that it may be treated at best advantage before it is too late, but it also gives an opportunity to remove hidden handicaps which diminish *health, happiness* and *efficiency* and rob life of much of its pleasure. It also provides an opportunity to bring *benefits* which medical science can add to make even a healthy life richer and more vigorous. It can provide *safeguards* against troubles of the future.

A health examination, if properly conducted, will give a feeling of confidence and relief. The characteristic feeling is "now I know exactly where I stand, I know just what I have to do, and here is nothing unknown that I have to worry about." To the greatest degree possible, it takes the nagging uncertainties out of life. The feeling that one should have about the health examination is that it is a wise thing for a sensible person to do. It is painless, it is profitable.

Objections:—The following are some objections which the speaker may have to meet:

1. *Delay.* "Don't trouble trouble, until trouble troubles you," "let sleeping dogs lie," "if I have anything the matter with me, I don't want to know it." This is bravery rather than courage, the counsel of ignorance, a typical attitude of the fabled ostrich with his head in the sand.

This may be answered along this line:

When the enemy is launching an attack on the front line trenches, he seeks every cover to prevent notice by his intended victims. If the sentry cries out, "The enemy is coming!" do the soldiers turn over and reply, "Don't bother me, wait till they arrive, that is time enough! Why bother about the enemy until you have to, you destroy my peace of mind. You are borrowing trouble."

No, the soldiers arm themselves at once and seek to stop the attack before it gets under way.

Now, the enemies are the insidious chronic diseases and deteriorations (mention them if you like). Attack them before they can start their attack on you; for when thay get started, the attack is pressed close, and they are hard to fight. The sentry is the medical profession. He is now giving you his warning. You are the soldiers, seek out your medical captain, your own family doctor, and he will give you the correct orders to make your fight and remain happy and unharmed.

Other answers can be worked out. The value of foresight is demonstrated by wise and successful men in farming, business and profession. A little wisdom is worth much brave stupidity. "Wisdom is justified of her children." As Uncle Zeb says, "ignorance may be bliss, but it has raised many a blister."

2. *Pain.* "Why, I haven't had a pain, why should I worry, it does not hurt me?" Only the lower animals are stupid enough to wait for a pain before they take measures for their safety and many of the lower animals are very much wiser than that. Pain is the old biological signal for action. If you wait for a pain you will get it.

It cannot be too strongly emphasized that men have died of heart disease who have never had a pain in the heart. Men have died of diabetes and never had a pain. Men and women have died of cancer which had started and gone on without pain for one, two and three years, until the time for a saving operation was irrevocably passed and there was no remedy.

Men and women have had their hearts wrecked from rheumatism from teeth that never caused a pain because the roots had been killed. High blood pressure can go on for years without pain. Tuberculosis can go on for months without pain.

3. "I never had a sick day in my life. You doctors would starve if everybody were like me," accompanied by a thump on the chest and a haughty look. High blood pressure, nephritis and the like sometimes have pre-clinical symptoms unfortunately painless and euphoric. Try to be kindly with such a person.

Helps in Preparation:—The following articles will be helpful to the speaker:

1. "Manual of Suggestions for the conduct of Periodic Examinations of Healthy Persons." Send 20 cents to the American Medical Association, 535 North Dearborn Street, Chicago.

2. American Medical Association Blanks. Single copy 5c; 50 copies for 50c.

3. "What's a Health Examination Anyway?" Haven Emerson. American Medical Association 10c.

4. "Prophetic Medicine." Reprint from Scribner's Magazine, Popular article on Health Examinations, C. Ward Crampton, sent on request while available. 515 Park Avenue, New York.

5. Post-Graduate "Health Survey." Sixteen-page form for health examinations with aids for physicians and patients.

6. Health Book, to accompany the Health Sur-

vey, to be given to the patient after the examination, contains prescriptions and recommendations. Survey and Health Book may be obtained from the State Committee while available. 515 Park Avenue, New York.

7. "How to make a periodic health examination." Fisk and Crawford, Macmillan, New York. A good text book.

8. "Preventive Medicine." Published by the Academy of Medicine, New York City. Written by several authors. Published by Hoeber, New York.

Special requests should be addressed to C. Ward Crampton, M.D., 515 Park Avenue, State Chairman, of the Committee on Periodic Health Examinations or to the office of the Medical Society of the State of New York, 2 East 103rd Street, New York.

PART II. BRIEF NOTES ON THE SCIENTIFIC BACKGROUND

Definitions of the Health Examination:

a. The Medical examination of one presumably in health.

b. The inspection of a person (presumably in health) to find means to lengthen life, detect diseases or deterioration, to increase health, happiness and efficiency by every practical way open to a skilled and understanding medical advisor.

The *Health Examination Procedure* has three parts:—

1. *Diagnosis*—examination, consideration of findings, preparation of a practical program.

2. *Prescription*—instruction of client, motivation of program of cure, correction and betterment.

3. *Treatment*—The program of cure, correction and betterment is carried out by the health client under the guidance of the medical advisor, usually and by preference, the examiner.

Diagnosis:—The examination involves the determination not only of present disease, but also pre-clinical signs.

Present Disease:—To *discover present disease* not yet obvious to the client.

Caution—No one can exclude the presence of disease except by the most exhaustive search and then not positively, as for example myocarditis, early intestinal cancer.

Note:—The above, the search for present defect or disease, is all that a simple ordinary health examination contains. It is a good deal. It may be done by any physician who will faithfully search over the whole body.

Preclinical Signs:—To discover diseases in their preclinical stages or to discover conditions preclinical to disease or deterioration, i.e., *preclinical signs.*

Note:—We seldom see chronic diseases except in the XYZ or advanced stages. There is a preclinical chain of linked causes leading from far back in the *preclinical alphabet.*

Definitions of Preclinical

a. Evidence of disease discoverable before the clinical stage (Cline-bed; hence, disability).

b. Presymptomatic, i.e., before pain or disability noticeable to the patient.

c. Predispositions; prodomata.

Classification of Preclinical Signs

Conditional (by history).

1. Heredity (arteritis, hemophilia, etc., etc.).
2. Previous illness (immunological record, tonsillitis, scarlet fever, rheumatism, etc.).
3. Regimen (life management and environment; past and present: alcohol, malaria, tuberculosis).

Objective (by examination).

4. Anatomical, structural (body type, posture).
5. Physiological, tests and observation (circulation tests, carmine test).
6. Pathological:
   a. A disease in its preclinical stage (early diabetes, tuberculosis).
   b. Or a disease preclinical to another.

Note:—Preclinical signs of all classes differ in reliability, clarity and certainty, some are positive, others negative, some inclusive, others exclusive.

* * * *

Betterment:—To discover ways (not primarily related to disease) to add to the wealth of living (point of view, environment, exercise, diet, recreation, attitude, adjustment, life management).

"The human machine is coming in for its share of study and experimentation to increase its efficiency. The physician is the efficiency expert who must direct this service."—Page 7, Manual, American Medical Association.

* * * *

The Health Examination has two distinctive features:

1. It is the examination of a whole life, not the present illness alone. It studies the present in the light of the past and seeks to make the future full and secure. It is life time diagnosis and life time management.

2. It is extensive, rather than intensive. It faithfully covers the whole field of the body and all that affects it. The usual examination is focussed upon the particular illness.

Note:—There is a tendency to make medical examinations in the presence of illness more and more like the health examination, in these respects.

Reasons for the Health Examination:—Some dangerous diseases have a silent beginning period. Some of these diseases, if discovered early enough, may be stopped, such as tuberculosis, cancer, syphilis. (Caution—early discovery does not insure cure—for cure may be impossible.)

Some dangerous diseases, if discovered early, may be treated with profit though not as yet definitely curable. Diabetes, nephritis, cardiac disease, pernicious anæmia, and mental disease.

Conditions found within the body, in environment or in habits of life management may hinder and harass, and sooner or later invite disease and be dangerous to life—apical abscess, unsuitable work, dietary errors.

Impairment in happiness and efficiency consequent upon the above. Caution: No one should promise to lengthen the life of a single individual.

The body has an immense capacity of going on in spite of handicaps. It will endure much and keep on going. The health examination seeks to discover and remove these handicaps.

The mind can be trained to disregard pains, discomforts and go on. Some persons feel it creditable to endure.

* * * *

Evidence of the Value of Health Examinations:

Individual:—All of the reasons for the health examination have been realized in individual cases. Life shortening, life burdening and dangerous conditions have been removed.

General:—Statistical evidence shows that fewer persons died among a group of over six thousand given health examinations in the six-year period following the examination as compared with a similar group who were not examined.

No physician who has done health examinations has any question as to its value.

The health examination relieves subconscious worries about health. Persons who have health examinations say they feel better. Their families and friends agree.

* * * *

Common Understanding of the Health Examination:

I understand that something may be the matter with me that ought to be stopped before it gets bad. "A stitch in time, saves nine."

I have my automobile inspected, why not my body.

Varieties of the Health Examination:

The Insurance Examination:—For small policies, this is customarily a rough screening process to eliminate obviously bad risks. For large policies it is a moving toward the health examination ideal.

The Industrial Examination for Employment:—The prime motive is the protection of the employer from loss from or through illness or defect. It is valuable to the worker, when it reveals defects, especially if it moves toward correction.

The School Examination:—Primarily a rough screening process to exclude contagion, and find defects and latent infections. The State cannot properly go as far as the private physician may in the expenditure of time and attention.

Each condition noted below is a preclinical text which with examples from the speaker's own experience, may be presented with great profit.

Impairment	*Ages 25 to 34*	*Ages 45 to 54*
Faulty posture	16.9	20.8
Flat feet	17.0	15.4
Over 20% overweight	8.1	18.9
Defective vision uncorrected	28.9	29.4
Enlarged, septic or buried tonsils	32.8	17.1
Hypertrophic rhinitis, enlarged turbinates	16.9	10.7
Carious teeth; septic roots.	7.9	9.2
Heavy dentistry, roentgen ray advised	40.7	43.5
Slight arterial thickening	10.9	18.2
Blood pressure, up 20 or more	4.8	10.1
Constipation	39.5	40.1
Weak inguinal rings	5.9	5.9
Prostate gland, enlarged, hard, tender, boggy	2.0	5.6
Headache	16.4	13.7
Frequent colds	20.8	14.2
Urinary findings	25.9	32.4

Common defects; based on a study of 16,662 white males in the Metropolitan Life Insurance Company. From Dublin, Fisk, and Kopf, in the *American Journal of Medical Sciences*, October, 1925, No. 4.

THE USE AND ABUSE OF PHOTOTHERAPY*

By FRANK THOMAS WOODBURY B A M D NEW YORK N Y, LT COL U S ARMY, Retired

IN phototherapy, as in x ray and gamma ray therapy, the remedy is not the lamp used nor the radiation which it emits nor even the radiation which bathes the patient This misconception has led to much confusion in nomenclature with the consequent total loss of much labor and experience thus rendered meaningless

The real remedy in phototherapy is the energy produced within the cells when they absorb radiant energy

The radiant energy employed in phototherapy lies in the electromagnetic spectrum somewhere between wavelength (symbol λ) 180 millimicrons (symbol mμ) and λ14 microns (symbol μ) which are the limits at which this portion of the electromagnetic spectrum is absorbed by living cells Any wavelengths longer or shorter than this region in this part of the spectrum are reflected and of no value

When radiant energy is absorbed by living cells it is converted into heat, or chemical energy or both There are no other alternatives The various bio reactions to this converted energy constitute the basis of phototherapy

We give photochemical or photothermal or photochemicothermal treatments in phototherapeutic practice All phototherapeutic treatments fall of necessity into one of these three classes

*Photochemical Therapy or Photochemy***— Under the name of ultraviolet, photochemical effects obtained by radiant energy from metallic arc lamps especially the mercury arc in quartz have been so commercialized and misused in medical literature as to have not only obscured the entire subject of phototherapy but almost to have driven the rest of the phototherapeutic spectrum from the scene

Under the guise of sun lamps the general public, and many of the medical profession, have been lead to believe that the mercury vapor electric arc in quartz irradiates a spectrum possessing the same characteristics and imparting the same therapeutic results as in summer solar rays whereas its spectrum is interrupted and curtailed and contains wavelengths which are most chemically irritating to living cells, not found in solar radiation, and does not contain wavelengths of energy in the caloric region

This misconception that ultraviolet was an invariably fixed quality of chemical radiation interchangeable therapeutically with solar radiation led to indiscriminate use of any and every type of radiating apparatus and calling the method ultraviolet treatment Many unhappy clinical results and much disappointment resulted

Phototherapy can do without the mercury vapor arc in quartz because there are other sources of chemical rays more potent and not so restricted in effect

Living cells are selective in choosing which wavelengths of energy they will absorb The resulting energy thus converted in the cell itself is of markedly individual chemical nature peculiar to the substance acted upon Thus we have activation of ergosterol into viosterol or vitamin D by wavelengths between λ289 mμ and λ313 mμ. dermatitis by the region between λ250 mμ and 313 mμ, provided the person is white skinned, and pigment is caused by the region between λ300 mμ and λ320 mμ in persons who can form pigment It would seem that carotin, ingested as food, is activated into vitamin A by the yellow-green region while photoallergy from the visible spectrum sensitizing ingested food substances and dyes is not only an observed phenomenon but a method of photochemical treatment Blue rays are decidedly sedative and analgesic The blood absorbs all radiation reaching it less than λ450 mμ with two absorption bands at λ540 mμ and λ580 mμ and when sensitized, two others with maxima at λ600 mμ and λ660 mμ Absorption spectra give the key to therapeutics by radiant energy

Photoallergy has many resemblances as well as many contrasts when compared with the reactions obtained by radiation in the region λ289 mμ to λ313 mμ (called the Dorno region) and when applied to unpigmented individuals These I have treated more fully elsewhere [1]

Now the Dorno region is practically the essence of all the so called ultraviolet treatments since its energy when absorbed has very important effects upon the parathyroid glands and through them upon calcium and phosphorous utilization with all the functions depending upon that phenomenon It is therefore to be given whenever we have a condition marked by disturbed calcium and phosphorous utilization The conditions depending upon this disturbance present a wide range of indications for the chemical effects of the Dorno rays

It does not follow that the Dorno rays are the only wavelengths of chemical effects and therapeutic value Phelps of Yale" has, by means of a Corning glass filter (G986 A) and a continuous spectrum reduced the radiation in the ultraviolet region so that there was a maximum in the range from λ320 mμ to λ380 mμ and a minimum in the Dorno region Using this altered radiation he obtained what he believes is a demonstration of the specificity of the λ320 λ380 mμ energy in the treatment of tuberculosis

As a corroborative proof we have the work of Kramer *et al* [2] who demonstrate that in the study

* Read at the Annual Meeting of the Medical Society of the State of New York at Rochester, N Y, June 4th 1930

** This simplified term is suggested by the writer as possessing a clear and definite application

of eighteen tuberculous children, divided into two groups, vitamin D did not accelerate healing nor produce any increase in either serum calcium or phosphorous and no deleterious effects, ascribable to overdosage were witnessed.

The accumulated observations of many students of this subject have resulted in a mass of facts, inferences and deductions which have caused the subject to become considerably involved. If we carefully put to one side all the evidence obtained from plants and all the evidence obtained with protozoa and invertebrates and also the evidence from the experiments with animals which however have markedly different physiological processes from our own we may consider them as showing without possibility of cavil that all the frequencies of the solar spectrum which reach the surface of the earth either directly or by reflection or by dispersion have valuable vital effects upon living things.

We have also evidence that alteration of radiation by reduction, by elimination of parts of the spectrum or by overintensifying some wavelengths produces radiation so distorted as to have marked effects upon living things subjected to its continuous application.

With living human beings the processes intimately associated with vitamin influences such as growth, metabolism, the reproductive functions, the development of sexual characteristics, muscular strength, mental activity, nervous power are also profoundly influenced by the chemical effects of radiant energy.

The terms vital, extra vital and intravital have therefore no meaning since they do not by any means correspond with any reactions save those limited to the Dorno region.

We feel, therefore, that the term ultraviolet is meaningless as well as the term light to describe photochemical treatments.

Another term which has come into use but which is without meaning is the term "erythema dose." The term erythema, meaning merely a redness, has been abandoned, by the roentgenologists who first used it, as being meaningless. The phototherapists should do likewise. The reaction called erythema is a dermatitis, an inflammation of the skin, a sunburn in common parlance. One can also have a sunburn of the mucous membrane.

For what diseases is sunburn a form of treatment? Manifestly (1) where a revulsive reaction on deeper organs through the nervous system is indicated. (In such an event a mustard plaster or a mustard bath will serve every purpose.) (2) Where an inflammation is desired in order to produce a reactivation of old chronic keratoses and replace them by more normal cells and (3) where a very superficial germicidal action is desired. These are the limitations of sunburn as a remedy. You are again limited clinically, if your patient is already deeply pigmented racially or as the result of solar exposure, because he cannot sunburn.

The so-called ultraviolet rays are therefore, so far as their dermatitis reaction is concerned, restricted to dermatological practice[4] and even there the *x* rays have priority, and after them the entire spectrum and not that given off by mercury arcs in quartz.

A sunburn is indeed a calamity in the treatment of the constitutional diseases. Rollier, Sonne, Hill, Mayer and many other clinicians stress the necessity of giving photochemical treatments without sunburn. If the patient be already pigmented no caution is necessary but if he be unpigmented, a red blonde, an albino, an infant or if he have large areas of vitiligo on a pigmented ground then subinflammatory exposures must be given throughout the course of treatment.

It may be stated that the object of phototherapy is, with but very few dermatopathological exceptions, to administer the maximum photochemical energy without dermatitis and in conjunction with caloric rays by a spectrum resembling as nearly as possible that of the zenith summer sun.

This erythema dose idea totally disregards the erythema from caloric rays which is very important but very different as I[5] have pointed out elsewhere. The idea however that a sunburn is a treatment and that degrees of sunburn are doses rests upon the most fanciful of mental processes not susceptible of sound demonstration.

The pigmentation of those unpigmented is a protective measure of skins naturally sensitized to photochemical rays. This does not however interfere with the other photochemical effects of constitutional importance. Rickets for example is just as well treated in the colored as in the white child by Dorno rays. Coloring or dyeing the skin is not an equivalent substitute since the chemical rays will then be converted into heat unless the dye be a fluorescent one in which case the Dorno rays will not be emitted by it. There is a great difference between pigment in the epidermis and pigment in the stratum germinativum.

*Photothermal Therapy or Photothermy**—The second effect of absorption of radiant energy in this region is heat. It is a form of conversive heat resembling in many of its effects conversive heat from high frequency electric currents called diathermy.

These heat effects are found to be at a maximum, both of intensity and of penetration, at about $\lambda 770$ mμ. Both penetration and heat effect decrease rapidly as the wavelengths decrease so that for therapeutic purposes the heat effect is nil in the region of $\lambda 500$ mμ. though it may still be detected as far as $\lambda 180$ mμ. Penetration and heat effect decrease very rapidly as the wavelengths increase, becoming zero at about $\lambda 1.4$ mμ. It is to be noted that visibility and invisibility

* A term suggested by the writer as being simple and descriptive.

have nothing to do with phototherapy. They are terms belonging to the ophthalmologist and the painter and the illuminating engineer. Neither are we interested in the physicist's division into ultraviolet, visible and infra-red. Why? Because we are dealing with a remedy which is created in the cells themselves which is a result of wavelength and selective absorption and nature of the absorbing substances.

The effective absorption of the caloric rays and their conversion into heat coupled with their great penetrative power make photothermy a very close rival of diathermy. In fact there is very little that diathermy does which cannot be done also by photothermy. Although it may be spoken of as radiant heat we must remember that the radiation is not heat until it is absorbed by the cells. If there be little or no pigmentation, radiant energy in this region passes readily into the facial sinuses, the mastoid, the chest and abdominal cavity, through the scrotum, throat, tongue and maxillæ and the hands and feet. Pigment, pus, blood and solid growths absorb it as well as the muscles, fat, fascia and dense bone.

The reaction to photothermy is an active hyperemia. As such it is the extinguisher of the inflammatory reactions caused by photochemy and is therefore both a preventative and an antidote. It also brings about marked systemic reactions, depending upon the increased temperature, and it has distinct indications and contraindications which make it a remedy to be used only under the direction of a physician.

The sources of radiant energy producing both photothermal and photochemical effects is in heated bodies. Increasing the temperature of a substance causes it to emit electrons and consequently radiant energy. At a low degree of heat the energy emitted is in the longest infra-red region. As the temperature rises more and more wavelengths of energy are emitted progressively smaller in size until at a temperature of about 500° C. the frequency and wavelengths are small enough to cause visual perception of what is sensed as red light. As the temperature increases, more and shorter wavelengths are emitted until at a temperature of about 1400° C. the invisible ultraviolet wavelengths are added.

For every temperature degree there is one wavelength or frequency which is emitted in excess of all others. Therefore we may say that as temperature rises total radiant energy increases, the spectrum emitted extends toward the smaller wavelengths and the longer wavelengths increase proportionately.

The higher the temperature of our generator the greater will be the total quantity of energy absorbable as heat and also the more nearly will the spectrum resemble, in extent, that of the sun.

With generators of similar design the one operating at the highest wattage (volts x amperes passing through the lamp) will be the one whose spectrum will more nearly resemble the solar spectrum, because it operates at a higher temperature.

The common error of identifying heat with infra-red radiation is based upon the deliberate intention of commercial firms who have played up infra-red generators as though they were possessed of specific heat virtues for photothermy, and the uncritical repetition of the term by phototherapeutic writers. Some have attempted to avoid this error by speaking of "radiant light and heat." As light is nothing if not radiant we have an awkward tautology.

A piece of metal or carbon at a white incandescence will emit more energy utilizable as heat both relatively and proportionately than when it is at a dull red heat or is giving off only obscure rays, i.e., infra-red rays, as a black-hot body. Obscure heat rays form from sixty to ninety per cent of radiant energy from any incandescent source.

Infra-red radiators are therefore less effective than incandescent radiators since they not only emit less energy utilizable as heat but also because they operate at a lower temperature than incandescent radiators and therefore produce a greater proportion of their energy in wave lengths greater than 1.4 μ. which are not absorbed by the skin and are therefore wasted.

The long infra-red rays which are stopped by the epidermis and mucous membrane produce also chemical effects judging by the high degree of nervous irritability they cause and by a pigmentation though these effects are not the same as with ultraviolet short waves.

For these reasons phototherapy can do without the so-called infra-red radiators of obscure heat radiation.

Photochemicothermal Therapy or Heliotherapy—Since the rays of the sun as they reach this earth unobstructed by any medium except pure air have a spectrum extending from about λ289 mμ. to about λ3 μ. they contain wavelengths which are absorbed as chemical and as thermal energy, a photochemicothermal application.

If we modify this by filtration through various media we can greatly alter the proportion of thermal to chemical moieties. The same occurs if we reflect the rays from suitable reflectors or from ice, snow, sand and water or from skyshine and clouds.

For this reason any portion of the earth's surface may be selected for heliotherapeutic treatments which will afford a daily exposure of the nude body to direct, reflected and diffused solar radiation in a dustless atmosphere.

Much learned discussion has been indulged in as to the therapeutic value of heliotherapy based upon the percentage and intensity of the contained Dorno rays, *i.e.*, wavelengths between λ289 mμ.

and λ313 mμ. which happen to lie in the ultraviolet.

Granting the preëminent value of the Dorno rays, no one has established the minimum dosage necessary, *i.e.,* the area to be exposed and the intensity and time factors, to maintain health or to restore it in such cases, for example, as rickets.

Tables of sunshine hours per year and charts showing the proportion of Dorno radiation in the total of solar rays in various latitudes and seasons and time of day and under various atmospheric conditions are all of slight value until we have this minimum dose established. Hess has shown that New York has more sunshine annually than Havana, and also more rickets. If the Dorno rays were so essential because of their influence upon calcium and phosphorous utilization why they could be satisfactorily replaced by doses of viosterol. But viosterol does not satisfactorily replace the chemical rays.

Exposure of the nude body is highly desirable to bring about all of the influences which tend to restore to the skin its natural functions and especially that of heat regulator for the body. This exposure should be accompanied by weathering, that is, exposure to currents of air in the open under the sky.

This double exposure requires a careful preparatory regime of weathering and pigmentation in gradually increasing doses and by all means without sunburn or chilling. Those unable to pigment may take their sunbaths in the early morning or late afternoon, when chemical radiation in the Dorno region is mitigated so as to avoid sunburning.

Based upon the value of the Dorno rays a special glass has been invented which permits their passage unobstructed. It is recommended for window panes in lieu of ordinary glass, which obstructs these rays.

This special glass finds its greatest usefulness in buildings where people are confined during most of the daylight hours. It does not create the Dorno rays and therefore it does no good on cloudy days nor in smoky, dusty atmospheres nor if it is coated with a film of dirt. It is valuable only when crystal clear and when receiving the pure direct rays of the sun, preferably from the zenith and in the south. It is partially effective when receiving skyshine and cloud light from a northern sky. The same value is to be placed upon quartz panes which are now being produced at a price which makes them available. Also cellophane is transparent to the Dorno rays.

Although the solar radiation shows such variability in intensity and quality it is nevertheless potent in very small doses but there are many, many persons of all ages whose daylight hours, especially those most potent in chemical rays, are spent indoors and in interiors artificially illuminated.

We are now able to obtain artificial solar rays both for therapeutic use and for prophylactic use. These with the use of selected metallic reflectors and the proper reflecting paint on the walls and ceilings, produce a very satisfactory substitute for sunrays. When employing them in heliotherapy the feature of weathering should also be included.

The oldest type of heliotherapeutic lamp is the Brush electric arc lamp. This is more familiarly called the carbon arc lamp. It has three variations. The open arc, the open arc with reflector (such as the marine searchlight and the ordinary therapeutic arc lamp) and the enclosed arc.

The enclosed arc lamp was originally a German lamp called the Efkaheliol lamp and sold in America as the Hoffman. It has been modified in this country by Luckenbach and Hallberg so that it can be used either as an open or enclosed arc. It is a safe lamp to use in family practice as it emits no fumes and can be operated by a d.c. or a.c. supply.

The carbon arcs can be obtained in any desired wattage and in many different designs. It must be borne in mind that it is the substance of the electrode which produces the spectrum and the wattage at which the lamp operates which governs the intensity. To pay six hundred dollars for a fancy stand and a lot of large metallic reflectors and funnels surrounding a carbon arc which operates at the same wattage as an eighty-five dollar lamp advertised for photographic purposes is certainly not the act of one well informed. The wattage and the substance of the arc points are the essence of the therapeutic value of Brush arc lamps.

The National Carbon Company makes electrode points of special composition which when burned in the arc emit very distinct variations of the spectrum. One may therefore by changing the electrodes give a photochemical treatment in the Dorno region or in the visible region or a thermal treatment in the caloric region or an artificial heliotherapeutic treatment with a sunlight spectrum.

If one desires to give photochemical treatments locally or orificially from the carbon arc lamp then the Gelb-Finsen arc lamp with a special water-cooled attachment for quartz applicators is a standard when employing the various types of electrodes.

The second type of heliotherapeutic lamp is the superheated tungsten filament electric lamp in a special globe of very thin glass which is transparent to the shorter ultraviolet wavelengths, especially the Dorno region. The spectrum emitted resembles very closely that of the summer sun and contains more of the ultraviolet portion of the chemical rays than that from the mercury vapor arc in quartz when compared wattage for wattage.

One variety of this lamp is called the Curay.

It is a hand lamp and when fitted with a quartz applicator it gives directly photochemical rays of the same part of the spectrum as the Krohmayer lamp when the methylene blue filter is used to cut off the irritating small wavelengths It is not only valuable for giving soothing photochemical treatments but makes an excellent source of trans illumination for diagnosis When fitted with a Corex glass filter it can be used for diagnosis by *fluoroscopy*

The other variety of filament lamp for helio therapy is the large floor or ceiling lamp with reflector, called the Polysonn, which comes to us upon the recommendation of Prof Dannmeyer, from Germany

The third type of heliotherapeutic lamp is the recently presented General Electric Company's Sunlight (Type S-1) lamp Its spectrum resembles that of the noon summer sun and does not contain the short irritating wavelengths in the ultraviolet found in the mercury spectrum because of its glass bulb, although it emits a mercury spectrum

The bulb of this lamp resembles a large sized Mazda When the current passes it heats the v shaped filament which vaporizes some of the contained mercury The vapor of mercury conducts the current across a small gap between two tungsten electrodes which strikes an arc The resulting radiation is the combined emission of incandescent tungsten, mercury vapor ionized and the incandescent filament

Owing to the high temperature at which it operates it requires that an alternating current be stepped up by a transformer It is possibly the best substitute for sunlight for heliotherapy both for office and institutional use and is ideal for family use

With the sun or any of its substitutes it is possible to administer purely photothermy by merely interposing a transparent colorless glass filter It is possible similarly to filter out the caloric rays leaving only the chemical rays in the ultraviolet region by using filters of Wood's glass or Corex glass or water lenses of quartz as Finsen did

Scientific phototherapy can no more be used indiscriminately by the untrained or the general public than any other remedy since it is fraught with dangers and unhappy results On the other hand it is a very valuable form of treatment and particularly complimentary to all other forms of therapeutics

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A REPORT OF TWO CHEST CASES WITH FEATURES OF SPECIAL INTEREST

By MILTON SILLS LLOYD, M D, NEW YORK, N Y

CASE 1

A Case of Mediastinal Suppuration With Recovery After Spontaneous Drainage Into the Trachea

SUPPURATION in the mediastinum, secondary to the perforation of the trachea or oesophagus, by a foreign body is a common enough occurrence and is generally considered as a fatal complication As a sequel to disease in the lung, it is infrequently seen and is to say the least an unsatisfactory surgical problem

The following case, because of its course and outcome is of interest

A white male, aged 37 years, was the victim of pneumonia in the middle of February, 1930 Since three people in the same household were afflicted, at the same time, both influenza and psittacosis were suspected, but there was no evidence to support a diagnosis of either of these conditions The temperature fell by lysis and after about two weeks' illness, the patient appeared to have made a satisfactory recovery No X Ray photographs of the chest were made

After five days convalescence, there was a return of chills, sweats and fever The patient gradually became worse and was admitted to the Staten Island Hospital on March 15th Seen at that time, he was weak and pale, sweating profusely, with a temperature of 102°F, pulse 120 (irregular) respirations 40 and a cough, productive of 1½ ozs in 24 hours Physical examination of the chest indicated fluid at both bases posteriorly, a small area of consolidation at the angle of the right scapula and a considerable enlargement of the heart There were large rales and medium ronchi over the right base anteriorly White blood cells numbered 14,800 per cu mm Sputum blood and urine examinations revealed no other information of importance An X-Ray was taken, on admission and a diagnosis of mediastinal effusion was made Attempts were made to aspirate the chest on three occasions but no fluid was obtained On March 20th a thoracic surgeon

was called in consultation. He refused to operate, however, because of the resemblance to a mediastinal New Growth.

The patient's condition gradually became worse, until March 27, when death appeared to be momentarily impending. During the night, he was seized with a sudden attack of coughing and raised a large quantity of creamy, greenish-yellow, homogeneous and structureless purulent material. His sputum in the next 24 hours amounted to 11ozs. but he was much improved, clinically, in every respect.

From that time on, his recovery was rapid and complete and he was able to return to his home in two weeks.

Before leaving the Hospital, he was asked to submit to a bronchoscopic examination, from a point of view of purely academic interest. He was sporting enough to do so. The examination showed a complete absence of pus throughout the tracheo-bronchial tree. On the left posterior wall of the trachea, about ¾ inch above the bifurcation was a small elevation, apparently composed of granulation tissue, which sank into the mediastinum, during inspiration and rose into the trachea, during expiration. Touched, with the point of a curved aspirator, the tissue was friable and bled easily and it appeared to be a simple matter, to push the tip through into the mediastinal space. Naturally, the patient was not exposed to this unnecessary risk.

The author believes, that he was correct in concluding, that this elevation, in the trachea, represented the partially healed perforation from which a mediastinal purulent collection had drained.

The author is indebted to Dr. H. A. Cochrane, for referring this case to him and for his permission to report it.

Case 2

Intrabronchial Tumor, Complicated by Interlobar Effusion

The writer feels, that the following case deserves to be recorded, in the literature, because it deals with certain features, in connection with intrabronchial new growths, which do not appear as yet to have been reported.

The patient, a white female aged 28 years, entered the Staten Island Hospital, on March 24, 1930, because she had expectorated blood, amounting to "about a pint." In the Hospital, shortly after her arrival, she coughed up a measured eight ounces of bright red blood. Her temperature was 102° Fahrenheit. On physical examination, there was limited movement on the right side, a small area of dullness and diminished breath sounds, at the right base, in the anterior axillary line and a loud purring ronchus, especially at the end of expiration over the right base anteriorly. Her W.B.C.'s numbered 11,000 per cu.mm. The sputum was negative for tubercle bacilli.

A lateral X-Ray revealed the presence of a small effusion between the right middle and lower lobes. About four c.c. of this fluid was obtained on inserting a needle into the area of dullness, previously described. It was clear, yellow and sterile on culture.

Bronchoscopic examination was recommended, but the patient hesitated to give her consent. She did, however, consent to an intratracheal injection of Lipiodol. The Lipiodol was accordingly injected, by the Catheter Method,[1] under direct fluoroscopic observation. The oil was seen to descend into the right bronchus, to about the midpoint, where it was completely arrested. It continued to accumulate, at this point, until the extreme phase of the inspiratory movement was reached, when it suddenly dropped to the bottom of the lung. There was evidently some type of valvular obstruction, in the right bronchus.

On March 31st, with the patient's consent, a bronchoscope was passed. The right lower lobe bronchus, was seen to contain a glistening, predunculated tumor, about the size and shape of a large bean, attached to the medial wall, about ⅜ in. below the mouth of the middle lobe bronchus. This tumor moved freely up and down with respiration. Its under surface was greenish and appeared to be necrotic. The mucous membrane of both the middle and lower lobe bronchi was severely thickened and inflamed. An attempt to remove the tumor, with cutting forceps was made, but on account of its tough resistant nature, and the danger of hemorrhage, was abandoned, to be re-attempted at a later date, with a specially constructed cautery.

About a week later a bronchoscope was passed a second time. The tumor was no longer present but the peduncle could be easily seen. A specimen of tissue was removed from it. After the examination, the patient stated, that two days previously, during a fit of coughing, she had brought up a "hard lump." Not realizing its importance, she had discarded it. On section, the tissue appeared "very suspicious of early squamous celled carcinoma of the bronchus."

The cough expectoration and fever immediately disappeared. An X-Ray about two weeks later, showed the complete disappearance of the interlobar effusion.

Six weeks later, following the delivery of a normal child, a second specimen of tissue was removed. The examination on this occasion showed "hypertrophy of the lining membrane of the bronchial mucous glands, but no evidence of malignancy."

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[1] "A Refinement to the Technique of Intrabronchial Injections," M. S. Lloyd, *The Laryngoscope*, September, 1929.

DENTISTS AND STATE MEDICINE

By A. M. SIMONS, B.L., CHICAGO, ILL.

From the Committee on the Study of Dental Practice of the American Dental Association, Herbert E. Phillips, D.D.S., Chairman; R. E. Denny, D.D.S., H. J. Leonard, D.D.S., G. S. Millberry, D.D.S., and C. E. Rudolph, D.D.S., N. Sinai, D.P.H., Adviser.

Are We Facing Social Control of Sickness Treatment?: Call it "Sickness" or "Health Insurance," the "Panel System," or "State Medicine," no legislation has so greatly affected so many people as that for the social control of the treatment of disease. No section has been so deeply affected as the different branches of the professions dealing with the treatment of disease. This applies almost equally to physicians, dentists, and nurses, and to nearly all the institutions concerned with human ills. These various groups giving medical service must suffer or profit together from the workings of such legislation. It is impossible to separate their fates, even in discussion, and certainly not in programs of action.

Since Bismarck compelled the enactment of the first compulsory social insurance laws in 1883, similar laws have been enacted in practically every European nation, in Japan, and in several South American countries, and are under favorable consideration in nearly all other countries, including Canada, Australia, and South Africa.

The International Labor Conference, which includes every nation belonging to the League of Nations, at its meeting in 1927, adopted an agreement binding all members to introduce compulsory sickness insurance as soon as possible.

While much is made of the distinction between *"compulsory"* and *"voluntary"* systems, the difference in degree is so slight that it is hard to draw the line between them, especially as the voluntary systems are constantly adding compulsory features.

In the United States, workmen's compensation laws have already given us a system of compulsory accident insurance in all but four states, while a constantly increasing number of states are extending these laws to cover "occupational diseases." Many features of compulsory insurance treatment have also been included in recent legislation for veterans. All of these measures affect the practice of dentistry as well as that of medicine.

It is to obtain the information that will help all groups of the medical profession to cope with the threat of state medicine that the Committee on the Study of Dental Practice of the American Dental Association is conducting a study of all phases of sickness insurance in Europe and America. As fast as the results of that study are available they will be placed before the members of the American Dental Association, and will be available at any time in the future when such legislative proposals are under consideration.

How French Dentists Met the Insurance Question: France is the latest great nation to adopt an extensive system of compulsory health insurance involving all branches of the medical profession. This law went into effect October 1, 1930, but it had long been under consideration.

When Alsace and Lorraine returned to France they brought back the German system of health insurance. In spite of the admitted defects of the German system there was a demand that health insurance be now extended to all of France. The first law passed in 1928, being largely copied from the German scheme was so full of defects that it raised a storm of protest, particularly from the medical professions.

When the government suspended its operation this gave an opportunity for a complete rewriting. The physicians and dentists, as often under similar conditions, had been caught largely unprepared. But they now got busy in earnest and to excellent effect.

The physicians raised a fund of over one million francs (about $40,000), set about a thorough analysis of insurance, formulated their demands and adopted them at a great mass meeting and then carefully laid out a campaign, which they carried through to a successful conclusion, to secure these demands.

Since the dentists were included in the law from the beginning, they joined with the physicians in support of the latter's demands and then formulated their own program.

Such a fight calls for a strong professional association. The French dental profession is divided into stomatologists and dentists with different educational standards, which previously had made common effort difficult. How the emergency caused them to forget their differences is reflected in these words taken from a circular issued by the stomatologists.

"It is necessary for every practitioner thoroughly to realize that any mistakes made now will govern our destinies in the years to come. * * * It is of paramount importance at this moment that the individualistic spirit in medicine give way to the collective spirit, which alone will permit some defense against the collectivities that are confronting us."

There was a dentist and a physician who were members of the Chamber of Deputies. From the beginning each of these worked both within and without the Chamber to push the following proposals of the medical professions:

1. Complete freedom of choice of practitioner.
2. Legitimation of all professional associations entitled to deal with the insurance societies by the national associations of the profession.
3. Direct payment of all fees.

4. Professional representation on all administrative bodies.
5. Complete safeguarding of professional secrecy.
6. No lay control of professional activities.

Every one of these provisions was written into the law. The dental patient brings to his dentist a letter of introduction from his insurance society. The work is performed; the customary fee charged and paid; the dentist then endorses the work done upon the letter which the patient takes to this insurance society and collects the amount due him, which in most cases is only a part of the fee. For prosthetic work the insurance society must first endorse the estimate of the dentist as to the cost.

There are representatives of the medical profession not only on every administrative body, but even on the governing committees of the insurance societies.

Although the insurance societies had more than six million members, nearly all voters, the medical professions, purely by virtue of organization, superior knowledge of the situation, and a well planned campaign won a victory so complete that their German confreres have enviously congratulated them on escaping the evils of the German system. This victory was so complete that instead of the enactment of the law being followed by "doctors strikes" as in other countries, the insurance societies "struck" in many places and refused to sign the uniform contracts presented by the medical professions in accordance with the law.

It may have been a trifle too complete a victory since the insurance societies are now beseeching the politicians to amend the law to take away some of the advantages gained by the physicians and the dentists. Whatever may be the outcome of this prospective fight, the medical professions will, at least, for the first time have the advantage which the societies have had under every other system, in that they will be in possession of the disputed territory and know exactly how to battle for their professional privileges.

How Insurance Affects German Dentists: Germany was the first nation to install health insurance. Now after almost half a century of experience it is possible to pass judgment on nearly all its results.

The fact that German dentistry was from the beginning divided among two classes of practitioners has deeply influenced the relations of both insurance and dentistry. The *Zahnärzten* are physicians who have specialized in dentistry. Alongside of this class there grew up a constantly increasing number of dental technicians. As prosthetic dentistry grew in importance as compared with dental surgery, these came to take over more and more of the dental field, especially among the insured.

When insurance was established, there was practically no prosthetic dentistry, at least among the working class. There were thus three lines of progressive increase; first, number of insured; second, relative importance of prosthetic dentistry; and third, largely as a result of the other two, in the number of dental technicians and consequent scope of their work.

Insurance societies seek the cheapest service that will be satisfactory to their members. In the beginning, at least, the dental technicians charged less than the dental surgeons. In many cases insurance physicians prescribed and directed the work of dental technicians.

Soon the technicians began to develop their own special professional skill, standards, educational institutions, and organizations. At the present time they have obtained official recognition for the graduates of their dental institutions, which they claim are modeled on the dental schools of the United States. They have assumed the name of "dentists" in spite of strenuous protest from the *Zahnärzten*. They now largely dominate the great insurance practice.

Unfortunately the insurance societies were able to play upon the antagonism of these two branches and thereby drive the rewards for insurance dental work down almost to the starvation point. At first the *Zahnärzten* were not so greatly affected because dentistry was still a luxury profession; but when insurance brought so large a section of the population, hitherto almost without dental care, within its scope, it dominated dental service.

When the two divisions of the dental profession tried to cooperate against the insurance societies, the insurance men established great clinics. It is complained that in many cases excessive sums were invested in the building and equipment of such clinics largely for advertising purposes. These clinics were staffed by whichever section of the profession could be hired most cheaply. Usually both branches were utilized, but the number of "dentists" so employed was much the larger.

The political and social power of the societies and the weakness and unpreparedness of dental organizations prevented the profession from maintaining control of clinics. These are, therefore, operated almost entirely in the interest of the societies with a disregard for prefessional interests. Once established they did not confine themselves to insurance patients, but entered upon general practice on a strictly commercial basis. They even invaded the "luxury" practice and supplied private patients with expensive dentures of precious metals such as are forbidden in insurance practice. In short, the course of evolution, political conditions, weakness of preparation and divided organization have all combined to bring upon the German dental profession the very worst effects of the insurance system.

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Counsel—LORENZ J. BROSNAN, Esq *Attorney*—THOMAS H. CLEARWATER, Esq.

Executive Officer—JOSEPH S LAWRENCE, M.D., 100 State St, Albany. Telephone, Main 4 4214

For list of officers of County Medical Societies, see this issue, advertising page xxxi
Next Annual Meeting, Hotel Syracuse, Syracuse, N. Y., June 1, 2, 3, 1931.

THE ANNUAL MEETING

This issue contains the first installment of the plans for the annual meeting of the Medical Society of the State of New York, which will be held in Syracuse, June 1-3, 1931.

The scientific program is the feature which will appeal to most members of the Society, for no matter what other activities the Society may undertake, its great function is to teach and inspire its members to practice medicine according to the highest standards of the profession.

The technical exhibits are also of importance, for they consist of the tools which doctors use in the practice of their profession. It is the intention of the managers of our Journal to promote a friendly relation between our exhibitors and advertisers on the one hand, and the readers of our Journal, practically all of whom are members of the Society.

The next issue of the Journal will contain the annual reports of the officers and committeemen, which will form the basis for the discussions in the House of Delegates.

PRESIDENTIAL COMMENTS ON CURRENT EVENTS—No. 20

The Public Welfare Law has been in effect for two years. A survey of its efficiency in meeting the problems that it was intended to meet can now be made in the counties where it has been fully used. In these counties, it has shown its value in better care of the indigent and in meeting the financial burden of medical service by general taxation, hitherto largely carried by the medical profession.

During the year the President has had a chance to study the operation of the Welfare Law in several of the counties. The first observation is that wherever the law is working well, it is because of the cooperation of the county medical society and the County Welfare Commissioner in developing the principles of administration. To illustrate this I cannot do better than to tell the simple story of the methods used in one of the counties.

In Suffolk County there were many misunderstandings between the Welfare Commissioner, the hospitals, and the medical profession. In the beginning of the use of the law the social problems and the county's responsibility under the law were not well understood by the Commissioner. This is not surprising at all because there was no former experience to be used as a guide. The hospitals had not made a uniform ward rate for county cases. Some were charging less than they could afford to give the service for. They were not giving equal service of laboratory, *x*-ray, and other instruments of precision. The charges that could be made for medical service were being decided individually and it was not clear to the doctor what charges to make for any feature of medical work that could be reasonably standardized. Other details such as authorization for the hospitalization or the treatment of the patient at home were not understood.

The Suffolk County Medical Society through its Economic Committee undertook to bring about an understanding of the provisions of the law and a practical application of them as they affected each group interested in its administration. The Economic Committee called a luncheon meeting, at one of the hospitals of the county, of the President of the County Society, the Public Welfare Commissioner, and the superintendents of the five hospitals. The result of this first conference was to come to an agreement between the three interests,—the county, the hospitals, and the medical profession. At the close of the meeting the Commissioner expressed his appreciation of the friendly attitude of the medical profession and of the willingness of the hospitals to cooperate in the working out of the administration of the law in the county. He then added, "I wish that I could have had this help in the beginning. It would have prevented some difficult questions."

My second observation is that governmental interests are willing to be guided by the medical profession in the solution of problems involving the technical service of medicine.

At this meeting the hospital rate was made uniform at three dollars and fifty cents per day for county cases and there was a clear definition formulated of what was to be included in the rate,—one *x*-ray picture in fractures and routine urinalysis. If further service is needed, it is to be charged for after obtaining authorization of the Commissioner who agreed to accept the opinion of the attending physician that it was necessary.

Upon request of the committee, the Commissioner agreed that the doctor should be paid his usual office fee in the office or in hospital service and that the fee for calls should be the average of those prevailing in the county. This would mean in Suffolk County that two dollars would be paid in the office or a visit at the hospital and that three dollars would be paid for calls to the patient's residence. Emergency work was to be taken care of at the doctor's initiative and authorization obtained for further treatment within forty-eight hours from either the Welfare Commissioner or one of the local deputies.

A month later another luncheon meeting was held for the purpose of discussing any problems that might have arisen in the administration of the law and for the purpose of discussing fees for operations, obstetrics, and other technical services. An agreement was reached to become effective after adoption at the next regular meeting of the County Medical Society. Later I will report on the action of the County Society. Many minor details of administration were discussed in this meeting. It is not necessary to report them for information because they were peculiar to the county and would not apply to other counties.

I am endeavoring to discuss the general principles applicable to the successful administration of this law and which can be made use of in every county of the state. For example, authorization must be obtained from the Welfare Department as soon as convenient except that emergency cases shall be taken care of on the doctor's initiative until in reasonable time, he can obtain authorization. In a general way, it was agreed that a reasonable time was forty-eight hours. It is necessary for the doctor to have this authorization in order to be paid for his work. In the opinion of the Suffolk County Medical Society this is a proper regulation since it is concerned with public business and spending the taxpayers' money. Just because payment is made by the county gives no license to charge more than the average fees prevailing in the locality. The ethics of the medical administration of this law impose an obligation to play the game squarely.

If the Welfare Law is not functioning prop-

erly in any county I believe that it is fair to say that the medical profession should usually be blamed for it. The profession owes a duty to the public to cooperate with the Public Welfare Commissioner in making the law effective. In addition to its value as public policy it is of value also to the medical profession since it is solving one of the problems of medical care by compensating the doctor for professional service.

WILLIAM H. ROSS.

THE HEALTH COMMISSION BILL

Two inapplicable motives have been ascribed by high officials to physicians who have opposed the County Health Unit feature of the State Health Commission's bill. One was that local health officers would lose their positions if the County plan were adopted.

The second was stated in a news item in the New York *Times* of Thursday, April 9, 1931, page 14, which says:

"Disregarding urgent recommendations of Governor Roosevelt, the Republican majority in the Assembly passed today a bill from which the sections held vital by the Governor and the special committee had been removed. It is expected that the Senate will pass the bill in the same form.

"The commission, headed by Dr. Livingston Ferrand, president of Cornell University, had urged the setting up of county health units as an essential feature of the twenty-year program.

"The Governor, in a special message, said he was aware that opposition to this portion of the measure was being evinced by local politicians, who feared a loss of minor patronage, and demanded that the health unit feature be retained.

"The bill, as it went through the Lower House, however, ignored the health unit program entirely.

"It appropriated $750,000 for three new tuberculosis hospitals, a division of cancer control in the State Health Department, and made some other general changes in the health regulations."

Local health officers, who constitute over twenty per cent of physicians practising outside of the larger cities, know the value of local home rule by the township, village, and small city. The local municipality is the natural unit to administer ordinary contagious disease control, and also for local sanitation, which is another name for civic housekeeping. The local health officers believe that there should be a county health department to assist the local health officers in the larger emergencies, and to do the larger forms of health department activities such as milk control and child welfare work.

The local health officers wish the State system of public health work to be organized like that in the army, in which the company is the smallest administrative unit and the captain is responsible for health and sanitation within his own area. But the battalion major is equally responsible for the area of his four companies, and the colonel for all his battalions. The line of command goes down to the company commander in all health matters pertaining to the company. This is what was intended by the local health officers when they were accused of being afraid of losing their jobs and political patronage.

LOOKING BACKWARD

This Journal Twenty-five Years Ago

Cause of Cancer: This Journal of April, 1906 contains an article on Cancer by Dr. Samuel Lloyd in which he states that he is convinced that cancer is communicable. He says:

"I am absolutely convinced of this fact myself, and have for years been watching the collection of data from various sources proving it.

"First and most convincing is the increasing ratio of cancer to the population, as shown by the health statistics of different countries, our own included. Second, it has been shown that cancer is more common in thickly populated sections, where the people are crowded together, the air is vitiated, and cleanliness is less regarded than with the better housed and fed."

Dr. Lloyd then describes five cases of which the following is typical:

"Woman died of cancer of the breast. Two years later I operated upon the sister, who had nursed her, for cancer of the stomach. There were no previous cases of cancer in the family."

The doctor continues his argument by referring to metastases in a way which is entirely accepted today:

"Auto-infection with cancer is now a well-established fact, and surgeons generally are adopting every possible precaution to avoid injuring any of the cancerous tissue during the course of an operation, in order to avoid spreading any of the cancer cells in the operative field." This practice is generally observed today.

MEDICAL PROGRESS

Sleep and Its Disorders in Childhood.—Hector Charles Cameron discusses three factors which may be concerned in producing sleeplessness in young infants, namely, pain or discomfort, inherited or constitutional neuropathy, and faulty management. In a few cases the unrest is caused by persistent pain, as in syphilitic periostitis, the subperiosteal hemorrhages of scurvy, uric acid calculi, and otitis media. The pains of dyspepsia and aerophagy are more common causes. Brought to the breast sleepless, crying, and excited, the child gulps, strains, and chokes, and thus secures from the breast a minimum of milk and a maximum of air. The consequent distention of the stomach is painful. Nasal obstruction from nasal catarrh is a frequent cause of wakefulness. A tampon of cotton-wool, which allows a few drops of adrenaline solution (1:5000) to flow backward through the nostrils before the child is put to the breast, may permit nasal breathing and suction, and thereby prevent aerophagy and hunger. Few babies suffer from inherited neuropathy. Most infants who are sleepless and who cry constantly without any specific pain and discomfort do so because the management is at fault. It is through the mother or the nurse that we must work to get our effects. No infant lies quiet in the arms of a woman who is herself in a state of nervous tension. Insomnia and constant crying may become persistent when the mother grows agitated and worried by her failure to dominate the opposition of the child. The best place for such an infant may be up against the mother's back, against a warm, comfortable part of her body which takes no part in the expression of her emotions, when the searchlight of eyes and face is directed away from the child, and when her hands are free to busy themselves with occupations which divert her thoughts from the child. Chloral is the most effective hypnotic in infancy and may be used until the rhythm of sleep is restored. Many nervous older children will sleep only in the presence of the mother. The persistent hailing of the mother, as soon as the light is turned out and the child left alone, is caused by the effect upon the child of the ill-concealed agitation in the mother. To urge a child to go to sleep is only to call attention to his own importance in the matter. On the other hand, to speak before a child of his remarkable capacity for immediate and sound sleep, to call attention to his improvement is to provide helpful management. Cameron directs attention to the importance of metabolic disturbances as a cause of insomnia in nervous children. In children, starvation, pyrexia, exertion, and emotional excitement tend more readily than in adults to exhaust the reserve of carbohydrate, leading to hypoglycemia and ketonemia, which in turn are likely to result in sleeplessness, night terrors, or enuresis. A higher percentage of sugar and a somewhat lower percentage of fat are the chief needs of the nervous child.—*Journal of the Canadian Medical Association,* February, 1931, xxiv, 2.

Clinical Researches on Chlorophyll.—Lorenzi Angelo describes in the *Riforma Medica* of January 19, 1931, his researches on the action of chlorophyll in individuals with normal and with excessive blood pressure. His experiments were carried out on 50 subjects, of whom 10 were normal, 17 suffered with hypertension and poor general condition requiring hospitalization, and 23 had hypertension but were able to live a normal life. In all cases chlorophyll extract was used in aqueous solution in doses of 0.80 to 1.50 gm. per day, no other medication being administered. The chlorophyll was well tolerated even in strong dosage over months of time. In the group of normal individuals no particular results were seen in the blood pressure. In the second group a constant and appreciable lowering of blood pressure began on the 5th to the 8th day, the systolic pressure falling 30 to 60 mm. Hg and the diastolic 20 to 30 mm. In the third group results were similar, but were not observed until the 15th day. The results in this group assume an importance, since these individuals were continuing their regular habits and the change could not be charged to hospital care. At the same time that the blood pressure was coming down the general condition of the subjects improved. The effect of the chlorophyll was to cause a vascular dilatation, to stimulate arterial contractility, to improve the peripheral circulation and thus to relieve the work of the heart. In some cases the results continued for 1½ months after the treatment was stopped, while in others the blood pressure went back to its old figure again in 10 days. Two hypotheses are possible: either that the chlorophyll removes the causes that obstruct the circulation, or that it diminishes the quantity of exciting substances in the circulation. That the first of these is true was definitely established by the experiments. As regards the second, one can only suppose that the improvement in the peripheral circulation favors the elimination of

toxic substances, and hence diminishes the effect of these upon the circulation. In either case there would be a certain parallelism with the action of digitalis.

Symptomless Acute Mastoiditis.—N. Asherson emphasizes the importance of recognizing the fact that not all cases of acute suppurative mastoiditis are associated with symptoms. It is possible that an intracranial extension such as a perisinus abscess may exist without giving rise to subjective symptoms. It is generally recognized that one of the most reliable signs of acute mastoiditis is a sagging or bulging of the posterior superior wall of the osseous meatus where it abuts on the tympanic membrane. What is not widely accepted is the important fact that this bulging or sagging may be the only sign or symptom indicating the presence of a suppurative mastoiditis, or even an intracranial collection of pus. Its detection depends on routine otoscopic examination of all acute ear conditions, after the meatus has been thoroughly cleansed of all discharge by syringing and mopping. The best view of the tympanic membrane is obtainable with the electric otoscope, the only instrument which makes possible the adequate examination of the ear in an infant or refractory child. A second important physical sign for opening the mastoid process is the rapid refilling of the meatus with pus after it has been thoroughly cleansed. If, in addition, the radiogram reveals a sclerotic process, that is, one devoid of cells, it is obvious that the collection of pus must be either perisinus, extradural, or cerebral. It could not arise from non-existent cells in the mastoid, and if it arose merely from the antrum the meatus would not refill so rapidly. If a patient with a running ear has any symptoms suggestive of dural involvement, as, for instance, vomiting, this symptom must be regarded seriously. —*The Lancet,* February 14, 1931, ccxx, 5607.

Autogenous Puerperal Infection.—J. Voron and A. Brocher say there can be no doubt of the existence of cases of puerperal infection in which it is impossible to incriminate any septic contamination from an outside source. The source of the microorganisms is on or within the body of the patient herself, previous to her accouchement, in genital or extragenital foci. When it is within the genital zone, the patient may be a carrier, either healthy or diseased. There is no infallible test by which the existence of such forms of infection can be demonstrated: the conviction that this is the case is reached only by a careful analysis of the facts, since numerous causes of heterogenous infection still elude detection. The increased prevalence of puerperal infections during endemics of grip argues for an autogenous origin. As a rule the evolution of such an infection is due to a weakening of the general and local defenses of the organisms rather than to the virulence of the responsible bacteria. Every woman carries in her genital tract microorganisms which live there in the state of epiphytes. Clinical arguments for the existence of an autogenous infection are found in the persistence of the puerperal infection; its appearance in the absence of any external contact in a rigorously clean environment, and its greater frequency in the winter months. Predisposing causes are (1) exaggerated length of time in labor, carrying with it the element of "bruising"; (2) obstetrical interventions which injure the tissues, reduce their vitality, and diminish their resistance to microbes; (3) the carrying of vaginal flora into the uterus by even aseptic manual delivery, and (4) retention of coagula, lochia, or ovular debris, which offer an admirable milieu for culture. Autogenous infections are generally mild, with few grave cases. Up to the present time, attempts at prophylaxis have borne little fruit. Measures in the right direction are (1) care of the health during pregnancy, (2) reduction of fatigue to a minimum during labor (3) suitable therapy to avoid obstetrical shock, (4) the overcoming of anergy, as by proteinotherapy or nucleinate of sodium, and (5) attempts at immunization, especially vaccinotherapy, which has given encouraging results. —*Journal de Médecine de Lyon,* February 5, 1931.

The Incision for Appendicectomy.—A. J. Southam, writing in the *British Medical Journal,* February 14, 1931, i, 3658, calls attention to the danger of injury to the nerves of the abdominal wall with the McBurney muscle-splitting incision for appendicectomy. He recalls that, in 1924, he pointed out that a right inguinal hernia sometimes followed the use of the gridiron incision, and since that time he has encountered several additional cases showing this complication. He thinks it doubtful if the connection between the appendix operation and the subsequent appearance of the hernia is often recognized. The hernia probably results from some injury inflicted on the ilio-inguinal nerve during the operation for the removal of the appendix. It is at the point where the nerve lies external to the anterior superior iliac spine that it is liable to be damaged. The nerve lesion results in paralysis of the muscles and the conjoined tendon around the internal abdominal ring and in the subsequent appearance of inguinal hernia. In three recent cases in which a second operation was undertaken for the radical cure of hernia following the muscle-splitting incision, Southam excised a portion of the ilio-inguinal

nerve and submitted it to pathological examination. All three nerves showed partial degeneration, varying in degree. The paramedian incision has the advantage that it can be extended to any length. In many cases, however, it will be found at some distance from the site of infection and will necessitate very careful packing off to avoid the risk of soiling the general peritoneal cavity. In typical cases of acute appendicitis localized in the right iliac fossa and in young patients, Battle's pararectal incision with inward displacement of the rectus muscle gives adequate exposure, and as the nerves can be seen and readily avoided it rarely leads to any subsequent weakness of the abdominal wall.

Results of Roentgen Disinfection of Diphtheria Carriers.—Rudolf Wahl gives an account in the *Deutscher medizinische Wochenschrift* of February 13, 1931, of the methods adopted in Magdeburg in 1929 to rid diphtheria carriers of bacilli. Everyone in the Magdeburg-Sudenburg Hospital—infants, children, or adults—who was known to be a carrier was subjected to irradiation of nose or throat or both. If there were carriers in the families of these persons, 3 smears were made from nose or throat within 8-14 days, and if all were positive, the carrier was advised to undergo irradiation. Naturally some difficulty was encountered in overcoming prejudices, even physicians of the city being skeptical in some cases. The results were of especial importance, since in many cases the carriers had given positive cultures for weeks or months. Only in exceptional cases were more than 3 irradiations given. About 5 or 6 days after an irradiation a control smear was made and examined bacteriologically. The interval allowed between irradiations was 2 to 3 weeks. At the first, or principal, irradiation the largest dosage was given, amounting to 30 per cent of the skin erythema dose and to not much less on the tonsils, for the layer of tissue that the rays must penetrate is not very thick. In infants one-half this dose was given. When a second or third treatment was necessary, 10 per cent of the erythema dose measured on the skin was given. In the year just ended 136 carriers were irradiated, of whom 133 carried the diphtheria organism, 1 streptococcus, and 2 meningococcus. Of this number 96, including the streptococcus and meningococcus carriers, were already negative after the first irradiation. Another 27 became negative after the second treatment, and in only 3 was a third treatment necessary. A carrier was considered diphtheria-negative if he showed 3 negative smears within 3 weeks after irradiation. It seems justifiable to believe that the use of this procedure is largely responsible for the decreased number of diphtheria cases in Magdeburg as compared with the period before 1923. In view of the small dosage given, it seems improbable that the rays act directly upon the bacilli to kill them, Smears made immediately after irradiation are always strongly positive, and remain so for several days. Rather is it probable that a nonspecific resistance is developed in the bodily tissues.

Nonspecific Protein Therapy in Nose, Throat, and Ear Affections.—After a brief review of foreign protein therapy in general, Joseph C. Beck states that he has employed this treatment in various pathological processes about the nose, throat, and ear. The conditions treated were the following: Otitis externa, eczematoid, follicular, or furunculous; chronic sinusitis, suppurative and nonsuppurative; postoperative sinusitis, after both conservative and more radical operations; atrophic rhinitis; chronic tonsillopharyngitis, with or without acute intercurrent attacks; chronic laryngotracheitis, especially suppurative; bronchiectasis, and borderline cases such as chronic suppurative disease of the salivary duct or any of the salivary glands, and fistulæ about the head and neck. He concludes that the results of foreign protein therapy, in his hands at least, have not been encouraging. While anaphylactic shock has not occurred in his series its possibility should be borne in mind and a careful history should be taken, especially as to the previous use of biological sera, and this particularly in children. Protein injection should not be given unless adrenalin is at hand for emergency use. Clearly indicated surgery was not permitted to be superseded by nonspecific protein therapy and when the latter was employed in systemic contraindication to surgical intervention, its use was not attended by any noteworthy benefit. The chill that has been supposed to be of prime importance in foreign protein therapy was rarely observed in this series of cases. Other therapeutic measures, such as specific sera, vaccines, allergins, chemicals, physical agents, diet, and endocrines, also possess definite nonspecific protein effects as adjuvants. Beck thinks that pure certified milk, free from bacteria, not boiled, is preferable to boiled milk containing bacteria, since the bacteria supply additional proteins and the dosage cannot be definitely controlled. He expresses regret that too many men employ nonspecific protein therapy on the advice and information of commercial salesmen of the various milk, bacterial, and other products, without the necessary laboratory and scientific medical control. This can only lead to the disrepute of the treatment.—*Laryngoscope,* February, 1931, xli, 2.

Treatment of Pneumonia by Intravenous Injections of Sodium Salicylate.—Couvy and Popoff, writing in the *Bulletin de l'Académie de Médecine* of February 3, 1931, give an account of their recent work in the native hospital of Dakar (Senegal), where during the last 2 years they have treated 114 cases of pneumonia in

African Negroes with intravenous injections of sodium salicylate. Of these, 46 were very grave cases, with delirium and cardiac insufficiency, 43 exhibited considerable gravity with symptoms of icterus, and 25 were average cases with favorable prognosis. When to these are added 26 cases on which the authors had made a previous report, the total number of cases treated is 140, of which only 7 (5 per cent) terminated fatally. The patients had been admitted in every stage of pneumonia from the second to the tenth day. The technique consisted in the intravenous injection of 30 c.c. of a 1:30 solution of sodium salicylate once or twice daily, according to the general condition of the patient. Its action was astonishingly rapid, producing prompt improvement in the adynamia, the toxinfectious phenomena, and the cardiac condition. The dry tongue became moist, the patients, detoxicated, began to feel a sense of well being, and were soon out of danger. The temperature usually dropped by crisis, in either one or two stages. Occasionally a fall of temperature after 1 or 2 days of treatment was followed in 18 to 24 hours by a fresh rise, with a final drop after 1 to 3 days at most. Treatment is stopped after the temperature falls, but is resumed if fever returns. In cases of average severity resolution is plainly hastened, and if the patient has treatment during the first 3 or 4 days definite apyrexia is established by the 6th, and sometimes even by the 4th day. In no case has injection been followed by any untoward symptom, such as induration or signs of toxicity. The maximum dosage reached was 11 grams in 6 days, in 11 inoculations. Moeller in the Belgian Congo has had good results with sodium salicylate administered by mouth, reserving the intravenous method for very severe cases.

Asepsis: A Possible Interference with the Physiology of Repair.—Herbert L. Johnson contends that, in view of the traumatic possibilities of the environment of primitive man, nature must have expected infection and contamination in every case of trauma. There is some evidence that bacterial toxins, irritating chemicals, and foreign bodies are depended upon to stimulate the serosa to a vigorous defense reaction for the purpose of neutralizing the damaging effect of their presence. The first stage of repair is chiefly concerned with the production of a plastic exudate rich in fibrin, leucocytes, and a host of unknown factors. Fibrin plays the major rôle in the mechanism of repair. By its close adhesion to inflamed surfaces it delays absorption. The diffusion of an inflammatory process in the peritoneum is dependent on or follows a deficiency of fibrin. It is obvious that any process which interferes with or prevents fibrin formation is a dangerous one. During the stage of structural repair the fibrous strands deposited in the process of defense reaction act as guides to the growth of new tissue and serve to house the elements of defense within their meshes, forming thereby a barrier against infection. The light aseptic trauma inflicted upon the serosa in the average "clean case" is not in itself sufficient to excite the production of a heavy plastic exudate. In consequence moderately abraded surfaces lie in contact and heal together, giving rise to the most damaging type of adhesions. The relinquishment of any small part of the advantages of asepsis and antisepsis is inadvisable. It is suggested, however, that we should seek a harmless substitute for the excitor effects of bacterial toxins, chemical irritants, etc., in order that we may more fully conform to the scheme of normal repair.—*New England Journal of Medicine*, March 12, 1931, cciv, 11.

Adrenalin in the Treatment of Contraction Ring, with Note of the Action of Adrenalin upon Tubal Contractions.—M. Pierce Rucker recalls that in an earlier communication he showed that adrenalin administered in 5 minim-doses of 1-1000 solution, hypodermically, caused a cessation of labor pains for a period of from nine to thirty minutes in 16 out of 20 cases. In 1927 he read a paper on the "Treatment of Contraction Ring Dystocia with Adrenalin." Later in the same year Bourne and Burn of London did practically the same work with adrenalin, and recently they have stated that such work has never been done before. Evidently they failed to consult the American literature. The action of adrenalin on the uterine musculature makes this drug of practical use in cases of advanced contraction ring, causing the disappearance of the obstruction for a sufficiently long time to permit of version or forceps extraction. In cases of contraction ring of moderate degree, the cause of prolonged labor is often unrecognized. In such cases investigation will frequently reveal a constricting band of uterine muscle about the baby's neck. By injecting subcutaneously 5 minims of 1-1000 adrenalin solution forceps extraction becomes surprisingly easy. Rucker reports a case of threatened abortion in which the use of adrenalin was apparently effective in stopping uterine contractions and making it possible to carry the patient to term. He suggests that its use in these cases is logical. He also records observations made with the Rubin apparatus for insufflating the fallopian tubes. After the initial spasm has passed off and the flow of gas has become constant, an injection of adrenalin causes a relaxation of the musculature of the tube and often a slowing of its rate of contraction. Pituitary extract, on the other hand, shows an increase in the tone and the rhythm of the contraction.—*Southern Medical Journal*, March 1931, xxiv, 3.

LEGAL

RETAINED FOREIGN BODY
COURT OF APPEALS HOLDS SURGEON BLAMELESS

By LORENZ J. BROSNAN, ESQ.
Counsel, Medical Society of the State of New York

In a case in the writer's office, our Court of Appeals recently handed down a decision of great importance not only to the individual doctor concerned in the case, but to the entire medical profession as well. The charge against the physician was that he had negligently left a foreign body in the abdomen of his patient. The decision of the Court of Appeals sustained the Appellate Division, which Court had by a divided vote decided in favor of the physician. In order to understand the force of the decision it is necessary to state the facts somewhat in detail.

The defendant physician was called in to see a married woman about thirty-eight years of age. She gave him a history of having sharp shooting pains in the lower right abdomen and complained also of a pain at the pit of the stomach that had shifted from the right lower abdomen. She told the physician that she had these sharp little pains continually, and then a sharp sudden agonizing pain. There was some slight flowing. The patient had missed one period. An examination of her abdomen disclosed that it was very sore, tender and rigid over the right lower section. The doctor made a diagnosis of a probable extrauterine pregnancy with a possible appendicitis, and advised immediate operation. To this the patient and her husband consented and she was immediately taken to the hospital, the doctor having telephoned the hospital and told the authorities that he was going to operate immediately on an emergency case.

After the physician had scrubbed up, and the patient had been prepared for operation and anesthetized, the defendant proceeded to operate. He made an incision to the right of the umbilicus, extending downward to the pubis, and went through the abdominal wall. Upon exposing the peritoneum, he found the lining of the abdominal wall was inflated with blood shooting through it. He then opened the peritoneum and retractors were inserted to spread the wound open. When these were inserted, the blood shot out in great quantities in the peritoneal cavity. The defendant testified it was necessary to work fast in order to stop the bleeding. The intestines were distended, so that in order to push them to one side and work down through it was necessary for the doctor to use pack-offs to hold the intestines back. The pack-offs used in this operation were large pack-offs. The pack-offs were handed to the operating surgeon by a sterile nurse, and the doctor testified that he relied upon the hospital nurses to hand him the correct pack-offs. The defendant testified on this point:

"Q. And you rely upon the hospital nurses to hand you those and hand you the correct ones? A. Yes, sir. She hands it to us like that, supposed to be moistened, so that we can put one of these in and leave it.

"Q. In where? A. In the abdomen until we are through our work, but where we have got blood seeping down from the upper abdomen into the region where we are operating we have to change these frequently, because they hold the blood back for a little while, then it seeps through and obscures our field again. Then we have to take this out and put in another one. So we use these both for sponges and for pack-offs. Now, say we use this—this is an operating room habit

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"Q. Usual, proper and approved method? A. To my mind.* * *

"A. (Continued) We put this in. The first thing my assistant does or I do when we get that we snap that artery clamp on to the sheet again, as I did before. We snap that snap into the artery clamp. Now, no matter where that is that can't get away from us, even that big thing like that. We are afraid of even these things there. Every one of these we use is snapped to the artery clamp like that. The other piece of gauze is sewed to the bottom of the bag. If you pull that out you will see it.

"Q. The other piece of gauze, referring to Defendant's Exhibit 2? A. Yes, the continuous strip sponge. Now, that is snapped there. That is the purpose of the snap is to snap it on to something so you have got it. Now, these are all we use in the course of that operation, actually use. When we come out they hang over the edge of the table like that. When we get through with them, throw them on the floor or in a pan. That looks big now. When it is wet it is quite small. Now, when these go into the abdomen, in spite of this hook here we count them. That is, if I put one in the abdomen, I say one in, in my mind, and I am keeping track of these. When I take the second one and put that in on top of it, two in. I take one out, two in, one out, one in. That is running through your mind sub-consciously all the time. Sometimes we say it to each other, my assistant and I. Now, we take these, put them in, snap them on like that. When

we put them in leave them in there until their purpose was finished, take them out, throw them on the floor or in a pan Sometimes after we take them out and they are on the floor we have to unsnap that in order to get them out of the way Now, we did that I went down in ——

"Q You are referring to the large pack off which is Defendant's Exhibit 1? A Yes Now, we used these under those precautions Then I removed the tube That in itself stops the hemorrhage

"Q You mean the Fallopian tube A Yes

"Q That is, you cut that right out? A You tie off the blood supply coming to the tube on both ends That naturally ties off the vessels coming to the tube and the bleeding ceases, but of course the tube is destroyed and has to come out

"Q And it did come out in this case A It did come out in this case Now we get these out Then we are ready

"Q When you say these, you mean Defendant's Exhibit 1? A Yes I took out her appendix, which was perfectly normal, on the way out I could do it very quickly, simply to prevent her having appendicitis That was in the way and we grabbed it You can do that in a minute Then we came out We got ready to close the abdomen Then I put my hand in the abdomen and felt all around to see if there was anything left in there You can imagine a clamp like that might slip down in there * * *

"A (Continued) A clamp like that might slip down in there Any number of things can get in there so we feel around to see if we have left anything in there I do that myself

"Q Did you do that in this case? A Yes not only that, I had my assistant do it, feel around in there to see if there is anything

"Q Did your assistant do it in this case? A Yes

"Q Who was your assistant in this case? A Dr. X Then we are ready to close the abdomen I turn and ask the nurse who is in charge of the operation room, how is your count? That means, how is the count of the gauze and all those things Before closing the abdomen I have her assurance and I had in this case that the count was correct * * *

'A (Continued) She tells me the count is correct then I go ahead and close the abdomen which I did in this case"

The doctor continued to see the patient once or twice a day The patient remained in the hospital about three weeks and made what appeared to the doctor to be an uneventful recovery There was nothing about her condition that indicated to the doctor that any foreign body had been left in the abdomen

About two months after the patient left the hospital she called the defendant to her home complaining of severe abdominal pain On examination the defendant found distension of the large intestine He advised an enema and when this had been given to the patient she felt relieved Two months thereafter she had a similar attack which was also relieved by an enema There were no symptoms indicating the presence of a foreign body

About nine months after the operation x-ray pictures were taken by another physician of the plaintiff The defendant upon examining the pictures found that they disclosed the presence of a buckle with gauze attached Upon ascertaining this fact, the defendant immediately telephoned to the woman's husband and told him that it was necessary to reoperate because of adhesions in the pelvis and also by reason of the presence of the foreign body The woman at that time was pregnant, and the doctor told the husband he could use his own judgment as to whether the patient should be told either about the adhesions or the foreign body The defendant reoperated the patient, and his findings upon that operation were testified by him to be as follows

"Q * * * Please tell the Court and jury just what you did in that operation, what you found and so forth A I went in The patient was brought in exactly the same, put under ether and we went through the same preparation and I made an incision through the old scar I made the other time This takes out all the scar tissue and lets fresh tissue in again It makes the new scar about half an inch longer than the old one I reopened the abdomen exactly as I did before The first thing I did was look to the pelvis down back of the uterus There I found what we call a sigmoid, that is the large intestine just above the rectum down back of the uterus was pulled over the right and stuck adherent to the place from where this tube had been taken off The tube was adherent too when I took it out

"Q You mean the Fallopian tube? A Yes I found it was stuck there Now, that pulled the intestine over making a kink like that I separated that adhesion It was so dense I had to take a knife and cut it, cut a piece off the back of the uterus, let this large intestine get away from the back of the uterus and sewed up the place I took off After doing that I looked over the region where we had removed her appendix This time we had no hurry or anything We could take our time I found that all right Then I went after the buckle and I pulled out the omentum That omentum is the sheet I told you about which in her case was very thick I pulled that out and I looked and could feel something in the middle of that I just separated where that had folded over and kind of adhered to this and I found some gauze

'Q (Handing witness Plaintiff's Exhibit 4) Using that, describe as near as you can what you

found. A. On opening up this omentum, this big sheet, I found wrapped up in it, the omentum all around it a pack-off like that, lying just like that, with the snap hanging out about that distance and extending downward and to the right. There was the pack-off like that. I separated the omentum around it, pulled on it and kept separating the omentum from the side and took it out. It looked just about like that except, as I say, it had been sterilized and discolored a little bit. Then I separated all these light adhesions on the omentum, spread the omentum all out. There were two little loops of small intestine adherent to the omentum. I separated those, restored things just as they should be, straightened out the omentum, tucked it down into the pelvis and again closed the abdomen.

"Q. Now, Doctor, referring again to Plaintiff's Exhibit 4, which you have in your hand, as being nearly identical with that which you removed on the second operation, will you tell the court and jury whether or not in your first operation you were using any pack-offs like that? A. No, the only pack-offs I used were like that.

"Q. In other words, the small pack-off was not of the type you were using or calling for? A. No.

"Q. Now, the fact undoubtedly is, as we have frankly admitted, that the foreign body was left in her abdomen? A. Yes. * * *

"Q. Did you at any time during the first operation see any pack-off of the type of Plaintiff's Exhibit 4? A. No.

"Q. Did you knowingly insert any pack-off of that type? A. I did not.

"Q. Now, will you tell the court and jury from your knowledge of the use of these pack-offs whether or not it would be possible for the small pack-off, Plaintiff's Exhibit 4, to have been rolled in the other pack-off and handed to you and thus inserted? * * *

"The Court: I think it is apparent one could be rolled within the other. * * *

"Q. What did the fact that this small pack-off, Plaintiff's Exhibit 4, was rolled up at the time you removed it (the second operation) what did that fact indicate? * * *

"A. I found that pack-off rolled up. That indicated that the pack-off had never been used, otherwise it would have been unrolled. I found it rolled up like that.

"Q. In other words, no pack-offs are ever put in unless they are unrolled? A. No.

"Q. When you found this small pack-off in this second operation was it encysted? A. No, not what you call encysted.

"Q. What was its condition, then? A. It was surrounded by omentum. Encysted implies that there has been a lot of inflammatory reaction around it so as to produce a sac around it.

"Q. There was no sac? A. No sac.

"Q. What did that indicate? A. It indicated that the pack-off, in itself, had caused very little irritation.

"By the Court:

"Q. Was the buckle encysted, Doctor? A. No, sir."

The doctor also testified that he did not employ the nurses and had nothing to do with their employment. An expert physician was called by the defendant who testified on a hypothetical statement of facts that the defendant followed proper practice. This physician also testified that the defendant was absolutely correct in not making an extended search into the plaintiff's abdomen, since to do so might have caused a paralysis of the intestines and possible death.

The Court submitted the issues to the jury. The jury found in favor of the plaintiff. The case was appealed by the defendant to the Appellate Division, where the judgment of Trial Term was reversed and a new trial granted so as to give the plaintiff's attorney an opportunity to produce further proof. In reversing, the Court said:

"Plaintiff's theory was that the leaving of the pack-off in the abdomen made the lack of skill and want of care so obvious that expert testimony was unnecessary. But, defendant called an expert who said that proper and approved methods were used in the operation, and thus inferentially that there was no negligence. He stated that it would have been unwise for defendant to have made a more extensive search for foreign substances in the abdominal cavity at the close of the operation, and might have caused paralysis of the intestines; also that it was proper and customary for an operating surgeon to rely on the nurse's count of sponges, pack-offs and gauze placed in and removed from the incision. Plaintiff did not rebut defendant's medical evidence that proper and approved methods were used. The presence of the pack-off in the abdomen after the first operation standing by itself suggested that proper care had not been used, and required defendant to offer proof in explanation. But when defendant's expert witness stated that proper and approved methods were used in the operation, the possible inference of negligence because the pack-off had been left in the abdomen was destroyed. * * *

"This defendant was not chargeable with the negligence, if any, of the nurses employed by the hospital. (Baker v. Wentworth, 155 Mass. 338.)"

The plaintiff's attorney, however, did not submit any additional proof on the second trial and hence the complaint was dismissed. The plaintiff thereupon appealed to the Appellate Division, where the ruling of the Trial Court dismissing the complaint was affirmed. Inasmuch, however, as two of the Justices in the Appellate Division dissented, the plaintiff was permitted to carry the case to the Court of Appeals. The Court of Appeals unanimously affirmed the action of the

courts below and exonerated the physician from any liability under the facts disclosed by the record. No opinion was written by the Court of Appeals.

We have set forth the evidence in considerable detail in this editorial, since a knowledge of all the facts is necessary to a proper appreciation of the decision. The decision is an extremely important one bearing the stamp of approval of our highest Court, and we feel sure that it will be received by the medical profession with great interest.

ALLEGED WRONG DIAGNOSIS OF STOMACH AILMENT

The plaintiff in this case was referred to the defendant doctor, who specialized in radiography and X-ray therapy, by another physician, in order that a proper diagnosis might be made of the cause of annoyance from which this man suffered immediately after eating.

The doctor gave him a 14 ounce drink of barium meal mixed with water, and stripped him to the waist, placing him under a fluoroscope in order to observe the functioning of his stomach for three minutes. After waiting a short time he then took a series of six x-ray pictures of the man's stomach from various angles.

The patient returned six hours later and another picture was taken, and on each of three succeeding days additional pictures were taken. With all this data before him the defendant doctor sent the following report to the physician who had referred the patient to him:

"Findings on examination: The esophagus is normal. The stomach fish-hook in shape, no defects in curvatures, the lowest point, at the level of the crest. The duodenal cap slightly irregular on all films. Six hour examination—small gastric residue. The head of the barium column in the caecum. Twenty four hour examination—Moderate amount of barium in the colon. Forty eight hour examination—Colon empty of barium. Appendix—Not seen. Conclusion: Probably duodenal ulcer."

Nothing more was heard of the patient until some months later when he returned to the defendant's office and accused him of being wrong in his diagnosis of duodenal ulcer, when there was in fact nothing the matter with him except a stomach ache resulting from what he called a nervous stomach.

The plaintiff thereafter started suit in the Municipal Court of the City of New York based on malpractice and fraud. The plaintiff alleged that the defendant was negligent in improperly and carelessly diagnosing his condition as an ulcer and that by reason of such negligence he suffered great mental pain and anguish and was forced to incur considerable expense as a result thereof.

For three years after instituting the action plaintiff did nothing, and a motion was made on behalf of the defendant to dismiss the complaint for lack of prosecution. Said motion was granted, thereby terminating the matter in favor of the doctor without trial, which was a most fortunate outcome.

FAILURE TO BE PRESENT AT DELIVERY

In this case the defendant doctor was consulted by a woman who advised him that she was pregnant. The doctor examined her and arrangements were made for him to attend her during the remainder of her pregnancy and to deliver her of her child at the proper time. She continued to call at the doctor's office for about six months, all of which time she was progressing normally. At the last call the doctor directed her to notify him at the first sign of labor.

A few days later she entered a hospital, without the doctor's knowledge. The attending physician at this hospital called the doctor and informed him that the patient was in labor but not active and that there was very little dilation. The defendant doctor was at the moment busy with another patient and directed the attending physician to call him as soon as the woman became active. This call was received a few hours later and the doctor rushed to the hospital in an automobile. By the time he reached the hospital the woman had delivered herself of a normal child in a normal way and had suffered no ill effects as a result of the delivery. Neither the defendant doctor, nor the attending physician at the hospital were present at the child birth. The doctor examined the woman and found her condition to be excellent, and attended her daily until the time of her discharge from the hospital about two weeks later.

When the doctor saw her last he directed her to return to his office about six weeks later in order that he might make a further examination of her condition. This she failed to do.

A suit was instituted against the doctor in which it was charged that although the defendant had sufficient notice of the imminence of the plaintiff's labor, he failed to appear to attend her during her delivery, and for that reason she suffered great injury.

An answer and demand for bill of particulars was served on behalf of the defendant doctor. The plaintiff never complied with the demand for a bill of particulars and a few months after suit had been instituted, plaintiff's attorney consented to discontinue the action, thereby terminating the matter in favor of the doctor.

THE ANNUAL MEETING

PROGRAM OF THE SCIENTIFIC MEETING

The one hundred and twenty-fifth annual meeting of the Medical Society of the State of New York will be held in Syracuse Monday, Tuesday and Wednesday, June 1-3, 1931. The headquarters of the Society will be in the Hotel Syracuse; and the same hotel will house practically all the features of the meeting, including the House of Delegates, the scientific sessions and the technical exhibits.

Following the example that was adopted last year, the scientific sessions will be divided into two groups. A general session will be held on each afternoon of Tuesday and Wednesday; while meetings of the scientific sections will be held on the mornings of those days. The complete scientific program of both the general and the section meetings is printed on the following pages.

THE COMMITTEE ON SCIENTIFIC WORK:

Chairman, Arthur J. Bedell, M. D., Albany

John Wyckoff, M.D., New York
Charles W. Webb, M.D., Clifton Springs
Onslow A. Gordon, Jr., M.D., Brooklyn
Marshall C. Pease, M.D., New York
Conrad Berens, M.D., New York
Noble R. Chambers, M.D., Syracuse
Earl D. Osborne, M.D., Buffalo
Arthur T. Davis, M.D., Riverhead
Luther F. Warren, M.D., Brooklyn

GENERAL SESSIONS

Presiding, William H. Ross, M.D., President, Medical Society State of New York

Tuesday, June 2nd at 2:00 P. M.

Place of Meeting, Ball Room, Hotel Syracuse

Address by the President of the American Medical Association, William Gerry Morgan, M.D., Washington, D. C. (By invitation.)

SYMPOSIUM ON PSYCHOPATHOLOGY AND PSYCHOTHERAPY

Introductory remarks, Smith Ely Jelliffe, M.D., New York City.

1. "In Childhood and Adolescence," Frankwood E. Williams, M.D., New York City.
2. "In Neuroses and Psychoses," Abraham A. Brill, M.D., New York City.
3. "Internal Medicine," Smith Ely Jelliffe, M.D., New York City.

Wednesday, June 3rd at 2:00 P. M.

Place of Meeting, Ball Room, Hotel Syracuse

1. "General Survey," Wells P. Eagleton, M.D., Newark, N. J. (By invitation.)
2. "Surgical Aspects." Albert G. Swift, M.D., Syracuse.
3. "Treatment and After Effects," Foster Kennedy, M.D., New York City.

SECTION ON MEDICINE

Chairman.....John Wyckoff, M.D., New York City
Secretary.....David A. Haller, M.D., Rochester

Tuesday, June 2nd at 10:30 A. M.

Place of Meeting.....Hotel Syracuse

1. "Gall Bladder Physiology, etc.," Lester Levyn, M. D., Buffalo.
2. "The Treatment of Adrenal Insufficiency by the Use of Cortical Extracts," Joseph A. Hartman, M. D., Buffalo and Clayton W. Greene, M.D., Buffalo.
3. "The Nature and Treatment of Non-specific Ulcerative Colitis," Ascher Winkelstein, M.D., New York City.

Wednesday, June 3rd at 9:00 A. M.
Place of Meeting.....Hotel Syracuse

1. "Coronary Occlusion," Alfred M. Wedd, M.D., Clifton Springs.
2. "The Use of Potassium Sulphocyanate in the Treatment of Hypertension," William Goldring, M.D., New York City.
3. "The Present Status of Quinidine Therapy," Edwin P. Maynard, M.D., Brooklyn.

SECTION ON SURGERY

Chairman..... Charles W. Webb, M.D, Clifton Springs
Secretary..... Arthur M. Wright, M.D., New York City

Tuesday, June 2nd at 10:30 A. M.
Place of Meeting.....Hotel Syracuse

1. "Uroselectan—A New Method of Visualizing the Upper Urinary Tract," Lantern Demonstration, Oswald Swinney Lowsley, M.D, New York City.

Discussion by George W. Stark, M.D., Syracuse.

2. "Exophthalmic Goitre in Children," George E. Beilby, M.D., Albany; James G Carlton, M.D., Albany.

Discussion by Martin B. Tinker, M.D., Ithaca.

3. "Plastic Surgery, Its Uses and Limitations," Lantern Demonstration, Clarence R. Straatsma, M.D., New York City.

4. "Fixation of Fractures by Removable Metallic Lag Bolts," Lantern Demonstration, Homer J. Knickerbocker, M.D, Geneva.

Discussion by Ross G. Loop, M.D., Elmira.

Wednesday, June 3rd at 9:00 A. M.
Place of Meeting.....Hotel Syracuse

SYMPOSIUM ON ACUTE ABDOMEN

1. "Acute Abdomen from the Surgeon's Point of View," William D. Johnson, M.D., Batavia.

2. "Acute Abdomen from the Internist's and Practitioner's Point of View," Clayton W. Greene, M.D., Buffalo.

3. "The Present Status of Acute Appendicitis in a General Hospital. "A Résumé of One Year's Admissions for Appendicitis," John J. Morton, Jr., M.D., Rochester.

4. "Post-operative Ileus, Its early Recognition and Control," Donald Guthrie, M.D., Sayre, Pa. (By invitation.)

Discussion by Stanley R. Hare, M.D., Batavia, Alfred K. Bates, M.D., Auburn.

SECTION ON OBSTETRICS AND GYNECOLOGY

Chairman..... Onslow A. Gordon, Jr., M.D., Brooklyn
Secretary..... George H. Bonnefond, M.D, Utica

Tuesday, June 2nd at 10:30 A. M.
Place of Meeting.....Hotel Syracuse

1. "Uterosalpinography with Pneumoperitoneum," Lantern Demonstration, Arthur S. Unger, M.D., New York City.

2. "Dilatation and Its Interpretation," Paul T. Harper, M.D., Albany.

3. "Judgment in Gynecological Problems," George B. Broad, M.D., Syracuse.

4. "The Responsibility of the General Practitioner in Menopausal Bleeding," James E. King, M.D., Buffalo.

Wednesday, June 3rd at 9:00 A. M.
Place of Meeting .....Hotel Syracuse

1. "The Ascheim—Zondek Reaction in Immature Rabbits," Ferdinand J. Schoeneck, M.D., Syracuse.

2. "Repair of Second and Third Degree Lacerations of Perineum and Rectocele." A motion picture with sound. Harold O. Jones, M.D., Chicago, Ill. (By invitation.)

3. "The Technic of Elective Version and Extraction with immediate repair to the Birth Canal Injuries," Irving W. Potter, M.D., Buffalo.

SECTION ON PUBLIC HEALTH, HYGIENE AND SANITATION

Chairman.....Arthur T. Davis, M.D., Riverhead
Secretary.....Frank W. Laidlaw, M.D., Middletown

Tuesday, June 2nd at 10:30 A. M.
Place of Meeting.....Hotel Syracuse

1. "Tularemia," Edward Francis, M.D., Washington, D. C. (By invitation.)

2 "Psittacosis," Robert H. Riley, M.D., Baltimore, Md. (By invitation.)

3. "Human Rabies," Melville D. Dickinson, M.D., Rockville Center.

Wednesday, June 3rd at 9:00 A. M.

Place of Meeting.....Hotel Syracuse

1. "Opportunities for Preventive Medicine in New York State," William H. Ross, M.D., Brentwood.

2. "Veterinary Aspects of Undulant Fever," F. J. Devine, D.V.S., Goshen. (By invitation.)

3. "Laboratory Diagnosis of Undulant Fever," Ruth Gilbert, M.D., Albany.

SECTION ON PEDIATRICS

Chairman.....Marshall C. Pease, M.D., New York City
Vice-Chairman.....:Douglas P. Arnold, M.D., Buffalo
Secretary.....Brewster C. Doust, M.D., Syracuse

Tuesday, June 2nd at 10:30 A. M.

Place of Meeting.....Hotel Syracuse

The Section on Neurology and Psychiatry will meet with this Section for the first two papers.

1. "Treatment of Infection of the Central Nervous System by Forced Spinal Drainage." George M. Retan, M.D., Syracuse.

2. "Problem of Cerebral Dominance—Its Influence on Developmental Problems in Children, Particularly in the Acquisition of Language," Samuel T. Orton, M.D., New York City.

Discussion by Bernard Sachs, M.D., New York City, Lloyd H. Ziegler, M.D., Albany.

3. "Recent Advances in Urology—Their Relation to the Management of Children's Diseases," Joseph F. McCarthy, M.D., New York City.

Discussion by George W. Stark, M.D., Syracuse; John Aikman, M.D., Rochester; Roger H. Dennett, M.D., New York City.

Wednesday, June 3rd at 9:00 A. M.

Place of Meeting.....Hotel Syracuse

1. "Hirschsprings Disease Treated by Lumbar Sympathectomy," T. Wood Clarke, M.D., Utica.

Discussion by John J. Morton, Jr., M.D., Rochester.

2. "Bacteriophages as a Help in the Treatment of Infections in Children," Ward J. MacNeal, M.D., New York City.

Discussion by Samuel W. Clausen, M.D., Rochester.

3. "A Study of the Prophylactic Value of Various Antirachitic Agents," Adolph G. DeSanctis, M.D., New York City.

Discussion by John Dorsey Craig, M.D.; B. Winston Jarvis, M.D., New York City.

4. "Diagnosis of Intracranial Hemorrhage in the New Born," Clifford G. Grulee, M.D., Chicago, Ill. (By invitation.) Discussion by Edward J. Wynkoop, M.D., Syracuse; Henry L. K. Shaw, M.D., Albany; DeWitt H. Sherman, M.D., Buffalo.

5. "Case Report of Celiac Disease." A. Clement Silverman, M.D., Syracuse.

SECTION ON NEUROLOGY AND PSYCHIATRY

Chairman.....Noble R. Chambers, M.D., Syracuse
Secretary.....Irving J. Sands, M.D., Brooklyn

Tuesday, June 2nd at 10:30 A. M.

Place of Meeting.....Hotel Syracuse

The Section on Neurology and Psychiatry will meet with the Section in Pediatrics for the first two papers.

"Psychiatry in Relation to Literature," Louis J. Bragman, M.D., Syracuse.

Wednesday, June 3rd at 9:00 A. M.

Place of Meeting.....Hotel Syracuse

1. "Tic Douloureux," Henry W. Williams, M.D., Rochester.

2. "Some Comments on the Relationship of Mental Deficiency to Misconduct." Vernon Branham, M.D., Albany.

3. "The X-ray Diagnosis and Treatment of Radiculitis Due to Spinal Arthritis," Lee A. Hadley, M.D., Syracuse.

4. "The Signs and Symptoms of Multiple Sclerosis with Particular Reference to Early Manifestations," Albert G. Odell, M.D., Clifton Springs.

SECTION ON EYE, EAR, NOSE AND THROAT

Chairman.....Conrad Berens, M.D., New York City
Secretary.....Richard T. Atkins, M.D., New York City

Tuesday, June 2nd at 10:30 A. M.

Place of Meeting.....Hotel Syracuse

1. "Roentgenological Studies of the Larynx and Adjacent Structures." Mervin C. Myerson, M.D., New York City.

Discussion by Frederick J. O'Connor, M.D., Syracuse.

2. "Management of Eye Injuries," Nelson S. Weinberger, M.D., Sayre, Pa. (By invitation.)

Discussion by Walter S. Atkinson, M.D., Watertown.

3. "Recent Advances in the Diagnosis and Treatment of Chronic Diseases of the Nose and Throat," George L. Tobey, M D., Boston, Mass. (By invitation.)

Discussion by Richard T. Atkins, M.D., New York City.

4. "Recent Advances in Ophthalmic Surgery," Webb W. Weeks, M.D, New York City.

Discussion by Arthur J. Bedell, M.D., Albany.

Wednesday, June 3rd at 9 00 A. M.

Place of Meeting ....Hotel Syracuse

1. "The Place of the Otorhinolaryngologist in the Treatment of Eye Diseases," E Ross Faulkner, M.D., New York City.

Discussion by Thomas H. Halsted, M.D., Syracuse.

2. "Evaluation of all Etiologic Factors in Eye Diseases, Possibly Secondary to Disease of the Ear, Nose and Throat," James G. Dwyer, M.D., New York City.

Discussion by Searle B. Marlow, M.D. Syracuse.

3. "Tinnitus," Edwin S. Ingersoll, M.D., Rochester.

Discussion by Clyde A. Heatly, M.D., Rochester.

4. "Detachment of the Retina—Its Treatment," Edmond E. Blaauw, M.D., Buffalo.

Discussion by David H. Webster, M.D., New York City.

SECTION ON DERMATOLOGY AND SYPHILOLOGY

Chairman..... .....Earl D. Osborne, M D, Buffalo
Secretary..... ...Leo Spiegel, M.D., New York City

Tuesday, June 2nd at 10:30 A. M.

Place of Meeting.. ... .Hotel Syracuse

SYMPOSIUM ON SYPHILIS

1. "Cisternal Puncture: Further Observations on Headache and Practical Value," Morris A. Lyons, M.D., New York City.

2. "The Line Precipitation Test with Spinal Fluids in Neurosyphilis," Joseph J. Eller, M.D., New York City.

3. "The Treatment of Neurosyphilis with Tryparsamide," Harry C. Solomon, M.D., Boston, Mass. (By invitation.)

4. "The Treatment of Early Neurosyphilis," A. Benson Cannon, M.D., New York City.

Discussion by Harry C. Saunders, M.D., New York City; Albert R. McFarland, M.D., Rochester.

Wednesday, June 3rd at 9:00 A. M.

Place of Meeting.....Hotel Syracuse

SYMPOSIUM ON MYCOTIC DERMATITIS

1. "Sporotrichosis: Its Infectivity for Plants and Animals," J. Gardner Hopkins, M.D., New York City.

2. "Fungus Infections of the Hands and Feet: Observations as to Their Incidence in New York City," George C. Andrews, M.D., New York City.

3. "The Treatment of Dermatophytosis: A Résumé of Personal Experiences." Paul E. Bechet, M.D., New York City.

Discussion by Charles M. Williams, M.D., New York City; George M. Fisher, M.D., Utica.

SYMPOSIUM ON ECZEMA

4. "The Reaction of the Skin and Its Secretions in Eczema," Oscar L. Levin, M.D., New York City; Seymour H. Silvers, M.D., New York City.

5. "The Key to the Mechanism of Eczema," Walter J. Highman, M.D., New York City; Samuel M. Peck, M.D., New York City.

Discussion by Howard Fox, M.D., New York City; Jerome Kingsbury, M.D., New York City; Herbert H. Bauckus, M.D., Buffalo.

SESSION ON PHYSICAL THERAPY

Chairman.....*Richard Kovacs, M.D., New York City*

Wednesday, June 3rd at 9:00 A. M.

Place of Meeting.....Hotel Syracuse

1. "The Application and Limitations of Light in Therapy," Brian O'Brien, Ph.D., Rochester. (By invitation.)

2. "Physical Therapy in Traumatic Conditions," Kristian G. Hansson, M.D., New York City.

3. "Treatment of Arthritis," John S. Coulter, M.D., Chicago, Ill. (By invitation.)

4. "The Purposes and Aims of the State Development at Saratoga Springs," Carl R. Comstock, M.D., Saratoga Springs.

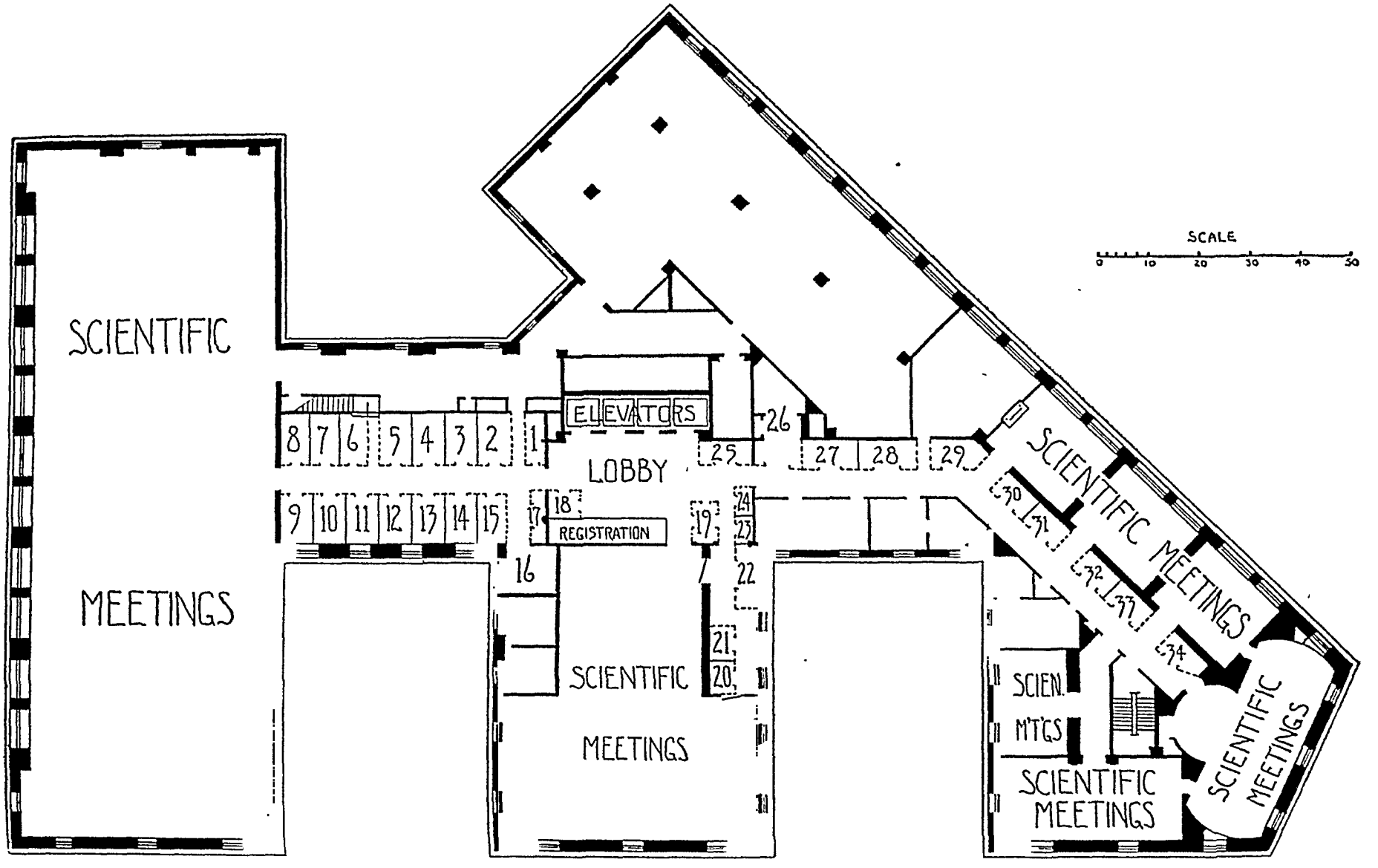


Diagram of Exhibit Hall, Hotel Syracuse, Syracuse, New York.
Annual Meeting, Medical Society of the State of New York, June 1-2-3, 1931

THE TECHNICAL EXHIBITS AT THE ANNUAL MEETING

One of the most pleasing features of the arrangements for the Annual Meeting of the Medical Society of the State of New York to be held in Syracuse June 1-3, 1931, will be the fact that all the different departments of the meeting will be housed in one building,—the Hotel Syracuse The technical exhibits will be displayed on the corridors of the tenth floor, through which all the doctors attending the sessions will pass

The majority of the exhibitors are all friends from among our advertisers, who have supported us in the past years and to whom we are indebted for one of the pleasing features of the Annual Meetings

DESCRIPTIONS OF THE TECHNICAL EXHIBITS

Booth 9—Anglo-French Drug Company (U. S. A.), Inc., New York N Y, will show motion pictures of all types of Surgery including that of the Head Neck and Thorax under Spinal Anesthesia, by Dr Harry Koster of Brooklyn, N Y

Booth 16—The Cameron's Electric Specialty Company, Chicago, Illinois, will exhibit Cameron's Electro-Diagnostoset, Cameron's (Radio Frequency) Cauterodyne, Cameron's Thermaloop Cautery and Cameron's Electro Cautery A 36-page monograph, profusely illustrated in colors on the use of electric light in the practice of medicine, will be presented free to every physician registering at the meeting, or mailing the coupon in the advertisement on Page xii of the advertising department of this Journal

Booth 23—The Crookes Laboratories, Inc, New York, N Y, will feature a number of their *Collosol* medicinal specialties, particularly *Collosol Argentum, Collosol Manganese, Collosol Iodine* and *Collosol Kaolin* Mr S L Scott, special representative, formerly of London, England will be in charge of the exhibit, and will demonstrate to interested physicians the phenomenon of the Brownian Movement showing the dynamic nature of colloids as represented by a number of Crookes Collosol preparations

Booth 33—Davies, Rose & Co., Boston, Mass An informative and interesting visit may be made here where therapies which are engaging wide attention are being discussed Pills of Stramonium Leaves for the sequelæ of encephalitis, and Trethylene for trigeminal neuralgia are among those which are of particular interest to neurologists

Booth 13—The Denver Chemical Mfg. Co., New York, N Y, will exhibit Antiphlogistine, which was introduced to the medical profession nearly forty years ago, and is now employed by physicians in all parts of the world in the treatment of inflammatory and congestive conditions You are invited to visit the exhibit and take away a package of Antiphlogistine with you

Booth 6—The DeVilbiss Company, Toledo Ohio, manufacturers of Atomizers and Vaporizers for home and professional use, has reserved space No 6

The DeVilbiss Company has in the past year made many improvements in its line of Atomizers Many models have been added which will be of interest to the profession These will all be shown at the Syracuse meeting

Booth 10—The Drug Products Co., Inc., Long Island City, N Y, will display an exhibit including three specialties Bismuth Sodium Gluconate, a water and tissue soluble Colloidal *bismuth for intramuscular use*, Pamol, a Colloidal emulsion of mineral oil, agar agar and psyllium seed overcoming objectionable features of ordinary emulsions of this type, and Pulvoids Digitalis Folium, a preparation of whole leaf Digitalis, standardized by the Cat Method of Hatcher and Brody

Booth 19—The Electro Surgical Instrument Company, Rochester, N Y, pioneers in the field of electrically lighted diagnostic and surgical instruments, will display its complete line

Included in the display will be the following instruments Cystoscopes (Braasch) (David), Urethroscopes (Young), Bronchoscopes (Imperatori), Transilluminators (Gibson) (Sullivan), Procto Sigmoidoscope (Tuttle) (Lynch), Fono faryngoskop (Russell), Non Gag Glottoskop (Russell), Single and Double Table Transformers etc

Booth 29—The Foregger Company, Inc., New York, N Y Oxygen carbon dioxide outfits for those who prefer to make their own mixtures, and for the use of "ready-made" mixtures, will be featured by the Foregger Company, in addition to the Metric and Gwathmey Gas Machines, the Henderson and Flagg Resuscitation Outfits and the Guedel Oxygen Tent

Booth 31—The General Electric X-Ray Corporation, Chicago and New York, will exhibit the Victor Electrocardiograph and a rather complete display of Physical Therapy equipment, including their recently announced prescription type Ultra Violet Quartz Lamp for use in the patient's home, and their new *Micro-Surgical* Diathermy Unit with "Micrometer Control"—an ultra modern compact and portable *surgical unit* for the specialist

Booth 18—Gerber Products, Division of the Fremont Canning Company, Fremont, Michigan, will show Strained Vegetables for infant feeding and special diets. These products have gained wide acceptance by the medical profession and the trade during the two years since being introduced.

Strained, unseasoned, specially prepared, these products are of unusual interest because they offer the physician an opportunity for more perfect control of infant diets and insure uniform, properly prepared feedings.

Booth 1—Granger Calcium Products, Inc., Brooklyn, N. Y., will display Cal-Sal Tablets and Wafers and Paste for infants, and Mineralized Candy, and Alkaline Ash Oatmeal. Their business is based on the well-known facts that many serious diseases are attributable to Acid Ash, or Calcium-eliminating neutral foods; that calcium is the safe alkaline; and the now known fact that complete nutrition can be obtained by the scientific use of the proper commercial salts of the deficient minerals.

The business of the Company is done with dispensing physicians and pharmacists who order on physicians' prescriptions.

Booth 17—Horlick's Malted Milk Company, Racine, Wis., will exhibit its well-known milk preparations. Have you found how grateful patients are for the suggestion of Horlick's Malted Milk Tablets as a relief from the sameness of the Liquid Diet? The tablets have the same nourishing and remarkably digestible qualities as the powder form, possessing all the goodness of full-cream milk, choice wheat, and malted barley.

Horlick's Original Malted Milk in both natural and chocolate flavors, both in powder and tablet form, and Horlick's Milk Modifier, a maltose and dextrin product, will be featured at the Horlick booth.

Booth 22—Industrial Hygiene Exhibit, Division of Industrial Hygiene, New York State Department of Labor. This Exhibit, supported by the State, shows typical diseases resulting from various occupational poisons covered by the Workmen's Compensation Act; also provides literature on industrial hazards and methods of preventing accidents. It consists of twelve descriptive screens, continuous moving pictures, wax models of diseased conditions, special goggle and splinter panels, model of mine generating dust, and preserved silicotic and anthracotic lungs.

Booth 8—The Kalak Water Company of New York will exhibit and physicians are invited to call and test for themselves the palatability of this dependable alkalinizing agent. Visit the Kalak Water booth when you are thirsty or when you suffer from manifestations of acidosis. Kalak Water is not a laxative, and you can partake of it freely with benefit.

If you are interested in a simplified method of rapidly determining the intensity of the urinary acidity, ask the representative at the booth to demonstrate the Kalak Indicators.

Booth 14—Kellogg Company, Battle Creek, Michigan. Doctors are invited to visit Booth 14 where the Kellogg Company of Battle Creek, Michigan, has a display of its products, including Kaffee Hag Coffee. This coffee is a carefully selected blend of coffees from which the caffeine has been removed. Doctors will find Kaffee Hag Coffee a satisfactory non-stimulating beverage to suggest for special diets.

Booth 12—The Kny-Scheerer Corporation will occupy Booth 12, where it will exhibit its well-known line of Surgical Instruments and Sundries.

Booth 7—M. & R. Dietetic Laboratories, Inc., Columbus, Ohio, will exhibit Similac, a completely modified milk. A representative will be pleased to answer any questions pertaining to its use, either as a complement to breast feeding or as a complete diet for infants deprived of breast milk.

Booths 3 and 4—Mead Johnson & Co., Evansville, Ind., will have on exhibit its complete line of infant diet materials including Mead's Dextri-Maltose, Mead's Cod Liver Oil, Mead's Viosterol, Mead's Recolac, Mead's Non-Curdling Powdered Protein Milk, Mead's Non-Curdling Powdered Lactic Acid Milk and Mead's Powdered Yeast.

Mead's Cereal will be introduced. A cereal rich in vitamins and minerals will undoubtedly be received with deep interest by physisians.

There will also be for the examination of physicians a complete line of Mead's services such as diets for older children, height and weight charts, etc., all of which are free to members of the medical profession in any quantity desired.

Booth 25—Mellin's Food Company, Boston, Mass. An exchange of ideas and opinions relative to the feeding of infants and the preparation of nourishment for adults requiring a restricted diet is of much value, particularly in view of the recognized importance of selecting the food material best adapted to the individual requirements. The Annual Session of the Medical Society of the State of New York affords an opportunity for such discussion not only in the various sections but in the exhibit hall where representatives of the Mellin's Food Company will await physicians' questions and be ready to discuss the subject matter from the maker's viewpoint.

Booth 34—The Merrell-Soule Company, Inc., New York, N. Y., is exhibiting its group of powdered milk products for infant feeding and child diet. Klim—the powdered full cream cow's milk—will be served ice cold, and its application to the general problem of nutrition described, with particular reference to high caloric diets for underweight children. Since Klim is the most economical powdered milk offered the medical profession, its use has a very real appeal to the patient of moderate means. Be sure to get your glass of Klim and explanatory literature

Booth 15—The Mutual Pharmacal Company, Inc., Syracuse, N. Y. will exhibit products of their laboratory at Booth 15.

The Mutual has an enviable reputation for the dependability and appearance of their products and the exhibit is representative of these qualities. Physicians are cordially invited to visit the booth.

Booth 32—The Pelton & Crane Company of Detroit, Michigan, will show the new Pelton Automatic Autoclave, together with other Pelton Adjustable-Automatic Sterilizing Equipment. Also on display is the Pelton line of Surgical Cuspidors, and the new Pelton Syringe Sterilizer with removable procelain enamelled boiler.

Booth 28—S. M. A. Corporation, Cleveland, Ohio. Complete details concerning S. M. A. service may be obtained at their booth. Representatives will explain the special spraying process for producing all powdered products of their laboratory. They will also tell about the special packing process for Protein S. M. A. (Acidulated) powder and Smaco Products that accomplishes the removal of destructive oxygen present in the absorbed film of air on the surface of the milk particles responsible for the development of rancidity.

Booth 2—E. R. Squibb & Sons, Brooklyn, N. Y., extend a cordial invitation to physicians attending the Syracuse Meeting of the Medical Society of the State of New York, to visit the Squibb Booth in which will be featured a new potent concentrate of the cod-liver oil vitamins, a physiologically tested follicular hormone preparation, and a chemo-therapeutic agent for the treatment of genito-urinary infections. Competent representatives will be in attendance to furnish information concerning any Squibb product.

Booths 20 and 21—The State Department of Health. The milk control exhibit of the State of New York Department of Health is interesting and instructive. An automatic moving picture shows the department's laboratory busses at work. Materials for making standard plate counts and direct microscopic counts of milk are also shown, together with posters giving facts concerning New York State milk control work.

Booth 27—Tailby-Nason Company, Boston, Mass., will introduce an International Delegate to the Annual Meeting of the Medical Society of the State of New York. This distinguished visitor and ally to the American Medical Profession hails from the Lofoten Islands of Norway. The delegate is next to the largest cod fish ever caught and was taken from the Lofoten Waters by Nason & Co., producers of Nason's Palatable Cod Liver Oil. His weight was over sixty-five pounds. His liver made nearly three pints of Nason's light golden, sweet and palatable oil. This Giant Cod is receiving at Booth 27 and is an important part of Tailby-Nason's exhibit of Nason's Palatable Lofoten Cod Liver Oil. Please call and see the distinguished visitor.

Booth 30—George Tiemann & Co., New York, N. Y., will exhibit, in addition to a full line of surgical instruments, its "velvet eye" soft rubber catheters, and colonic tubes, made of the famous Tiemann rubber compound, in a complete range of sizes. Among the worthwhile novelties are the nasal punches made in miniature sizes to fit the universal handle. These have proven very useful and popular. George Tiemann & Co. have standardized some of the popular types of artery forceps, etc., with the result that they can offer chromium plated quality instruments at the price of ordinary ones. This line will also be included in the exhibit.

Booth 11—Petrolagar Laboratories, Chicago, Illinois, will present Scientific Medical Motion Pictures in a beautiful modern display.

Visitors may relax and devote uninterrupted attention to this splendid library of films of international reputation. The list comprises twelve exceptionally instructive subjects. Presentation before accredited medical groups may be arranged for any place or date without charge.

Booth 5—The Westinghouse X-Ray Company, Inc., Long Island City., N. Y., will exhibit two pieces of apparatus which are of wide popular interest to the medical profession at the present time. The first of these—the Westinghouse Model F Endotherm—for electrosurgery, called by newspaper writers the "Electric Knife," will be demonstrated continuously during the meeting. The other—the Westinghouse Sinutherm—is a unique new development which makes possible the simultaneous application of diathermy and low voltage therapeutic currents with a single pair of electrodes, as well as the application of either modality separately.

The new Westinghouse Mobile Bedside *x*-ray Unit, also the Westinghouse Myostat—Galvanic and Wave Current Generator, will be shown.

THE CITY OF SYRACUSE—ANNUAL MEETING JUNE 1-3, 1931

The early history of Syracuse centers particularly around the salt industry, and for that reason it is often spoken of as the Salt City. The principal business thoroughfare is known as Salina Street. While production of salt no longer occupies the foremost place among Syracuse industries, salt coming from the wells south of the city is still an important and necessary part of the enormous chemical industry, known as the Solvay Process Company. On the land where the salt wells are located the Solvay Process Company operates an excellent dairy from which comes the highest grade of certified milk. Syracuse and the surrounding country is known all over the world for its excellent dairies. Milk is produced and cared for by the most modern methods. The standards set by the Syracuse Department of Health are unusually high which account in no small way for the remarkable health record of the city. Any physician who has the time and opportunity should visit some of the numerous dairies near Syracuse.

The Central City of New York is located in the midst of lakes, some of the most beautiful being called the Finger Lakes. From one of these, Skaneateles Lake, nineteen miles to the west, comes the sparkling water which supplies the city. No place in the world can boast of a better water supply. The scenery in this adjacent lake district is unsurpassed in beauty and grandeur. It is not far, less than one hundred miles, to the world famous playground and beauty spot of the Saint Lawrence River, the Thousand Islands.

Much of the acreage of the city proper is given over to parks some of which are very beautiful. Located in Thorndon Park is one of the most famous rose gardens. Visitors are asked to make a special note of this. It is within easy reach, about one mile east of the center of the city.

The many buildings of Syracuse University and the grounds upon which they are located will interest the visiting physicians. With an enrollment of more than five thousand students one will find all of the numerous activities of a modern, progressive university.

Modern hospitals and the College of Medicine of Syracuse University have for scores of years made the city one of the leading centers in medical education. Physicians will profit by visiting these institutions. Many of them are new. All of them are only a short distance from the hotels. Particularly impressive is the hospital and medical center in the University district. If you care to visit the general or special hospitals or any of the numerous clinics, the local physicians will see that your wish is fulfilled. The medical supervision of school children and the University student health service are public health activities exceptionally well organized. Should you be interested, representatives from these services will gladly accompany you and acquaint you with the activities.

With the city's adequate transportation, hotel facilities, numerous industries, golf courses, theaters, and unusual attractiveness, it is not surprising that Syracuse has become popular as a convention city. While famous for its industries, beauty, University, and school system, it is proudest of all of its health record. The united efforts of the citizens of Syracuse, especially the local medical profession, have resulted in one of the healthiest cities in the world. Many visitors interested in all phases of public health come to Syracuse annually to study the methods which have proved so successful. O. H. W. MITCHELL.

RECREATION IN SYRACUSE

Many physicians will plan for recreation and relaxation when they attend the Annual Meeting. The following facts regarding the recreation facilities of Syracuse are taken from the Convention Publicity and Tourist Bureau of the Syracuse Chamber of Commerce:

Close to Syracuse are many beautiful spots, any or all of which should be seen by every visitor to Syracuse. There are a number of delightful waterfalls, lakes and scenic features which will well repay a day or more stop-over in Syracuse for the purpose of seeing them. Listed below are those which are most easily accessible by motor.

Green Lake State Park at Fayetteville on the main highway to Utica, approximately eight miles east of the city. This park contains Round Lake and Green Lake.

Chittenango Falls, near the village of the same name and but a short distance from the main highway on the road to Cazenovia.

Cazenovia Lake, one of the most delightful summer resort points in Central New York.

Edwards Falls, near Manlius, between Fayetteville and Cazenovia.

Clark Reservation at Jamesville containing Green Lake. This is very unique from a geological standpoint.

NEWS NOTES

LEGISLATION

BULLETIN No. 10—MARCH 25, 1931

The osteopathic bill came up in both houses yesterday, March 24th, for final vote. It appeared in the Senate first and was passed with practically no debate, and by a short roll call. The following requested that they be recorded in the negative:

Mr. Berg
Mr. Hastings
Mr. Hofstadter
Mr. Howard
Mr. Knight
Mr. Lord
Mr. Love

Immediately the Senate bill was sent to the Assembly, where later in the day Mr. Tellier had his bill stricken from the calendar and the Fearon Senate bill substituted. After a brief discussion Mr. Cuvillier moved that the bill be recommitted. His motion was lost and Mr. Tellier asked then that the bill be passed. It was lost by a vote of 81 to 55. A record of the vote follows:

Ayes

Mr. Abbott
Mr. Alterman
Mr. Austin
Mr. Bernhardt
Mr. Byrnes
Mr. Canney
Mr. Davis
Mr. Dineen
Mr. Dunmore
Mr. Esmond
Mr. Falk
Mr. Gamble
Mr. Garnjost
Mrs. Graves
Mr. Hartshorn
Mr. Hathaway
Mr. Hewitt
Mr. Higgins
Mr. Hutchinson
Mr. Jenks
Mr. Killgrew
Mr. Lewis
Mr. Mandelbaum
Mr. Marks
Mr. McKay
Mr. Merriam
Mr. Miller, F. G.
Mr. Mittler
Mr. Moffat
Mr. Pack
Mr. Palmer
Mr. Paris
Mr. Pease
Mr. Piper
Mr. Porter, F. L.
Mr. Porter, H. E. V.
Mr. Potter
Mr. Rice
Mr. Richtmyer
Mr. Riley
Mr. Sargent
Mr. Searle
Mr. Sheldon
Mr. Steingut
Mr. Stephens, J. E.
Mr. Stevenson
Mr. Stockweather
Mr. Swartz
Mr. Tellier
Mr. Thistlethwaite
Mr. Thompson
Mr. Vaughan
Mr. Wemple
Mr. Whitcomb
Mr. Whitney

Nays

Mr. Reoux
Mr. Robinson
Mr. Roulier
Mr. Samberg
Mr. Saunders
Mr. Schanzer
Mr. Schwartz
Mr. Schwartzwald
Mr. Sheldrick
Mr. Smith, F. M.
Mr. Smith, R. B.
Mr. Smith, W. F.
Mr. Stone
Mr. Streit
Mr. Sullivan
Mr. Taylor
Mr. Theodore
Mr. Turner
Mr. Whittaker
Mr. Winters
Mr. Zimmerman

A word of comment with regard to this bill is appropriate. It was announced in both houses that the bill was drawn by Augustus Downing, ex-Deputy Commissioner of Education, and that the osteopaths took identically the same examination under the Regents as the medical men and, therefore, the bill was not undesirable and should be passed. In the Senate Dr. Love spoke against the bill, citing that although physicians and osteopaths took the same examination under the Regents, they were obliged to present different credentials before entering the examination, the physicians being asked to give evidence of having taken two years pre-medical work in a college and having passed one year's study each in pharmacology and materia medica.

In the Assembly Mr. Marcy, of Buffalo, made the principal address and appealed to the Assembly to defeat the bill on t[illegible] that to pass it would be to lower [illegible] tional standards established and jea[illegible] tected by the Regents. He stated bill were passed it would be used [illegible] dent for future appeals, not only by [illegible] paths themselves but by other [illegible] explained the fallacy in the claim [illegible] groups took the same examinatio[illegible] announced that the Board of [illegible]

filed an opposition to the bill while it was still in committee. Therefore, we feel that every physician reading this bulletin—and especially the county chairmen—should appreciate that those who voted against the osteopathic bill felt that they were supporting physicians and guaranteeing to the public the quality of medical service rendered.

We urge that every man whose legislators voted against this bill write immediately to them, expressing his appreciation of the support they have given. Please do not neglect this; it is a small matter, but it will mean a great deal to them and will, likewise, mean a great deal to us later. The chiropractic bill has not yet come upon the calendar so when you write, make a point of asking that this bill be accorded a similar fate.

TO COUNTY SOCIETY LEGISLATIVE CHAIRMEN

March 26, 1931.

There is enclosed a copy of the revised Wicks-Hutchinson bill. Please note the extensive revision which has been made. The Committee will appreciate your immediate comments on this late print.

The last print number for the Porter chiropractic bill is Assembly 2573. This bill will be voted upon Monday night. You will recall that it contains no waiver clause such as the bills of preceding years, but it is particularly objectionable in that it provides for the appointment by the Regents of a special examining board. Advise your legislators immediately, because we find from conversation that many of them are inclined to think the chiropractors need regulation such as this bill provides. Among these legislators are some of our closest friends. Promptly disabuse their minds of this impression.

TO COUNTY SOCIETY LEGISLATIVE CHAIRMEN

March 30, 1931.

Enclosed you will find the following bills:

Senate Int. No. 1788-Dunnigan, to amend the vehicle and traffic law, in regulation to requiring physical examinations of applicants for licenses to operate motor vehicles.

Senate Int. No. 1842, Print No. 2231-Wicks. This bill incorporates certain parts of Mr. Wicks' previous bill, Senate Int. No. 993, known as the Wicks-Hutchinson bill.

Senate Int. No. 1843, Print No. 2232-Wicks, incorporates another portion of the previous Wicks-Hutchinson bill.

You will note that the original bill has been broken into three parts thus far. One is the amended bill in the Assembly by Mr. Hutchinson, Print No 2638, and the other two are the ones named above.

Study carefully Senate bill Int. No. 1842, where you will find stated the powers of the Public Health Council.

Let us have your comments immediately, because the legislature may adjourn this week.

Very truly yours,
HARRY ARANOW,
WALTER A. CALIHAN,
JOHN J. RAINEY.
Committee on Legislation.

BULLETIN No. 11—MARCH 31, 1931

The Assembly reached the Porter Chiropractic bill last night and passed it by a vote of 78 to 57. 77 votes are required for passage, so you can see that the bill barely got by. We were very much surprised at some of the affirmative votes that were cast and are sure that you will be. There is beneath a statement of the vote. The bill now goes to the Senate, where it will rest with the Education Committee. We hope that we can keep it there until the legislature closes, but do everything that *you* can to keep it there—write or telegraph to the members of the Education Committee, the chairman of which is Senator Webb. You have the rest of the names in your white book. Also send wires to Senator Knight and Senator Downing:

Ayes

Mr. Abbott
Mr. Allen
Mr. Alterman
Mr. Ambro
Mr. Austin
Mr. Bentley
Mr. Bernhardt
Mr. Byrnes
Mr. Canney
Mr. Cohen
Mr. Cornaire
Mr. Cuvillier
Mr. Davis
Mr. Dooling
Mr. Downs
Mr. Doyle
Mr. Dunmore
Mr. Eberhard
Mr. Esmond
Mr. Falk
Mr. Gamble
Mr. Goodrich, M.E.
Mrs. Graves
Mr. Hartshorn
Mr. Hathaway
Mr. Heffernan
Mr. Higgins
Mr. Hutchinson
Mr. Hyman
Mr. Jenks
Mr. Kahan
Mr. Kantowski
Mr. Killgrew
Mr. Kirnán
Mr. Latour
Mr. Lewis
Mr. Lynde
Mr. McKay
Mr. Merriam
Mr. Miller, F.G
Mr. Mittler
Mr. Nathanson
Mr. Pack
Mr. Palmer
Mr. Paris
Mr. Pease
Mr. Pollard
Mr. Porter, F.L.
Mr. Porter, H.E.V.
Mr. Post
Mr. Potter
Mr. Rice
Mr. Richtmyer
Mr. Riley

Ayes

Mr. Samberg
Mr. Sargent
Mr. Searle
Mr. Sheldon
Mr. Sheldrick
Mr. Stephens, D.M.
Mr. Stephens, J.E.
Mr. Stevenson
Mr. Stockweather
Mr. Story
Mr. Sullivan
Mr. Swartz
Mr. Taylor
Mr. Tellier
Mr. Theodore
Mr. Thistlethwaite
Mr. Thompson
Mr. Turner
Mr. Vaughan
Mr. Wallace
Mr. Wemple
Mr. Whitcomb
Mr. Whitney
Mr. Whittaker

Nays

Mr. Albert
Mr. Breen
Mr. Breitenbach
Mr. Bungard
Mr. Cahill
Mr. Catchpole
Mr. Close
Mr. Condon
Mr. Cooney
Mr. Dennen
Mr. Devany
Mr. Esquirol
Mr. Fake
Mr. Farrell
Mr. Fayerweather
Mr. FitzGerald
Mr. Gimbrone
Mr. Goodrich, H.E.
Mr. Hanley
Mr. Hawkins
Mr. Hayes
Mr. Hewitt
Mr. Holley
Mr. Ives
Mr. Kelly
Mr. Lamont
Mr. Livingston
Mr Mandelbaum
Mr Marcy
Mr. McCreery
Mr. McGrath
Mr. McNamara
Mr. Messer
Mr. Miller, F. A.
Mr. Moffat
Mr. Moran
Mr. Mulligan
Mr. Munsil
Mr. O'Reilly
Mr. O'Rourke
Mr. Piper
Mr. Pratt
Mr Reidy
Mr. Reoux
Mr. Robinson
Mr. Roulier
Mr. Saunders
Mr. Schanzer
Mr. Schwartz
Mr. Schwartzwald
Mr. Smith, F. M.
Mr. Smith, R. B.
Mr. Smith, W. F.
Mr. Steingut
Mr. Streit
Mr. Winters
Mr. Zimmerman

New Bills

Senate Int. No. 1762—Wicks (Assembly Int. No. 2037—Hartshorn), amends the State Charities Law relative to the use of the sign "Clinic" or other words to the same effect. When we sent out the bill, we called attention to the fact that in the vicinity of large industries, particularly in New York City, it is reported that certain physicians are conducting their offices in the manner of dispensaries, but are not under the Dispensary Law, because they mark their offices as "Clinics" or with some other similar designation. This bill has now passed both houses and goes to the Governor.

Senate Int. No. 1779—Howard, is the companion to Assembly Int. No. 817—Story, which we reported in Bulletin No. 4; providing no hospital supported wholly or partly at public expense shall charge for medical services given while operating a clinic to which public is invited. The bill is still in committee in both houses.

Senate Int. No. 1788—Dunnigan, adds a new section to the Vehicle and Traffic Law, requiring all applicants for licenses or renewals thereof to pass a medical and physical examination by a physician employed by motor vehicles bureau. This bill may be too exacting to meet with general approval, but certainly there is need for some legislation along this line. We all know that there are color blind men driving cars; others who have very defective vision, and some with defective hearing, all of which can readily be detected by physical examination.

Senate Int. No. 1842—Wicks (Assembly Int. No. 2291—Hutchinson), adds to the Public Health Law relative to enforcing sanitary code, to laboratories, inspection of State institutions and parks, to county health districts, pollution of waters, and empowering the State Commissioner to conduct experiments to discover economical and practicable methods for eliminating or disposing of industrial wastes and sewage. Referred to the Health Committee.

Senate Int. No. 1843—Wicks (Assembly Int. No. 2290—Hutchinson), amends the State Finance Law relative to fiscal supervision of state reconstruction home at West Haverstraw and hospital for treating incipient pulmonary tuberculosis at Ray Brook and transferring appropriations made therefor. Referred to the Finance Committee.

These two bills are parts of the original Wicks-Hutchinson bill. It has seemed wise to break the old Wicks-Hutchinson bill into smaller bills. In the Assembly Mr. Hutchinson still carries what is left of the original W-H bill, under Print No. 2638. This bill provides principally for the acquisition of land, the establishment of state tuberculosis hospitals, and the treatment of venereal diseases.

The Committee has carefully studied these three bills and feels that they deserve our support. With the exception of section 20-b in Senate bill Int. No. 1842, Print No. 2231, and Assemly Int. No. 2291, Print No. 2780, which provides for the creation of county boards of health and specifies that three of the seven members shall be physicians, there is no reference to the county health unit. Probably another bill will be created carrying the remaining part of the original Wicks-Hutchinson bill.

Action on Bills

Assembly Int. No. 1864—F. L. Porter, permitting the health board of a consolidated district to include in estimate of expenses sum for employing a nurse in connection with business of lying-in asylum and for public health work, has passed the Assembly and is reported out of committee in the Senate.

Assembly Int. No. 1887—Gimbrone, amending the Public Health Law requiring health officers hereafter appointed in cities of more than 50,000

to devote entire time to duties of office and not engage in the practice of medicine, has passed the Assembly and is reported out of committee in the Senate.

Adjournment is likely to be not later than April 10th; hence communicate immediately with your legislators regarding these bills, in order that they may be acted upon this year.

SPECIAL BULLETIN, APRIL 4, 1931

STATEMENT ON STATE HEALTH PROGRAM ISSUED BY SPEAKER McGINNIES AND SENATOR KNIGHT

Subsequent to the reading of Governor Roosevelt's special message to the legislature today (April 2nd), in relation to the pending bills to carry into effect the recommendations of the State Health Commission, Senator Knight and Speaker McGinnies issued the following statement:

We have not changed our minds as to the value of the work done by the Special Health Commission. We are enacting into law practically all the important recommendations of the Commission except that requiring the establishment of a county health unit in every county. This particular suggestion, although it has received a great deal of important support, including the approval of the State Medical Society, has also met some opposition from certain parts of the state. Some of this opposition is doubtless based on an imperfect understanding of the exact provisions of the bill, such as the belief stated in various quarters that the bill requires cities to be included in a county health unit, whereas it simply provides that cities may, in their own discretion, at any time, join a county health unit. Also it has been currently reported that the bill would necessarily greatly increase local expenditures for health work; whereas, in fact, it not only would not compel any increase but by reason of State aid would in some instances actually diminish the local tax burden for health purposes, and would simply permit counties in their discretion to establish new, desirable health activities for which the state would reimburse them fifty per cent. While it is true that the bill would *require* the establishment of a county health unit in each county, it would at the same time remove the existing requirement that every town and village, irrespective of size, *must have* a board of health and health officer.

The decision on our part not to press this provision this year is in no sense a disapproval of this recommendation of the State Health Commission, but it seems to the legislative leaders desirable that there should be further opportunity for consideration and discussion of this provision, and that it is desirable that so important a change as this in local health organization should lay over until next year to afford an opportunity for fuller consideration and discussion.

We assume that this recommendation will be renewed next year and that it will have at that time the serious consideration on the part of the legislature which its importance deserves. Meantime, conference and discussion between its advocates and opponents may well result in a greater unanimity of opinion in regard to it.

SPECIAL BULLETIN—APRIL 9, 1931

Up until this morning the Senate Committee on Education had a vote of five to three against reporting out the chiropractic bill. Since then three members of the committee changed their vote and the bill was reported out by the chairman and on the objection of Senator Crawford was referred to General Orders, which, as many of you will recall from past experience, is called the "grave yard." The chiropractic bill for this year is dead.

The Senate has also, within the last hour, passed the portions of the Wicks-Hutchinson bills—Assembly Int. No. 1362, late Print No. 2638; Assembly Int. No. 2290, Print No. 2779—which provide for the erection of three tuberculosis hospitals. These bills have already passed the Assembly and now go to the Governor. The remainder of the Wicks-Hutchinson bills will be put over until next year.

The osteopathic bill still lies on the table in the Assembly, but we know that Mr. Tellier is planning to attempt to take it off tomorrow, when there will be a close call of the house. If you are not certain about how your Assemblyman will vote, wire him immediately at the Assembly Chamber. The vote is not likely to be taken before noon.

HARRY ARANOW,
WALTER A. CALIHAN,
JOHN J. RAINEY,
Committee on Legislation.

CATTARAUGUS COUNTY MEDICAL SOCIETY

(Published at the Request of Cattaraugus County)

A meeting of the Medical Society of the County of Cattaraugus was held March 24, 1931, at the Dudley House, at Salamanca, N. Y. The attendance, in view of weather conditions, was excellent. Twenty-six members were present, out of a total membership of forty-eight. In addition representatives were present from neighboring counties.

After dinner, the meeting was called to order, with the president, Dr. Leo Reinmann, presiding. A short business meeting ensued, which included the election of a new member, Dr. Theodore J. Holmlund, of Cattaraugus.

The meeting was then addressed by Dr. George Eckel, a past president of the Erie County Medical Society. Dr. Eckel dwelt upon certain aspects of the Wicks-Hutchinson Bill, now in the Legislature, and explained the basis of the opposition manifested by the Erie County Medical Society to this bill, and to certain of the recommendations of the Governor's Special Health Commission. He brought out the fact that the actual number of practicing physicians on the commission was only two or three at the most, and that any claim that the findings of the commission represented the viewpoint of the practicing physician was open to doubt on this score.

He pointed out the undesirability of haste in the passage of this particular bill, and depolred the fact that the organized profession was being given very little time or opportunity to acquaint itself with the bill.

He counseled the physicians present to consider his words, and the wording of the bill, very carefully.

Following Dr. Eckel's address a spirited discussion ensued. The following resolution was then introduced by the Committee on Public Relations, and was passed unanimously, with the request that the Journal publish it and the account of the meeting.

WHEREAS, A bill has recently been introduced into the Legislature of the State of New York, this bill being termed the Wicks-Hutchinson Bill, and

WHEREAS, This bill is being actively pushed by various of the officers of the Medical Society of the State of New York, although it has not to our knowledge received the endorsement of the component county medical societies of the State Medical Society, or the House of Delegates thereof, and

WHEREAS, This aforesaid bill provides for the almost immediate institution of COMPULSORY county health departments in New York State outside of Greater New York, and

WHEREAS, Such compulsory institution of county health units has not to our minds received sufficient study from the organized medical profession as to their desirability, necessity, or efficiency, and

WHEREAS, Our experience in Cattaraugus County with a county health unit has not as yet completely convinced us of the tremendous advantages claimed by its advocates for the compulsory county health unit plan, and

WHEREAS, There is apparent a very marked haste in the speeding of this bill through the various legislative channels; with the report of the commission advocating the bill, the activities of the State Medical Society promoting the bill, and the introduction of the bill into the Legislature being almost simultaneous phenomena,

Now, Therefore, Be It Resolved, That the Medical Society of the County of Cattaraugus, in meeting assembled March 24, 1931, go on record as opposed to the Wicks-Hutchinson Bill at the present time, until provision is made for further and complete study of its provisions by the organized physicians of New York State, and be it further

Resolved, That the Medical Society of the County of Cattaraugus record its opposition to the COMPULSORY nature of this bill, and record itself in opposition because no provision is made in this bill for the abolishment of a county board of health should it prove unnecessary or inefficient, and be it further

Resolved, That the Cattaraugus County Medical Society deplore the activities of officers of the State Medical Society in advocating the passage of this bill before a meeting of the House of Delegates of the State Medical Society has occurred, and complete opportunities have been afforded the medical profession of the State for study of the bill in question, and be it further

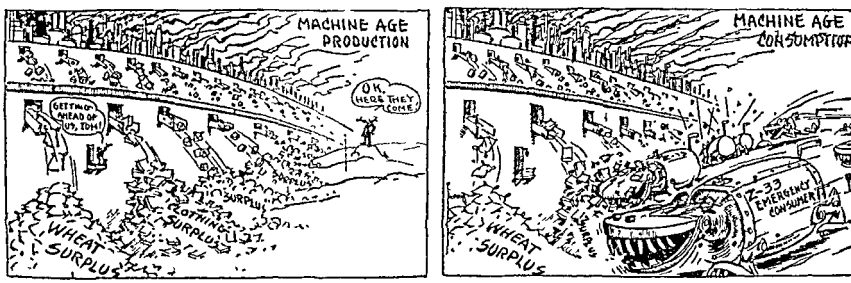
Resolved, That copies of this resolution be immediately sent to the Executive Officer of the State Medical Society, with a request for prompt transmission to the various officers and committees of the State Medical Society, and to the *Journal* of the Medical Society of the State of New York, with request for publication, and to the various county medical societies in the State of New York.

Carried: Ayes, 26; nays, 0. Total membership, 48. Total present, 26.

RAYMOND B. MORRIS,
Secretary.

THE DAILY PRESS

CONVENTIONALIZED HEALTH PUBLICITY



New York Herald Tribune, March 17, 1931

Are we approaching a machine age in the production and distribution of health service? How much health service can an individual or a community absorb? How many pounds of spinach should a child eat in order to attain a maximum of growth and vigor? Are we approaching a machine method in the preparation of health talks? Must we pour a few scientific facts into a lecture mill, and take out a certain number of inches of talk for a school child to consume? Answer these questions, ye who can.

LEARNING TO READ

How long does it take a school boy to learn to read? Two or three years is the time usually given as the minimum; but the New York *Times* of March 9 has the following description of an attempt to teach Blackfeet Indians to read in two weeks:

Today is to be opened on the Blackfeet Indian Reservation what is called an "illiteracy clinic." The object is to determine how much adult literate Indians can learn in two weeks under specially trained teachers. There will be 200 Indians, men and women, among them Chief Bird-Rattler, Fish-Wolf-Rose and Mary-Wades-in-the-Water. All have a good average of intelligence and will undergo intensive training in reading and writing, with a touch of arithmetic.

"The textbook will be one prepared under the auspices of the National Advisory Committee on Illiteracy, of which Secretary Wilbur is chairman. Its seventy-two lessons are intended to enable the illiterate Indian to read *The Blackfeet News,* which is to be published during the 'clinic.' Many will see in it for the first time their own names in print.

"The Indian Bureau and the local district of Browning, Mont., are cooperating with Secretary Wilbur in this experiment. The hope is to prove that literacy can be gained in a matter of weeks rather than years. If the illiterate adults of the aboriginal race pass their examinations, they will get certificates on the last day of school, which is to end with an Indian feast. But they will also be challenging every illiterate in the United States, their reservation giving an example to every other community. The demonstration will be followed with interest by all the States that are now carrying on literacy campaigns."

It seems to us that about one hundred years ago, a Choctaw Indian invented a syllabic alphabet of about 80 characters with which the men of his tribe learned to read in a day or two.

THE RANGE OF SIGHT

The unaided sight of man is probably inferior to that of many lower animals; but the microscope and telescope and other human devices have enabled him to see objects which are hidden from all other creatures. The New York *Herald Tribune* of April 5, in discussing these devices, says:

"The basic devices permitting man to project his feeble sense of sight into hidden scientific wonders have been gathered together for the first time in a display at the Exhibition of the Science and Art of Color at the Museum of Science and Industry in East Forty-second Street, New York. The ten machines are:

1. The stroboscope, which slows up the motion of objects moving too swiftly for the eye to see;
2. the oscilloscope which catches the movement of objects too vibrant;
3. the microscope which reveals the infinitely small;
4. the telescope to see distant objects;
5. the radiometer, which detects the invisible infra-red, or heat, waves;
6. the photo-cell, which ensnares the unseen ultra-violet radiations;
7. the *x*-ray, which reveals things through opaque materials;
8. the spectroscope, which sorts out the mixed radiation of white light;
9. the pyrometer, which records things too radiant for the eye to gaze upon; and
10. the spectro-photometer, which performs feats of color analysis beyond the power of the human eye."

AN OPERATION FOR SHOW

It seems incredible that any surgeon would perform an operation on a stage before a lay audience, yet that was what a beauty surgeon did on March 12 in the Hotel Pennsylvania, New York City, according to the *New York Herald Tribune* of March 13, which said:

"Three women fainted during the performance of an operation in face lifting at the International Beauty Shop Owners convention at the Pennsylvania yesterday.

"The operation seemed to hurt the audience more than it did the patient, who was a motion picture actress. The 1,200 women in the room were much affected by the actual process of the operating, but the patient conversed cheerily with the surgeon and left the stage after it was over, announcing that it 'didn't hurt a bit.' She had been treated only with local anaesthesia. The room was overcrowded and the precautions taken by the committee were swept away by the audience itself.

"It was said by officials of the convention that very little of the actual operation was visible, as the surgeon was facing the room and working on the side of the patient's face which was away from the audience. The flashing of photographers' lights added to the nervous tension of the onlookers."

SCHOOL OF EVIL

Light on the cause of crime is given in the following editorial in the New York *Herald Tribune* of March 9:

"Some weeks ago Police Commissioner Mulrooney had a few impatient words to say about the way in which the lurid presentation of criminal news makes heroes of gangsters, who are sneaking blackmailers and assassins in his sight, and fires the youth of big cities to emulation. Point is now given to these remarks by the appearance of four small boys, none over twelve years of age, in a Manhattan police court on a charge of playing gunmen with pistols and revolvers, which they had burglarized from a theatrical studio.

"This is not a unique case. It is a common sight in the streets, whether among the tenements or on Park Avenue, to find school children with toy pistols solemnly acting make-believe hold-ups, killings and motor car banditry in parked automobiles. In one sense these games are no more than the modern version of the scalpings, stage-coach robberies and cow-camp duels which the little out-law-worshipers of the last generation acted in the same streets.

"Not one boy in a million who thought he would like to be a bad man or a cattle rustler ever had a chance or a real hope of meeting his heroes in the flesh; while the modern city boy, if he is gaited that way, can meet and attach himself to his heroes almost as soon as he tires of the make-believe of the playground. The responsibility which devolves upon those mediums of publicity that turn jackals into lions, yellow ruffians into bold, dashing denizens of a night club superworld, is infinitely heavier, therefore, than that which used to be fixed upon the dime novel and later upon the cruder Western 'movies.'"

BOOK REVIEWS

THE TREATMENT OF SCHIZOPHRENIA. By LELAND E. HINSIE, M.D. Octavo of 206 pages Baltimore, Williams & Wilkins Company, 1930 Cloth, $3 00.

The term Schizophrenia has replaced that of Dementia Præcox whenever the disease is discussed in better circles. However, the newer terminology has in no way altered either the signs or symptoms, or prognosis of that morbid disorder. It has given, however, a stimulus to younger workers in the field of psychiatry to study the disease in the light of new psychological approach, especially by the psychoanalytic method discovered by the immortal Freud. Dr. Hinsie has had a very rich experience with mental patients as observed in the New York State Hospital system, and is in an authoritative position to formulate new concepts and principles about schizophrenia in the light obtained from his exhaustive studies. He has written an excellent book, limiting his effort in describing the treatment of those schizophrenics who are in the adolescent period, who voluntarily seek treatment, whose psychical symptoms are in the ascendency, who have insight into the fact that their mental processes are abnormal, and who are communicative and willing to follow the directions laid down by the therapist. The method employed in the treatment of these patients is a simplified form of the Freudian method. In eleven chapters, he has surveyed his material in a most comprehensive manner, has pointed out errors in the earlier concepts of the disease process, has given the salient points of psychoanalysis, and formulated a method of managing his other circumscribed group of patients. The book may be properly designated as a milestone in the approach to the treatment of Dementia Præcox. It is also a vital testimonial to psychoanalytic psychology. As a whole, the book is a real contribution to psychiatry, and one which every neurologist and psychiatrist must possess in his library. A chapter devoted to the survey of the literature enhances the value of the book. IRVING J. SANDS.

ASSOCIATION FOR RESEARCH IN NERVOUS AND MENTAL DISEASE. Vol. 6. The Cerebellum: an investigation of recent advances. Editorial Board Frederick Tilney, M.D. and others. Octavo of 649 pages, illustrated. Baltimore, Williams & Wilkins Company, 1929. Cloth, $10.00.

This volume is a compilation of papers presented before the Association for Research in nervous and Mental Diseases, with respect to recent advances in the study of the cerebellum.

The first section is devoted to the morphology of the cerebellum. Dr. Strong points out unsolved problems suggested by cerebellar connections and cerebellar histology. There is then presented a comparative study of the Arbor Vitae and Folial pattern in the mammalian cerebellum with a view toward correlating these forms with the bodily development of a particular species. A similar comparative study of the vermis is presented. Tables and graphs illustrate the quantitative relationship of the proprioceptive tracts in mammals.

The second section is devoted to the physiological and experimental investigation of the cerebellum. Experiments by Rademaker are referred to, in which the cerebellum was completely extirpated in dogs and cats, resulting in atonia shortly after ablation, but only temporary. The reflexes of posture elaborated by Magnus and DeKlein and their relationship to the cerebellum is discussed. Experiments are outlined in which various folia of the cerebellar cortex were stimulated with localized and correlated reaction of various parts of the body.

The third section is devoted to pathological studies of the cerebellar connections. A "tumbling kitten" was the subject of pathological study. It showed an inability to maintain the optimum physiologic posture, that is the position of lying on its belly so that it could bring both legs under it. The animal was born without the tracts necessary for this. The anatomy of the cortico-ponto-cerebellar system is investigated by study of human pathological specimens.

Section four is devoted to clinical studies. The function of the cerebellum is to synergize all motor activities. It acts in relation with the cortex and brain and cord. There is functional localization in the cerebellum. In the vermis are represented, the synergic activities of the trunk. The fundamental defect symptom of a cerebellar lesion is asynergia. There is a study of cerebellar symptomology based on 51 cases of intra-cranial disease verified by operation or autopsy. The most common form of asynergia was disturbance in gait. Almost all fell to the side of the lesion. The next most common form of asynergia was ataxia, also most always on the side of the lesion. There is a detailed discussion of the symptomatology of intra-cerebellar, cerebellar-pontile angle tumors and the infra-tentorial tumors with cerebellar symptomatology.

Section five is devoted to treatment (215 cases are reviewed in which 237 operations were performed). The types of anesthesia, method of incision and operative technique are reviewed. Differential diagnosis is carefully gone into. Finally the irradiation of cerebellar tumors is discussed.

This review can hardly do justice to so complete a work. It is of interest to all workers in all branches of medicine and will be a valuable contribution to a better understanding of the cerebellum in its relation to the organism. STANLEY S. LAMM.

ASSOCIATION FOR RESEARCH IN NERVOUS AND MENTAL DISEASE. Vol. 8. The Intracranial Pressure in Health and Disease: an investigation of the most recent advances. Editorial Board Charles A. Elsberg, M. D., and others. Octavo of 519 pages, illustrated. Baltimore, Williams & Wilkins Company, 1929. Cloth, $6.00.

This is Volume VIII of a series of research publications by members of the Association for Research in Nervous and Mental Diseases. There are thirty-eight contributors to this volume, most of them investigators who during the past ten years have added much to our knowledge of the cerebrospinal fluid and its pathways. Many phases of the subject are presented but for the most part the question of pressures, as the title implies, has been the leading thought.

It would not be practical to attempt a review of each article. Suffice it to say that this volume represents at the time of its publication a very good review of what we know about the pressure of the cerebrospinal fluid in health, following the introduction of many kinds of intravenous drugs and during the course of expanding lesions of the brain. To this may be added the articles dealing with changes secondary to abnormal intracranial pressure over long periods of time.

Anyone interested in the subject should read every article of this volume for in no other way could one appreciate the importance of these collected contributions. JEFFERSON BROWDER.

OUR NEIGHBORS

A POPULAR HEALTH MAGAZINE FOR KANSAS

The March issue of the Journal of the Kansas Medical Society says that the establishment of a popular health magazine similar to Hygeia was considered by the Bureau of Public Relations of the Kansas Medical Society at its meeting in January, but decision was deferred until the annual meeting in May. The Journal says:—

"This proposition was submitted to the Bureau of Public Relations at its meeting in January. After some discussion it was decided to leave the matter for final determination at the annual meeting in May. In the meantime in order that a fair estimate may be made of the interest the members of the Society may be expected to take in this kind of a publicity campaign each one will be asked to pledge as many subscriptions as he feels would best serve his interests. Letters will be mailed in a few days to each member of the Society asking him to pledge at least ten subscriptions at fifty cents each."

"The success of such a publication, as a medium for our publicity campaign and as a business proposition depends entirely upon the prompt development of its circulation. To be of any value for publicity and to make the venture financially possible, it should have an immediate paid circulation, covering every section of the state, of at least ten thousand. That is the only problem to be solved and it is easy of solution if the members of the Society are as much interested in the matter of publicity as they should be. There are approximately fifteen hundred members in good standing and if each member will subscribe for ten of his patrons we would have fifteen thousand subscribers to begin with.

"It would be a nice compliment from the doctor to his patient to send him a year's subscription to such a magazine. It would be an excellent investment for a doctor to send a complimentary subscription to each of his families."

RURAL DOCTORS IN TENNESSEE

The rural parts of Tennessee are on par with those of New York State in regard to the number of available doctors, if one may judge from the following editorial in the February *Journal of the Tennessee State Medical Association:*

"Some years ago a great cry was raised about the scarcity of doctors in Tennessee. This was ground for the revision of laws governing the licensing of doctors. A tremendous change has taken place in Tennessee since that time. Roads have been built. A car can be driven to most any point that is suitable for human habitation.

"Today we hear greater complain of country doctors and small town doctors being unable to earn a livelihood than we hear of the scarcity of doctors.

"The fact is that rural dwellers will not patronize the old country doctor who still lives among them. They call a doctor from town. The country doctor in several instances has found it necessary to move to town and some will take care of practice he formerly did in the country.

"We have on file a number of requests for information as to good locations in Tennessee for a well prepared practitioner. The cooperation of the profession is requested in placing these men. Please forward complete information as to locations to this office at an early date."

The Medical Society Department of the same journal describes the Medical Society of Blount County, as follows:

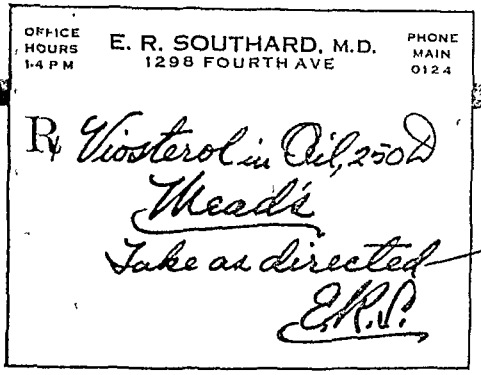
"The Blount County Medical Society meets every Thursday night. Last year's report shows 25 members. Total attendance of 605 for the year. One hundred cases were reported; 27 papers read; 103 discussions of papers; 9 clinics presented; 48 regular meetings were held during the year and 1 special meeting; 17 visiting doctors attended the meetings; 3 special addresses were made by visitors."

This would be a remarkable record for a city society, but on writing to Dr. J. A. McCulloch, Secretary of the Society, we found that it was a strictly rural county located in the mountain region. Dr. McCulloch wrote:

"Blount County lies in the Eastern section of Tennessee between the Tennessee River and the Smokey Mountains; and a large portion of the Great Smokey Mountain National Park is in

(*Continued on page* 506—*adv. xviii*)

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(*Continued from page* 504)

Blount County. It has a population of 33,989, of whom 5,000 live in Maryville, the County seat, and a like number in Alcoa, an adjacent manufacturing city. Seventeen doctors are listed in Maryville who are eligible to membership in the County Medical Society, of whom fifteen belong to the Society.

"For several years the Blount County Medical Society has met weekly, and is one of only four counties in Tennessee which hold weekly meetings. In 1927 it held 49 meetings; in 1928, 48 meetings; in 1929, 44 meetings; and in 1930, 48 meetings. A program is prepared for six months in advance, and every member of the Society is expected to prepare a paper on some scientific subject at regular intervals.

"A full-time Health Unit is located in Maryville under the direction of the Commissioner of Health for the State, with a full corps of assistants. The County Medical Society is the liaison committee for the County Health program, which is submitted annually for its approval. There is close cooperation between the Medical Society and all civic organizations of the county. Tuberculosis control has been emphasized, and as a result a tubercular sanitorium for children has been established and is being operated by voluntary public subscription. At certain intervals lectures on health subjects and clinics are presented to high school students by the members of the Medical Society. Typhoid, smallpox and diphtheria have been virtually eliminated as a result of the activities of the members of the Society in connection with the local Health Unit. School examinations are conducted during the entire school year, and the correction of defects are referred to the physician. In other words, the Medical Society is responsible for the Health Unit and its work."

It is doubtful that any county in New York State can approach this record even remotely.

HEALTH PROGRAM IN COLORADO

Dr. C. E. Harris, of Woodmen, Colorado, gave a paper before the State Society in which he made original comments on the health program of the State, and said:

"Organized medicine stands today because it has not attempted to erect a towering structure of therapy on a narrow base. It is a comforting thesis which bids us put our own house in order and mind our own business; but it will not stand analysis. We have erred sadly in allowing auxiliary health organizations to slip beyond our control. One of the prime essentials in a reform program is to see that the State Society exercises a strong directing influence over, if not actual de facto control of, lay health organizations. If we can profit by the experience of Iowa, it should

(*Continued on page* 507—*adv. xiv*)

(*Continued from page 506—adv. xviii*)

become apparent that the laity welcome rather than resent such control. We cannot dispense with lay organizations, but they should be directed by those who look at health with the seeing eye.

"Somewhere in Pueblo is a hardware merchant who is qualified to show a well meaning but bootless carpenter the way to better business. He needs no instruction regarding hammer and saw but only advice as to how to make his dollar go farther. Somewhere in Denver is a suburban grocer who ekes out a hand-to-mouth existence. He needs to be told by competent counsel that while he will never succeed as a tradesman, he has a better prospect as an insurance solicitor. Somewhere in Fort Collins is a truck driver with his nose on the grindstone because his wife needs instruction on household economics. At the other end of town is a lawyer's wife who is qualified to show her the way. And the families of the carpenter, grocer and truck driver will have better health when rescued from economic despondency. It is idle to say that there are men in every community who are willing to give salutary counsel. The assistance must be proffered even as we must emerge from our shell of complacency and make known under organization auspices the possibilities of a far reaching health program. When we are willing to preach valiantly the doctrine that good health pays, even at current price schedules, we will hear less furor about the high cost of medical care. Can we reach all who are on the nether side financially? Assuredly not. The thriftless, the incompetent and the congenitally deficient will resent any such program. Again I say, 'Help those who are worth helping.'"

Doctor Harris evidently agrees with the Editor of the NEW YORK STATE JOURNAL OF MEDICINE that the people themselves have a duty in the distribution of medical services to the needy.

CONVICTIONS FOR ILLEGAL PRACTICE IN PENNSYLVANIA

The March issue of the *Pennsylvania Medical Journal* contains an editorial describing the prosecution of quacks by the *Philadelphia Record*.

"At the time of the 1928 session of the State Legislature, our State Medical Society in common with other groups approved annual registration of physicians, the fee being one dollar, to accumulate a fund as was understood for certain matters, one of which was the prosecution of the illegal practitioner. This was deemed necessary because the State does not provide funds to prosecute any one who may be illegally practicing the healing art.

"It is of interest that newspapers at times ac-

(*Continued on page 508—adv. xx*)

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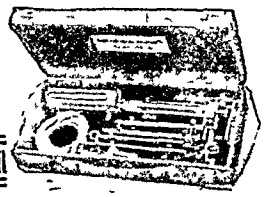
instruments are made by pioneers in this field All "E. S I. Co." instruments are original achievements and developed under careful guidance of American medical authorities. ¶ The promotion of more accurate diagnosis, accessibility, convenience, and efficiency have been given paramount consideration in the design of each "E. S. I. Co." instrument.

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INCORPORATED
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The Most Convenient Gym in New York

(Continued from page 507—adv. xix)

complish more than those whose duty it is to take care of such matters. All credit to *The Philadelphia Record* that secured the conviction of thirty-five illegal practitioners, twenty-six men and eleven women, in Philadelphia, which *The Record* hopes is the beginning of the end of quack healing in Philadelphia. The statements herewith are taken from the files of *The Record:*

"*The Record's* campaign to rid the city of unlicensed practitioners who had been preying on the victims of disease, began in June, 1930, and thirty-five men and two women were held under indictment for trial. The first two of the group came to trial on January 26, and were promptly convicted. The attorneys for the other thirty-five admitted defeat, and advised the district attorney that the next day they would enter pleas of nolo contendere, which meant that they would offer no defense, and simply have their clients throw themselves on the mercy of the Court.

"The first one tried, Otto Bimbler, aged 44, described himself as a naturopath and admitted he had treated thousands of patients. One of the women winesses testified that he had guaranteed to cure her of sterility, the course of treatments to cost $2.50 each, but that she failed to become pregnant. He gave her electric treatments, and pills for many weeks, to cure a blood tumor, which was preventing conception. In the final analysis, two jail sentences, $7,000 in fines, and $519.84 in costs, was the price paid by thirty-two quacks for practicing without a license. Three other healers were put on probation for a year.

"When Emma L. Amonson, a chiropractor, was called, her attorney stated she was intelligent and had an education. 'The more intelligent the less the excuse,' replied the Court. When the Judge was told that Mrs. Amonson had been employed by the State Board of Medical Education and Licensure, he stated 'This is all the more damning.' It appears her husband is still in illegal practice."

The Medical Journal quotes an editorial in *The Record* as follows: "It is of real importance that the blow given to quackery should lead to better protection of the public health in the future.

"Eventually measures should be taken to revise the whole system of licensing practitioners of the various methods of treating disease. But meanwhile there is urgent need for real enforcement of existing law.

"That it is now virtually suspended, that a newspaper had to drag flagrant violators to Court, is due to lack of funds by the State Medical Board.

"It is the duty of the medical profession to insist that the Legislature make adequate appropriations for this purpose, and that the responsible agency rid the State as it can, of unlicensed frauds and incompetents masquerading as doctors."

PSYCHIATRIC EXAMINATIONS OF CRIMINALS IN TENNESSEE

The March number of the Journal of the Tennessee State Medical Association has a leading article by Dr. H. B. Brackin, describing the work of the staff of the Central State Hospital, in Nashville, in examining persons on trial for crimes. The author says:

"We have received fifty-nine patients for observation from the Courts of Tennessee during the last two years and four months. Nineteen of these patients had committed murder; seven had attempted to commit murder; twelve had committed larceny, stealing everything from chickens to automobiles and thousands of dollars worth of diamonds; eight committed forgery, four committed rape, two committed robbery, two broke the White Slave law, two broke the Jones law, one had sex relations with a mare, one committed arson, and one abused women.

"After observing these patients from thirty to sixty days and doing a complete mental and physical examination and all laboratory work indicated, we made a written report in each case and outlined our reasons for saying whether patient was sane or insane. All of our staff signed each report and swore to it before a notary. We always state in the report that we have no interest in the case and receive no fee, and always send three copies of the report; one to the judge, one to the attorney-general, and one to the attorney for the defense. Out of the fifty-nine cases, I am indeed proud to state, our report has been accepted verbatim by the court in 53 of them. Our report was simply read without any of us being present or even summoned. The judge passed sentence according to our statements. If we stated they were insane the court sent them to the hospital for the insane to remain until they recovered and then be returned to court to stand trial, this being according to the Tennessee statute. If we stated they were not insane then they were tried for the crime and if found guilty sentenced to prison, and if not, released. In the other six cases we were subpœnaed and put on the witness stand and merely asked to recapitulate to the jury our written statement, and in each case they followed our recommendations. In other words,

(*Continued on page 510—adv. xxii*)

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Natural
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VITAMIN B in the diet has been likened to insurance because of its necessity to the normal diet for its own value and its probable aid to other vitamins in combination.

According to medical research, an adequate supply of vitamin B in the diet tends to increase appetite, aid digestion, and improve the process of elimination. Thus it seems not only necessary to general wellbeing, but of importance in the functioning of other vitamins.

As an evidence of this, Hoobler (*Jour. A.M.A.*-2-28-31-676), says: "One should be careful not to overdose with cod liver oil and viosterol unless at the same time an increasing quantity of vitamin B is also added to the diet."

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Physicians are cordially invited to visit our exhibition booth at the June meeting of the State Medical Society which will be held in Syracuse.

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Course will consist of daily attendance on ward rounds, lectures, seminars, clinical pathological demonstrations, case reporting, demonstrations and discussions of laboratory aids to diagnosis.

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(*Continued from page 509—adv. xxi*)

the courts of Tennessee, which also includes the Supreme Court, as some reports were for them, have accepted 100 per cent the statements of the staff of the Central State Hospital for the past two years and four months in regard to the sanity or insanity of fifty-nine criminals. This record we feel justly proud of, but do not think our results are on account of our superior ability, but on account of our method. We doubt that our method is used in other states, and we also doubt whether there is the complete cooperation and confidence in any other state between courts and hospitals for the insane."

GRADUATE TEACHING IN RHODE ISLAND

The March issue of the *Rhode Island Medical Journal* devotes an editorial column in reply to the insinuation that the State is deficient in facilities for graduate instruction, and says:

"We have often heard it deplored that there is no 'teaching center' in any Rhode Island medical community, because of the lack of a medical school, in spite of the magnitude of clinical opportunities and the incident wide variety of cases suitable for presentation.

"Perhaps the most attractive approach to the most interesting cases is made possible in the Clinic-Pathological Conferences held on Tuesdays at noon every other week at the Rhode Island Hospital, and to which all members of the profession are most generously welcomed. These are the sort of meetings which seek to present in their entirety from the onset of the patient's illness, through the clinical course of the disease with all laboratory and other data, to the final outcome and the post mortem findings, one or two interesting cases.

"But that which stimulates the most admiration is the care with which these cases are prepared, and the splendid presentation of the material at hand. The story of the case is briefly but most completely outlined. The laboratory work is painstaking and accurate, and the pathological reports are brilliant. Even the histological findings are presented by very beautiful micro-photographs, which not only commend the thoroughness of the microscopical study of the tissues, but portray an admirable technique in the art of scientific photography.

"No doctor in Rhode Island need deplore the lack of teaching facilities here, or thereby excuse his inability to keep abreast of modern medical thought, while we have such splendid meetings as these conferences; and the time and effort necessary in attending them is more pleasantly and profitably spent, and best of all, in the last analysis, our patients receive the ultimate benefit."

JOURNAL OF NEBRASKA

The following data on the *Nebraska State Medical Journal* are taken from the report of the Council meeting contained in the March Journal

"We have followed a consistent policy for years of furnishing three cuts to any article at the expense of the Journal Fund, and we have asked the author to assume the expense of any additional cuts if needed or desired by the author To this we have made exceptions in cases of a large number of cuts to an article. In such cases we have assumed about one-third of the expense A case in point is an article published in the November number containing 27 cuts

"The publication board has, however, decided at this meeting that the practice referred to in the last paragraph should not be continued

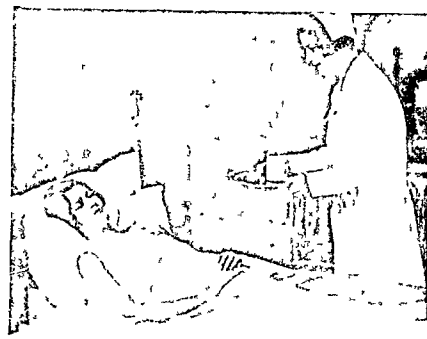
"If the Councilors will continue the appropriation of the sum of $1.50 from the dues of each member to the Journal Fund, we feel that we can get along quite comfortably, and give the profession a Journal as creditable as most of them"

The financial statement of the Journal is as follows:

"January 1, 1930 to December 31, 1930, as compared to January 1, 1929 to December 31, 1929·

Direct Journal Receipts:

	1930	1929
Advertising Space	$4,926 88	$5,003.54
Cuts	148.00	90 03
Copies Sold	14 22	9.20
Subscriptions to Journal.	47 00	51.75
Dividend Cooperative Advertising	308 71	264 55
Total Direct Receipts	$5,444 81	$5,419 07
Shares Dues Rec'd—General Fund	1,761 00	1,771 50
Total Receipts—All Sources	$7,205 81	$7,190 57
Direct Journal Disbursements:		
Salaries:		
Dr. F. A. Long (Editor)	$1,200 00	$1,200 00
Dr. R. B. Adams (Sec.-Treas.)	1,300 00	1,300 00
	$2,500 00	$2,500 00
Publication Expense:		
Huse Publishing Co.	$4,373 71	$4,451 13
Baker Bros Eng. Co. (Cuts)	623 59	330 63
Bank Charge	3.43	3 49
Uni Press Clipping	42 00	42 00
	$5,042 73	$4,827 25
Total Direct Disbursements.	$7,542 73	$7,327 25



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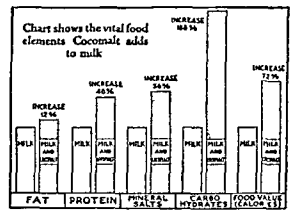
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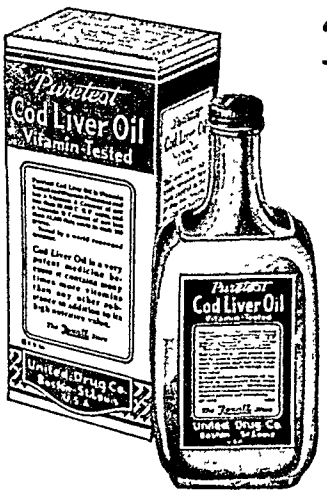
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LOFOTEN—Norway—north of the Arctic Circle is the source from which comes every drop of Puretest Cod Liver Oil.

Only the cod which are caught during January, February and the first week in March are used, for this is the season when the livers are richest in vitamins; the fish having recently spawned and then gorged themselves with the vitamin-rich algae which is prevalent in the Lofoten waters.

As the temperature is around freezing, and only twelve hours elapse between catching and landing the fish, the livers reach the factory in perfect condition.

To maintain the uniform medical potency of Puretest Cod Liver Oil, beginning at its source it is subjected to the rigid control of Professor E. Poulsson, director of the Pharmacological Department of the University of Oslo.

The purpose of the scientific investigation of the vitamin content of Cod Liver Oil is not merely to establish the presence of vitamins, but to determine the quantities in which they occur—to find a measure for the activity of the oil.

Professor Poulsson's tests of Puretest Cod Liver Oil show that it has a Vitamin A content of not less than 50,000 U.S.P. units and a Vitamin D content of not less than 13,333 Oslo units in each 100 grams.

This information is not only the result of Professor Poulsson's investigation at the source of supply, but proved by such an authority as Dr. Charles W. Hooper of the H. A. Metz Laboratories.

Puretest Cod Liver Oil is usually imported in batches of approximately one thousand barrels to a shipment. Protected from deterioration by inert nitrogen gas. A certified biological analysis accompanies each shipment.

Upon receipt of a shipment from Norway, each barrel is inspected and tested by our own Analytical and Research Department and no oil is used that does not merit the high quality standards of the United Drug Company.

Puretest Cod Liver Oil may be obtained in any Rexall or Liggett Drug Store. We will be glad to provide any further information desired by the Medical profession regarding Puretest Cod Liver Oil. Physicians are invited to ask for samples for clinical test.

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DUNKLIN COUNTY MEDICAL SOCIETY, MISSOURI

The following description of the meetings of the Dunklin County Medical Society contained in the March issue of the Journal of the Missouri State Association shows what a small medical society can do when it assumes the leadership in medical civics:

"During the year 1929, the Dunklin County Medical Society met seven times with an average of ten doctors present at each meeting. Fifteen members were in good standing with dues paid in full. Five were made Honor Members (worthy physicians of 70 or more years). Scientific programs were not planned, leaving these for the Five County Group, but round table discussions concerning many phases of medical practice were held. Many plans were discussed throughout the year, among the most important being: Cooperating with the county health unit to immunize against typhoid and diphtheria; a method for better collections of accounts which resulted in the organization of the Dunklin County Physicians Business Association; discussion of the building of a Dunklin County Hospital. One new member, Dr. Wheeler Davis Kennett, was added to our membership.

Meetings During 1930.—Dr. S. E. Mitchell, who served as President for 1929 was reelected for 1930 because of his splendid leadership. Eight meetings were held throughout the year with an average of nine members present. Each member was designated a committee of one to study and report on some problem concerning a county hospital. Eight members responded with splendid studies and information on the following: The legal manner of obtaining, maintenance, number of beds needed in a county of 40,000, expense of running, needed help, needed equipment, how to run it, and proper executive help. While a great deal was accomplished in gaining valuable information we realize with existent conditions it is not time to start a hospital. In the near future we are certain our dreams will be fulfilled."

LEGISLATIVE METHODS IN COLORADO

Legislation in Colorado is in the hands of the Public Policy committee, whose method of procedure is described in the March number of *Colorado Medicine,* as follows:

"Members of the State Society who possibly have thought it too much trouble to write the one or two letters to legislators requested by the Public Policy Committee would do well to consider the time being devoted to this work by the Committee members. Scarcely a day has passed that one of more members have not attended the legislative sessions at the Statehouse. The State

(*Continued on page* 513—*adv. xxv*)

(*Continued from page 512—adv. xxiv*)

Society and its work have been put ahead of private practice, business and pleasure.

"In support of our legislative program pamphlet material has been prepared, quickly printed, and placed in the hands of legislators Other material, suddenly needed, has been obtained from the American Medical Association's Bureau of Legal Medicine, sometimes by telegraph or long distance.

"Co-operation of other organizations, medical, public health, and lay, has been solicited and in several cases obtained. Our own Woman's Auxiliary has co-operated through its officers and is still at work.

"Far from being limited by the legislative program advocated by the House of Delegates, the work of the Committee has of necessity been for the most part devoted to other legislation Forty-two bills were introduced in the legislature relating to medical affairs and public health, of which only six constitute the program sponsored by our Society. All of these bills had to be studied, compared with existing laws, investigated for the ever-present 'jokers,' be evaluated. Attorneys, departments of the State government, other organizations, had to be consulted before decisions were made.

"Each member of the Committee has had the doubtful honor of being formally registered as a 'lobbyist' in the legislative records. Denver members have spent many hours appearing at meetings of House and Senate committees, or sitting on the sidelines explaining to individual legislators the merits or demerits of this bill or that

"This can give but a sketchy idea of what it means to be a member of the Committee on Public Policy, especially to be a member residing in Denver and thus close to the scene of action. If it impresses those who read it with a slight conception of what the medical profession and public health in Colorado owe to this group of doctors, it has accomplished its purpose."

MEDICAL HISTORY OF TEXAS

The February issue of the *Texas State Journal* contains the following editorial note on a medical history of Texas, written by a member of the Woman's Auxiliary:

"A Medical History of Texas has at last been published. The author is 'George Plunket Red' known to her close friends by that name, but to most of our readers as Mrs. S. C. Red, the distinguished wife of our beloved and also distinguished ex-president, Dr. S. C. Red of Houston. The book comprises 344 pages of reading matter, and numerous illustrations It sells at $3.00 and is worth every cent of it. The profits from the sale of the book for the first two years

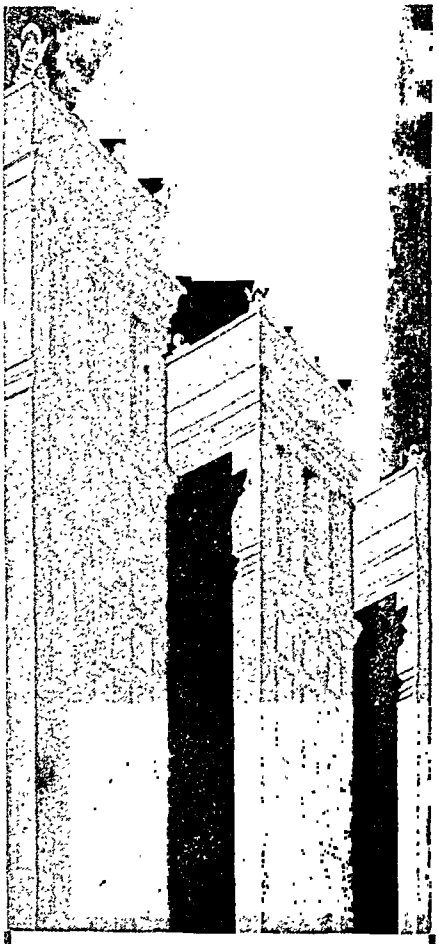
(*Continued on page 514—adv. xxvi*)

Here

is one of the advertisements of The Sugar Institute

THE advertisement reproduced here is one of the series appearing in publications throughout the country. In order to keep the statements in accord with modern medical practice, they have been submitted to and approved by some of the leading authorities in the field of human nutrition in the United States. The Sugar Institute, 129 Front Street, New York.





A
CORDIAL WELCOME
AWAITS YOU
AT SYRACUSE—

When you come to the New York State Medical Society meetings on June 1st, 2d, 3d and 4th, you will find Hotel Syracuse bidding you a very cordial welcome as your official host. Everything possible will be done to make your visit here one to be pleasantly remembered.

600 outside rooms, each with bath, servidor and circulating ice water. Rates $3.00 up.

Powers Hotel, Rochester, N. Y., under same management.

HOTEL
SYRACUSE
SYRACUSE, N. Y.

CULTISTS AND HOSPITAL STAFFS IN WASHINGTON

Northwest Medicine for March has the following editorial on the application of chiropractors to be allowed to treat patients in a public hospital in Seattle:

"Whenever a public hospital is constructed and opend for the reception of patients, there ensues a clamor on the part of various irregular practitioners and their adherents for the opportunity of treating patients in accordance with their peculiar tenets and practices. This has recently been illustrated in connection with opening Harborview Hospital at Seattle. Chiropractors and drugless healers united in a vociferous demand that a portion of the hospital be set aside for their use in the treatment of patients. The county commissioners gave a public hearing, at which the reasons for such privilege were presented, with statements to the contrary by representatives from the medical profession. These petitioners and their supporters claimed the right of utilizing this public institution, since otherwise they are being taxed without representation. Some of the medical speakers stated they had no quarrel with these irregulars as to their methods of procedure, but called attention of the commissioners to the fact that the hospital could not be rated according to the standards of the American College of Surgeons, if these irregular practitioners were permitted to participate in the treatment of patients. Neither would interns nor nurses consent to serve under the direction of any except regularly educated physicians and surgeons. In due time the board of county commissioners announced their decision against permitting these irregulars to practice in the hospital, giving as their reason the above mentioned objections."

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NEW YORK STATE JOURNAL of MEDICINE

PUBLISHED BY THE MEDICAL SOCIETY OF THE STATE OF NEW YORK

Vol. 31, No. 9 NEW YORK, N. Y. May 1, 1931

MEDICAL SOCIETY OF THE STATE OF NEW YORK ANNUAL REPORTS, 1930-1931

REPORT OF THE PRESIDENT

Sections

1. The President's Activities.
2. Present Day Principles of the State Society.
3. The Journal.
4. Graduate Education.
5. Economics.
6. Public Relations.
7. The Metropolitan Area.
8. The District Branch.
9. Public Health.
10. The Health Commission.
11. The Public Welfore Law.
12. A Committee on Activities.
13. The Trustees.
14. Organization.
15. Medical Care and Medical Service.
16. Appraisals.
17. Future Position of Medicine.

To the House of Delegates:

Gentlemen:

The President has the pleasure of submitting a report of the year's work.

Two hundred and three medical meetings, including conferences and committee meetings, have been attended as follows:

Eight meetings in District Branches.

Thirty-two meetings in County Societies.

Four meetings in Academies of Medicine.

Six meetings in the States of Illinois, Texas, Pennsylvania, New Jersey, Massachusetts, and Maryland.

Forty-one special meetings.

At these meetings ninety-one prepared addresses have been made on features of medical problems, relationships, or obligations.

Some part has been taken in the discussion of one hundred twelve conferences and committee meetings. A few standing committee meetings have not been attended because of conflicting dates.

The distance traveled is approximately forty thousand miles.

One thousand five hundred and twelve personal letters on the work of the year have been answered.

Twenty-eight medical articles have been published and twenty-seven pages of editorial comment have been writen for the Journal.

The President has provided his own secretarial help.

As a member of the Governor's unofficial Health Commission, your President has attended eight regular sessions and four sessions of the sub-committee on Medical Care and Medical Service, of which he is the chairman. The report of this committee has not yet been made.

As a member of the Governor's Committee to Review Medical and Hospital Problems in Connection with Workmen's Compensation, your President has attended the three sessions held and one session of the sub-committee on Medical Problems. The sub-committee is made up of nine members, six of whom are members of organized medicine.

It is obvious that the office of President of the State Society has come to be a full time task.

A condensed report is submitted with the Recommendations and an accompanying booklet of seventeen sections, indexed for your convenience, should you desire to consult it. This booklet sets forth in detail a discussion of the observation of the year. The study of the problems of medicine was approached without theory, and out of the year's experience has come a degree of unexpected orientation, in the main commendatory of the profession of medicine as the greatest factor in human welfare and human service.

Present-day Principles of the State Society: These were foreshadowed and used in meeting professional problems arising in the different stages of social evolution from the beginning of the State Society.

There were difficulties even from the beginning in securing enactments of laws. I have not learned of any that had unanimous support until after their enactment.

The problems are greater today only because of greater social changes and complexities of society resulting in greater health and sickness problems involving both medical care and medical service. The profession of medicine has greater problems only because of these changes which are are also common to every field of human effort.

The layman has little interest in organized medicine. He is interested in the services of medicine.

Many sections of the State have solved their own problems of health service and medical care and medical service on a basis of community interest and community support. Some counties seem to have done this because they have made use of official and unofficial agencies in their scheme of things under the technical leadership of medicine. In these counties organized medicine seems to have advanced just as it built new pathways of public service, made contacts with public interests, and established working relationships with them.

There have been difficulties in the past relatively as great as today. Medical statesmanship straightened them out.

The present problems are not the science of medicine, but the relationships of medicine. Medicine's responsibility for public problems will be easily met if there is a partnership understanding between the public and medicine.

If common sense is the "bedrock of medicine" as well as "of law," I am sure that from all that I have observed this year that it can be a mighty factor in the solution of medical problems, if it is backed by community perspective and if the doctor has a vision of the needs of his community.

Two forces—common sense and statesmanship.

I suggest that every doctor read and digest as opportunity offers the one hundred twenty-five year history of organized medicine as a background for the consideration of present day problems. It is proper for the profession to think through these problems as promptly as possible and then be guided by whatever adjustment of relationships is found necessary. No one can raise false issues. Whatever the facts are will determine the issues.

The Journal: The Journal is designed and maintained in order to reflect all the activities of the State Society and to give a résumé of the trend of medical public opinion.

It is not practicable for the Journal to have a reporter attend all the meetings, conferences, and committees. The Journal must, therefore, depend upon voluntary reports from the officers and committeemen.

Bulletins have been sent out this year to county societies by the Public Relations and Economic Committees on special topics of current importance.

Popular medical publicity has been handled by the State Department of Health. Its press releases and radio broadcasts are fully up to the standards of several State societies which give special attention to these forms of publicity. The President recommends:

1. That the officers and committeemen be expected to assume responsibility for reporting to the Journal the results of meetings and their activities.

2. That the Journal request the chairman of every committee or the leading physicians in various activities occurring throughout the State before any known meeting or if not, as soon as possible thereafter, to make a statement for the Journal of what transpired.

3. That the sending of bulletins to the officers of the county societies be approved, when in the judgment of the committees it is necessary.

4. That the popular medical publicity now handled by the State Department of Health be approved and the Department be requested to continue.

Graduate Education: This activity of the State Society is one of the most valuable ones. It is steadily bringing modern treatment of disease within the scope of the general practitioner of medicine and enabling him to apply it to the patient without subjecting the patient to the expense of a specialist.

It is quite possible that this activity of the State Society may soon be followed by some plan which will more effectively reach each individual physician. It is easy to bring instruction to all those who will attend the lectures. The evolution of sentiment for graduate education may soon bring into greater cooperation the teaching of the medical schools.

I recommend that the subject of graduate education be given most careful consideration with the object of expanding it to the fullest practical limit.

Economics: Economics naturally follow Graduate education.

Competent medical service, medical care, and the preventive practice in general will be followed by increased economic rewards.

The Committee on Economics has gone to the heart of difficulties that have existed a long time between physicians doing compensation work and the insurance carriers. The proposals in the report of the committee regarding the principles of

basic fees need not be considered as a fee list endorsed by the State Society but as an agreement between each county society and the insurance carriers, as the county society decides. As a profession we must see with a clear perspective and use the necessary degree of statesmanship to devise workable methods of solving present day problems.

I recommend that the report of the Economic Committee be carefully read and digested so that the proposed principles of relationship may be understood and from this beginning strengthened as needed and deficiencies filled in as required.

Public Relations: No activity of the State Society is doing more for medicine in this State than public relations. It is one of the most vital forces in medicine today. Its value is obvious and, more than that, there flows from it an intangible influence that will extend on and on, steadily building up a new professional attitude toward the value of a spirit of conference and cooperation with other health influences as a means of meeting public medical needs.

I have observed this in many parts of the State this year and have heard many groups of physicians discuss the evidence of the excellent work done by this committee. There is a growing interest in public relations outside of New York State. The public relations work in this State is being recognized as an epoch making force to bring the medical profession into the leadership that belongs to it naturally.

There is a rising tide of interest. Physicians are beginning to see that practice can become more prosperous by cooperation with the objectives of sound programs sponsored by other organizations. There is no better example than the work that the family physician may do for school and preschool children. He is the competent physician for this work because of his knowledge of the physical or mental handicaps and the environment of these children. Aside from the real service to public health, this work is of striking economic value to the general practitioner in each county of the State where it has been carried out.

The work of the Public Relations Committee has been on new ground. Its accomplishments have grown each year and just in proportion to the development of leadership. Leadership must possess intimate knowledge of organized medicine and the needs of the family physician. The leadership stimulated by the Public Relations Committee has kept medicine in closer touch with the public at large. The inter-relationship of the profession, health departments, other departments of the State government having health interests, school hygiene and health service, industrial hygiene, and general medical problems arising from the present day changes in all relationships have had close attention by the Public Relations Committee this year.

I recommend that ample financial support be given the Public Relations Committee for its enlarged plans for the coming year.

The Metropolitan Area: Conditions confronting the profession are superficially different in the metropolitan area than in the rest of the State. Closer study indicates, however, that the deeper problems confronting medicine are the same all over the State. The greatest difference in the two areas is the density of population.

The Public Relations Committee has more largely worked outside of New York City than in the metropolitan area. This year for the first time more effort is being given to the problems of relationships. Greater New York and a greater effort is being made to build into one organization the means of meeting professional problems in a densely populated urban area and the less densely populated cities and the rural areas of the State.

To meet the social complexities of medical relationships in Greater New York is a huge task. It can only be done by organization. Such an organization should be tied closely with the entire body of organized medicine in the State so that any conclusions reached may have the force of the entire profession of the State.

The time is near when increased facilities must be had for the purpose of efficiently carrying on this work in the city and in the State. It probably means increased secretarial help and it may mean an executive secretary. We are not yet quite at this point, but the indications are rather plain of its need. Committees can make the study, can formulate conclusions, but it is beyond the capacity of any doctor to give the necessary time to interpreting medicine's position in public affairs. All this simply indicates the need of a business medical organization.

The District Branches: The District Branch President occupies a midway position between the State Society and the County Society. In reality he functions in several capacities. He is a member of the Council, the House of Delegates, and the Board of Censors of the State Society. It is his duty to visit each county society in his district and aid it in its work. It is his duty to organize and conduct the business of the District Branch.

The State Society's chief interest at the present time is that the county societies should make the fullest use of the services offered to them so that the individual physician may develop scientifically and extend his usefulness in the community as an aid and director in public health work. Since the Branch presidents do not all realize the importance of their taking an active interest in the county society's development, the State Society should devise a plan of assisting

the Branch presidents to realize their responsibility. The most practical way that I know of is by conference with the officers of the State Society in the beginning of the yearly administrations.

An outline of what should be done in this conference might be something like the following.

1. Plans for increasing membership in county societies.
2. To consider the time, month, and hour of county society meetings.
3. Each county should have a regular and, therefore, expected place of meeting.
4. The Branch president should interest himself in the program of the county society.
5. Even the kind of notice sent out for the meeting is important in attracting an attendance.
6. Every District Branch should have regular standing committees and their reports should be expected and called for at each regular meeting.
7. The committees should correspond to those of the State Society and the chairman of each should be a member of the corresponding State Society committee.
8. The annual meeting of the District Branch is its one activity which is definitely established, and the value of its scientific program is proven by the records, which show that more physicians attended the annual meetings of the District Branches last year than attended the annual meeting of the State Society. The District Branch presidents are beginning to realize that the annual meeting affords an opportunity for the discussion of other subjects than purely scientific ones; as, for example, the economic conditions of the District, the public health activities, activities of welfare and voluntary agencies, as well as the welfare of the component county societies. This idea will admit of considerable development, and in order that the greatest advantage may be gotten from the development of such program, consideration should be given by the presidents, in conference, to such subjects as might arise under these general heads. Men should be chosen as officers of the District Branch who are able and willing to devote much of their time to the duties of their offices. The State Society, as a State organization, must for its own protection, develop the strength of its subsidiary organizations, and that will require time and personal effort on the part of the officers. This should be impressed upon the societies when they are electing their officers. Four District Branches will elect officers this year and the retiring president should lay emphasis on the necessity for selecting a successor who can perform these services to his District Branch and to the State Society.
9. While the duties of a District Branch President are defined in our constitution, yet, nevertheless, certain men have occupied the position for the two years without having discovered in that time what their duties were. It would, therefore, seem that in order that the State Society might get from them the greatest degree of cooperation, it should annually discuss with the Presidents the nature of these duties.

To sum up this subject, the duties of the president of the District Branch are the obligations, responsibilities, and opportunities as a member of the Council, House of Delegates, Board of Censors, and the administrative head of all the functions of a District Branch.

The district Branches have undeveloped potential resources which, if properly employed, would greatly enhance the usefulness of the State Society.

I recommend that a conference of the District Branch Presidents and Secretaries, the Executive Officer, President, and President-Elect of the State Society be held at the beginning of the year's work for the purpose of discussing the responsibilities and opportunities of the District Branch Presidents.

Public Health: Protection of the public health has always been the concern of nations. It has always been the concern of New York State. Laws have been enacted from time to time since 1850 just as health needs required and just as scientific medical knowledge developed for the prevention of disease, and just as methods of administration and practice advanced. All the various laws were mandatory and were accepted by the medical profession as sound procedures to meet existing conditions at the time of the enactment of each of them.

The protection of the public health we all endorse and strive to promote, but we must not confuse that with the practice of medicine by the public. Both activities are frequently embraced under the general term public health.

I believe that we all see that the practice of medicine is in a state of active transition. It is equally true that the relationship of medicine to public health practice is in a state of active transition due to changing health needs, increased knowledge of how to prevent disease, and new methods of public health practice.

If it is true that the greater the mind of man, the more he seeks for truth uninfluenced by lesser things, then the profession of medicine in New York State—a body of educated men—should lay aside justified reactions to past occurrences as guides in thinking out the next forward step in public health organization in the light of present knowledge and present public health practice. Medicine must decide whether this is in the interest of the public and in the interest of the profession of medicine.

County health legislation is no more a public health issue than it is a medical issue. Some county societies have taken a position this year which is not one of opposition to a definite plan as much as it is opposition to any plan to improve health administration.

Some constructive policy must be adopted. The need for improvement is beyond doubt. The only question is as to the plan by which this can be accomplished.

I am told by the leaders and officers of the Sanitary Officers' Association that they desire to support any plan reached after due deliberation with other interested groups and that they will advocate any plan reached in this way that seems expedient to secure the passage of legislation at the next session of the Legislature.

I recommend that the State Society determine its policy toward organization for administration of public health in the light of the present development of scientific knowledge and the present knowledge of public health practice for the prevention of disease. I believe that it is the obligation of medicine to take a constructive position on this question and thereby show its leadership in public health affairs.

Special Health Commission: A Special Health Commission was appointed by Governor Franklin D. Roosevelt on May 1, 1930, to study and report to him upon the administrative and legislative aspects of public health in the State and to examine the extent to which the needs of the people of the State were being met in the field of public health in order that existing scientific knowledge may be better utilized. The Commission was made up of fourteen people and given power to enlarge its personnel by sub-committees. As finally organized it consisted of eighty-six people, fifty-three of whom were doctors and the rest made up of health experts, representatives of voluntary health and civic associations, and every department of the State government having health interests.

The Commission investigated and studied the problems assigned to it for ten months.

The Commission made twelve major recommendations under the general headings of county boards of health; local health administration; tuberculosis; venereal diseases; cancer; maternity, infancy, and child hygiene; public health nursing; crippled children; industrial hygiene; public water supplies; stream pollution and public health personnel.

The Commission made its report to the Governor on February 18, 1931. A bill was later introduced in the Legislature for the promotion of public health at the desire of the Governor of the State.

The Public Welfare Law: In all counties in which this law is functioning properly in meeting its social problems and in paying the physicians for medical services, it is largely due to the cooperation of the county society through its Economic or Public Relations Committee with the Commissioner of Public Welfare. In only a few counties of the state is the law fully serving its intended purpose. It deserves to be more widely administered because of its service to the indigent and its effect on the economic rewards of medical practice.

I recommend that each county society consult any one of the few counties in which the purpose of the law has been established. It should by this time be distributing its benefits in every county of the state.

A Committee on Activities: Throughout the year I have been impressed with the need of some method of coordinating the work undertaken by the standing and special committees. Each one works too independently for the best results. Each one may miss an inspiration that might come if he knew "what the other fellow was doing." The thought has often occurred during the year that there should be some method devised to coordinate activities, to prevent overlapping, and to fill in the deficiencies.

Early in the year I called the chairmen of all the committees together for a conference, asking them to prepare a concise report of their plans, and after that the meeting was continued as a conference on activities. This conference was well attended. It resulted, of course, in a better understanding of the work of all the committees, but it was not enough and should have been followed up by several other conferences during the year. The work of the President, however, was too time-consuming for him single handed to keep this bit of organization going on.

Continued observation during the year indicates that it would be of very great value for many reasons to have a Committee on Activities. It would first of all provide for an understanding of the work as a whole and a means for determining the values of what we are doing. In a sense, it would afford an opportunity for a real appraisal. It could determine whether we are getting our money's worth and what further things could be done in the interest of the medical profession.

I would, therefore, suggest that the chairmen of the standing committees be designated as a Committee on Activities and brought together several times during the year for the purpose of reviewing their plans and programs.

The Trustees: I believe the Trustees are hungry for more to do. Their work is too limited to keep them interested. They are experienced and trained men because of having already served the Society in other important ways. I believe that new machinery should not be installed until existing machinery is used to capacity. This is a sound principle in industry and it is just as applicable to medical organization as it is to industry.

I, therefore, recommend that the monthly reports submitted by the chairmen of the various standing and special committees be duplicated and sent to each trustee. As a body they have the

responsibility of the care of our funds and are called upon to make appropriations adequate for the activities outlined by the Executive Committee and the standing committees and it seems only reasonable to me that they should have frequent reports from the standing and special committees, as they now have from the Executive Committee, in order that they may be properly oriented with regard to the Society's activities and the use to which the funds appropriated by them are placed.

Organization: The profession is properly, relatively independent and individualistic in scientific medicine, in medical research, and in the individual practice of medicine. In its relationships to hospitals, to health organizations, to all departments of the state government having health interests, it should exert its influence and support its policy after reaching a conclusion by unanimous support by every component county society, if its influence is to be effective.

Though organized medicine is a representative body, reaching its conclusions in the House of Delegates, representing as it does the component parts of the State Society, medicine too frequently undertakes to express its opinion independently of its own organization. Majority opinion seems to be accepted often with mental reservation.

Organized medicine welcomes minority opinion within its own Councils. When a conclusion is reached, it should be the opinion of medicine in deciding a medical policy. If we are ever going to have an organization that will be effective in maintaining medicine's position in the solution of the great public problems of medicine, we, as an organization, must have a policy which, when agreed upon, will have unanimous support.

I want to urge every doctor to help to make his county society a better organization in order to meet professional problems here now and which at any time may become more active if the government undertakes to exercise its parental function in order to meet the social problems of adequate health and sickness service. Medicine must be in a position to maintain a desirable relationship in public problems.

Since the organized profession is the most competent body to consider technical medical problems, medicine should offer plans for their solution. If they are public problems, proposals should be made to the agency that can carry them out or to the state in any of its plans to meet its responsibilities for the health of its dependent citizens. An example is the rehabilitation of crippled children.

Organized medicine, as a whole, does not seem to take seriously some problems of wide importance, or if aware of them, medicine is neglecting to assist in their solution. Some of these problems are the distribution of physicians, splitting fees, costs of medical care, educational standards of specialism. It is all a difficult piece of work. To carry on constructively the routine established by highly interested pioneer work requires more enthusiasm than can be commonly expected. With the exception of fighting tuberculosis, physicians receive practically no assistance from either official or unofficial agencies.

On the other hand, there are many practical examples in the state of the local profession constructively meeting the problems of health and sickness service. I have no doubt that it will become more general. We need better organization to meet effectually the increasingly complex problems of the present day. The situation in medicine over the state in regard to its relationship to public problems is a mixed one.

Some counties are guided by tradition. Some consider the changing needs of society. Some consider scientific medicine the whole problem. Some consider a cooperative relationship to other organizations essential in meeting the complex medical problems of modern society.

Medicine ought to be as well organized as other interests which could be cited as illustrations, when it has to deal with public problems.

Under "The District Branch," organization is further discussed and recommendations made.

Medical Care and Medical Service: Physicians should consider the public interest and discussion regarding medical care. Medical care and medical service should not be confused. Medical care pertains to nursing, hospitals, and their equipment. Medical service pertains to that which a physician renders.

It must be obvious to most physicians that the general subject of medical care has aroused more and more interest during the last decade and especially in the last two years. Physicians should consider this public interest and criticism and what constitutes adequate medical care and medical service.

Aside from standards of medical service, I would like to bring to the profession of the state the question, is it available to all the people, and if it is not, how can it be made available? The problem of the availability of medical service lies between the well-to-do who have no financial problem and those taken care of by the Public Welfare Law. What will make medical care available to this class?

It is a public calamity if physicians cannot be paid for their services as other citizens are for their services. Sooner or later professional service will suffer. The questions of medical care and medical service are large ones. Many facts are already at hand. The interpretation and solution are the next steps.

I recommend that either a special committee be appointed to make this interpretation or that the duty be assigned to the Public Relations Committee and that it study three main questions. What is adequate medical service? How can it

be provided for all the people? How can such service be adequately paid for?

Appraisals: The discussion in this section is intended to stimulate thought regarding the public appraisal of the adequacy of the services of medicine.

Industries are constantly making appraisals of the health and sickness problems of their people from an economic point of view.

There is a discussion by various interests and individuals of sickness insurance. Should medicine think out for the hazard of illness whether better service can be rendered under an insurance plan than by the present plan? Would it be better for medicine to make some study of how the profession could render better service and be paid for its work by those whose incomes are not far enough above the necessities of life to pay for adequate service themselves? There is an obligation on medicine to lead in improved methods of caring for the sick.

The relationship of medicine to all health interests should be carefully considered. What is medicine's interest in health administration, medical care, medical service, and providing better service? What is medicine's interest in cooperation with official and unofficial health agencies? What is medicine's reaction to the magazine and newspaper stories regarding the adequacy of health service?

Any appraisal of our own resources is for our own use and not for the public, and only for the purpose of making proposals for the solution of medical problems.

I recommend that a resolution be presented to the American Medical Association at its 1931 meeting requesting that a commission be appointed to make a study of the relationships of medicine to the public, to medical care, to medical service, and to all the interests of public health administration and practice for the purpose of developing constructive thought regarding them under the leadership of medicine and that this Commission be asked to make a preliminary report with such recommendations as it may have at the 1932 meeting of the American Medical Association with the object of bringing the influence of the organized medical profession to bear on every medical problem.

Future Position of Medicine: If the vision of medical relationships for the future has been enlarged and brought a little nearer to every-day thought, this administration will have accomplished one of the things that it set out to do. There are still problems to be solved, but the evidences of an increasing statesmanlike attitude toward them, showing here and there all over the state, prompts one to believe that there is just ahead a certainty that the greatness of the profession of medicine still lives.

The future position of medicine will rise or fall largely by its relation to the state of public opinion regarding the great problems of health and sickness service and professional attitude toward their solution and toward cooperation with other agencies with resources to meet public medical care arising from the present day rapid social evolution. Sooner or later public opinion will make decisions regarding better administration of public health and increased availability of adequate medical care and medical service. The profession of medicine should do this first. The public expects the medical profession to do it.

If medicine would survey itself and its public relationships as a whole, it would help the profession to have a better understanding of the situation in medicine than if the problems of medicine are considered separately. Single problems can easily be distorted or seen out of proportion. The truth will only be seen by taking all these things together.

I have undertaken to summarize as well as time and space permit the medical activities that have been carried on by organized medicine this year. I have undertaken to make the condensed report as comprehensive as possible.

My opinion is that present-day medical attitudes are sound. There is a growing understanding that cooperation of all health influences is a sound procedure. There is a new and growing spirit of cooperation and a new sense of civic consciousness on the part of the profession of public officials, and the people whom they represent in health matters, but this is no more conspicuous than that there is a new attitude in medicine. It is true in this state, and I have seen evidence enough to be sure that it is growing in other states.

While I have commented at some length on the work of the Committees on Public Relations, Economics and Public Health and Medical Education, I am sensible of the excellent, constructive and enthusiastic work of the Scientific, Physical Therapy, Medical Research, Periodic Health, Insurance, and Legislative Committees. Their reports will tell the story.

I wish to express my appreciation of the excellent work done this year by the officers, editors, and standing committees. A greater volume of work has been undertaken and carried through this year. Nearly every committee has advanced into new fields. In every activity there has been obvious results, and the intangible influences will continue to run on and on.

The greatest hope that I can express is that someone in each field of activity will carry on and give the leadership necessary to adjust medical relationship to new conditions.

Respectfully submitted,

WILLIAM H. ROSS, *President.*

April 15, 1931.

REPORT OF THE SECRETARY

To the House of Delegates.

Gentlemen:

Your Secretary again has the honor of presenting an annual report. When six years ago he assumed the duties of the office he had no idea of the extent and magnitude to which his burdens would grow. The days of a perfunctory secretaryship have passed and consequently he renders his report in the dual capacity of a Secretary and an Administrative Executive.

THE SOCIETY

During these six years the Secretary has had the pleasure of reporting a gradual, steady and healthy growth of the Society both in membership and activities, with a consequent and corresponding growth in the influence that it has been able to exert and the importance of the position that it has been able to attain in all matters pertaining to the health and welfare of the public. Interest has continued and enthusiasm has grown to such an extent that it has become in many instances individualistic and therefore threatening to the welfare of the whole.

The amount of work done by the officers and various committeemen has been tremendous. Few can conceive of how much time and thought have been consumed in upholding the dignity, promoting the welfare and forcing proper recognition of the profession and of organized medicine.

In all this earnestness and enthusiasm we must not lose sight of the fact that on account of the various activities there has been created within the organization many subsidiary bodies with separate specific duties and that, as the engine needs the governor, so each and all of these of necessity require the control of a coordinating power, a body of centralized authority. Without such, the work would become a heterogeneous mass of individual thought and action and all power and influence be lost. For this reason the idea of an Executive Committee was conceived.

Over-enthusiasm is even more dangerous than lack of it; for lack may be supplied, while over-enthusiasm frequently rushes in tumultuous haste past important points, fails to perfectly analyze situations and does not pause to consider the viewpoint of others; thus failing to absorb thought and wisdom and broaden its own vision. It therefore reasons from erroneous or false premises and reaches conclusions based almost entirely upon personal or individual opinions which are often unreasonable, untenable and unsatisfactory to the body as a whole.

By individual is meant not only an individual person but also a group, committee or any component of an organization or family. Individualism has no place in the body politic, economic or social. These are parlous times and the general feeling of depression and unrest is felt even in medical circles. If opposition and oppression threaten, they must be met with a united front; harmony should be the watchword, harmony and solidarity within and militant aggressiveness without. Internal dissension, pessimism or dread of the future has no place in the organization. Even the appearance of a house divided against itself gives courage to the proponents of adverse legislation as was seen in the last hours of the legislature.

Economic problems are confronting all conditions of society and business and the medical profession has not escaped. It behooves organized medicine therefore to carefully consider and study those that particularly affect the profession and endeavor to influence its members to work together for the common-weal, casting aside all consideration of personal aggrandisement, financial or otherwise, and by word and action, by constructive criticism, and moral support uphold the hands of those they have selected as leaders.

THE SOCIETY'S OFFICES

For the purpose of properly conducting the administrative and business end of its affairs, the Society maintains three offices; the Legislative Bureau at 100 State Street, Albany; the Publication offices on the fifth floor of the Academy of Medicine Building, New York City; and the general administrative offices on the fourth floor of the same building.

Although these offices are not overmanned and the salaries of the personnel in some instances do not quite compare with those performing similar duties in the business world, the work runs smoothly and efficiently. Each employee is more or less a specialist in her line and has to be possessed of intelligence and initiative. Those in the publication offices are sub-editors and Miss Briggs, the secretary-stenographer, in the Legislative Bureau acts as stenographer reporter at all conferences and assists in the registration work at the Annual Meeting. The thanks of the Society are due her not only for her work but for her never-failing courtesy and willingness to assist whenever called upon.

Of the work of the Publication and Legislative offices, the Secretary can speak advisedly for although not under his personal direction, his duties compel him to keep in close touch with them.

Of his own immediate staff, the only comment he can make is that a more cheerful, courteous, willing and efficient office staff does not exist. The Secretary takes pleasure in extending to them and the Manager, Miss L. D. Baldwin, his sincere thanks and appreciation.

For thirty years Miss Baldwin has served the Society faithfully and efficiently. Her fund of knowledge and her intimate touch with all details of the work have been, and are, of incalculable value.

Mrs. Roetger, the Assistant Manager, has served the Society ably for twenty years.

FINANCIAL DEPARTMENT

It is almost unnecessary to call attention to the sound basis upon which the finances of the Society are founded and to the safe and sane policies of the Board of Trustees. The reports of the Board and of the Treasurer speak for themselves.

The Society is indeed to be congratulated upon having in charge of its finances men of such high integrity, of such loyalty to the organization and of such excellent business qualities as the Treasurer and the gentlemen who form the Board. Sitting as Secretary of the Board, but without voice or vote, and being Secretary of the Business Committee, the Secretary of the Society has excellent opportunity to see and judge and makes this statement advisedly and without reservation.

There has been from time to time in the minds of newly elected committeemen and councillors, a confused idea as to the manner in which appropriations are handled, some of them appearing to think that appropriations could be paid in bulk. This, however, cannot be and never is done. An individual bill for each item of expenditure has to be rendered and is charged against the appropriation. Payments are made by voucher checks, the voucher being initialed by the Manager and the check signed by the Treasurer and countersigned by the Secretary. In this way, the interests of the Society are thoroughly safeguarded and there can be no error or looseness of expenditure.

LEGAL DEPARTMENT

When a year ago, Mr. Lorenz J. Brosnan took up as Counsel the work laid down by Mr. Lloyd P. Stryker, he was already well-known for the excellent manner in which he had conducted many of the trial cases. This excellence of work has continued and many letters of thanks and commendation have been received by the Secretary from those whom he has defended.

The members of the House will remember that Mr. Brosnan introduced as his assistant, Mr. Maxwell C. Klatt, whose personal presence and the short address he made very favorably impressed the Delegates. But a few short weeks passed when the sorrowful news of his sudden death was received. His place has been taken by Mr. Thomas H. Clearwater whom the Delegates will have the pleasure of meeting this session.

Despite the fact that the membership has been notified repeatedly that the Counsel is retained in an advisory capacity for the legislative and administrative bodies of the Society and that it is neither legal nor right that he should be expected to render opinions to others, he continues to receive numerous letters which he has to refer to the Executive Committee before answering. Attention is again called to the following resolution:

"All questions or requests for information by committees, county societies or individuals must be referred therefore through the Secretary's office to the Executive Committee with which Counsel sits."

The Secretary acknowledges with thanks his indebtedness to the Counsel for many acts of kindness and for his valuable advice in conducting certain phases of the Society's correspondence.

COMMITTEES

The work of the committees, both standing and special, has been excellent in every way and when one considers the character and amount of work done by these men, holding frequent meetings and coming from widely separated districts, too much cannot be said in praise of their loyalty to the interests of the Society and their endeavors to benefit the profession.

The Secretary voices the appreciation of the Society and also extends his thanks to the Chairmen who have recognized his membership in the Standing Committees. He has not been able to accept all invitations but it is good to be remembered.

To make special mention of any one committee would be unjust; all have done their duty. Under the veteran leadership of Drs. Farmer, Sadlier, Bedell and Aranow, their respective committees have upheld the reputation of other years.

CONSTITUTION AND BY-LAWS

Experience teaches that the fewer and the more inflexible laws are the stronger and more effective is an organization. Nevertheless, a Constitution and By-Laws of three years' standing necessarily fail to meet changing conditions.

Our present laws were adopted in 1928 and a study of them shows many flaws and a need of being brought up to date.

Your Secretary therefore recommends the appointment of a committee to revise the Constitution and By-Laws to report at the next Annual Meeting in 1932. This committee to be composed of seven members, three of whom on account of their intimate knowledge of the needs and workings of the Society to be the President-Elect, the Speaker and the Secretary; the other four to be geographically distributed. The Secretary suggests that the House appoint such men as Drs. Ludlum of Kings, Rooney of Albany, Farmer of Syracuse and Trick of Erie.

The same reasoning that applies here applies also to the Principles of Professional Conduct and a Special Committee of the Executive Committee has endeavored to bring them into consonance with present ideas and conditions. The changes appear with the report of the Council.

As the Secretary was a member of this Committee it perhaps would not be proper for him to urge their adoption. He does, however, ask for them the careful consideration and study of the delegates.

EXECUTIVE COMMITTEE

The Executive Committee has held nine regular meetings, the May meeting coming too late to be included in this report.

The Committee organized at the meeting held in Rochester on June 3rd by electing William H. Ross, Chairman, and John A. Card, Vice-Chairman.

It was decided to hold regular monthly meetings in the Society's office, 2 East 103rd Street, New York City, on the second Thursday of each month.

In accordance with the authority delegated by the By-Laws the following appointments were made:

Publication Committee—Charles H. Goodrich, Chairman, Charles Gordon Heyd and Daniel S. Dougherty.

Editor-in-Chief—Orrin Sage Wightman.

Executive Editor—Frank Overton.

Budget Committee—John A. Card, Chairman, Charles Gordon Heyd and Daniel S. Dougherty.

Committee on Insurance—John A. Card and Charles Gordon Heyd.

Legal Counsel—Mr. Lorenz J. Brosnan.

The Executive Committee being essentially the business and administrative committee of the Society much of the business transacted during the year has been of a routine character such as the receiving and acting upon the reports of the committees and the Executive Officer; receiving and examining applications for the expenditure of funds not covered in the Budget and referring them to the Trustees with appropriate recommendations; appointing special temporary committees and providing for the proper carrying on of the business of the Society.

At its first meeting, it received the report of the Budget Committee which after examination and revision was submitted to the Trustees for final adoption.

The reporting of the entire transactions of the Committee would take up more space than can be afforded for the report and unnecessarily waste the time of the Delegates, mention will be made therefore only of those of general interest.

In accordance with the resolution of the House, the Executive Committee during the year remitted the dues of several members who from long-continued illness are temporarily disabled from continuing their practice.

The Committee ruled that members are entitled to have bills incurred for extra legal services in malpractice defense paid by the Society providing that such bills be presented through the Counsel's office as part of the legal expense.

Under date of September 11th, the following members were appointed a Special Committee on Cancer Prevention: Thomas P. Farmer, Chairman, James E. Sadlier, James N. Vander Veer, George F. Chandler, George W. Kosmak, Arthur W. Booth and Burton T. Simpson.

Under the same date the place and date of the Annual Meeting was set for June 1st, 2nd and 3rd, at Syracuse, and Dr. Frederick H. Flaherty was appointed Chairman of the Committee on Arrangements.

Mr. Thomas H. Clearwater was appointed attorney, vice Maxwell C. Klatt, deceased.

At the October meeting rules and regulations for the government of County and State Hospitals, recommended by the Public Relations Committee, were adopted.

The following members of the Committee on Arrangements were appointed: Frederick S. Wetherell, Wardner D. Ayer, Adelbert C. Abbott, Albert Getman, Albert E. Larkin, Francis J. Ryan, O. W. H. Mitchell and Thomas P. Farmer.

Under date of November 20th, the Standing and Special Committees were informed that all questions dealing with medical education must be referred to the Committee on Public Health and Medical Education and the President was authorized to prepare and send a statement to all the State Society Committees informing them of their duties and calling their attention to the fact that the Council and its Executive Committee are the authorized ad-interim executive and administrative bodies of the House of Delegates to whom all matters of importance, resolutions, etc., must be referred for approval.

The County Societies were instructed that the registration of physicians in the County Clerk's offices must be verified before election to membership and that transfers received from other component county societies must be accepted in accordance with Chapter 14 of the By-Laws.

Under date of January 8th, Drs. Card, Ross, Dougherty, Heyd and Goodrich were appointed a committee to examine and revise the Principles of Professional Conduct.

Under date of February 12th, the Governor was requested to give careful consideration to the advisability of appointing only representative physicians as members of the Public Health Council.

Under date of March 12th, the Committee on Legislation was informed that the Wicks-Hutchinson Bill should not be supported until certain amendments had been made.

Under date of April 9th, the Secretary's letter to the Niagara County Society regarding the Wicks-Hutchinson Bill was endorsed and the Secretary instructed to send a letter of like tenor to all the county societies and to publish it in the State Journal. Also to send a letter to all county societies stating that the endorsements of eleven ex-presidents were not endorsements of the Wicks-Hutchinson Bill but of the Governor's Special Health Commission.

The Report of the Committee on Medical Economics with the exception of the fee schedule and agreement was approved; these being left to

the individual action of the county societies.

It was decided to request the Governor to add Drs. Sadlier and Ludlum to his Committee on Medical Problems.

COMMITTEE ON PUBLICATION

Under the By-Laws the Executive Committee is charged with the duty of supervising the publication of the Journal and the Directory. This duty is delegated to a sub-committee on publication.

The Committee on Publication has held various meetings and conferences with the Editorial Staff and considerable business of importance has been transacted.

The Report on the Journal written for the Committee by the Executive Editor is here presented:

THE JOURNAL

The NEW YORK STATE JOURNAL OF MEDICINE is maintained as an official organ of the Medical Society of the State of New York, and contains the official announcements of the officers and committees of the Society and the records of their meetings. It also reflects the activities of the eight District Branches and the sixty constituent county societies, many of whom are constantly trying new experiments which develop into activities worthy of the adoption of the entire medical profession of the State.

Volume 30 of the Journal,—that for the year 1930, is the most satisfactory of all the volumes, because the activities of the State Society have been by far more numerous than ever before. Some officer or committee has had something of permanent importance to report in every issue of the Journal; and the department of "News Notes" constitutes a continuous record of current medical history being made by the Medical Society of the State of New York. This record is not merely of ephemeral value, but it constitutes real history which will be consulted in future years.

The State is not alone in the increasing field of activity of its Medical Society. Just as the State Society derives information from its constitutent county societies, so also does it profit by the records of the activities of other State societies as revealed in their State Journals. The department of our Journal called "Our Neighbors" contains items of increasing number and interest, because the societies of other States, like that of New York, are increasingly active in planning how the medical profession can fulfill its obligations to all the people throughout the Nation.

The increased activities of the State Society have imposed increased obligations on the editors and Publication Committee, and also upon the Executive Committee of the Council, on whom rests the ultimate obligations for the management of the Journal. Every week the editors have been compelled to consult the Publication Committee on one or two questions regarding the propriety of publishing certain items of news, and frequently the questions have also been referred to the Executive Committee. Since the Journal appears fortnightly, prompt action is often necessary in order that the publication can appear in time to be of immediate service to its readers.

Owing to the splendid cooperation between the officers and committeemen, the Executive Committee, the Committee on Publication, and the editors, the Journal now reflects the opinions, policies, and activities of the medical profession of New York State more fully and intimately than ever before. The Journal has adopted the standard of eighty pages for each issue distributed among the several departments according to the material on hand. A comparison of the pages in the several departments during the past three years is shown in the following table:

	1928	1929	1930
Scientific	585	639	537
Editorial	77	73	74
Medical Progress	96	96	96
Legal	83	68	62
News	238	207	220
Our Neighbors	139	127	137
Daily Press	48	48	48
Book Reviews	50	48	46
Advertising	636	653	615

The Journal is increasingly popular among advertisers, who are keen judges of the value placed on a periodical by its readers. The medical standards of our advertising have been kept up to those of our scientific pages, and failure to observe the standards have nearly always been due to the ignorance of laymen who handle the advertising. The editors have found the advertisers to be agreeable to any change which may be suggested.

COMMITTEE ON INSURANCE

The Commitfee on Insurance has reported regularly to the Executive Committee on its various activities. The most important report that it has made has been that the group insurance rate has been revised with considerable saving to the insured members. The basic rate on the fifteen five plan remains the same but on the larger policies has been reduced 16 or 17 per cent. The *x*-ray and radium policies have also been reduced.

The Committee presents to the House of Delegates for adoption the following resolutions which were approved by the Executive Committee under date of November 20, 1930:

Resolved, that the Medical Society of the State of New York, furnish to its members the services of an attorney at law in actions brought for alleged malpractice, under certain conditions to be hereinafter provided.

Resolved, that the Counsel of the State Society will act as attorney in all actions for alleged mal-

practice, brought against uninsured members in good standing of the Medical Society of the State of New York, who may be certified to by the Secretary of the Medical Society of the State of New York, as being entitled to the same.

Resolved, that any member in good standing of the Medical Society of the State of New York, shall not be entitled to defense for alleged malpractice claims while such member is residing and /or practicing medicine or surgery outside of the territorial limits of the State of New York.

Resolved, First. Members shall not be entitled to malpractice defense if the acts in the suit for which they make application for defense were committed prior to their admission to membership in the State Society.

Second. Members who have been dropped for nonpayment of dues, if reinstated shall not be entitled to malpractice defense for acts committed during the time they were not members of the Society.

Third. Active members of the Society desiring to avail themselves of the privileges of this act shall make application therefor in writing to the Secretary of the Society, and it shall be shown to his satisfaction that they are members in good standing in the State Society. They shall also furnish the Secretary, the Executive Committee and the Legal Counsel a complete and accurate statement of their connection with, and treatment of, persons upon which complaints against them are based, giving dates of attendance, names and residences of nurses and of other persons cognizant of facts and circumstances necessary to a clear and definite understanding of all matters in question, and shall furnish such other relevant information and execute such papers as may be required of them by the Secretary, the Executive Committee or the attorney of the State Society.

Fourth. A member shall agree not to compromise any claim against him, nor to make settlement in any manner without the advice or consent of the Society given through its attorney.

Fifth. In the event that a member sued or threatened with suit shall, without the advice or consent of the attorney of the Society, determine to settle or compromise any claim against him, he shall reimburse the Society for the expenses incurred in undertaking his defense, and in default thereof, he shall be deprived of further privileges under this resolution.

Sixth. The Society shall not assume any responsibility for the payment of any sum agreed upon by arbitration in the settlement of claims, or awarded by court verdicts, or for making payments for any purpose whatsoever.

Resolved, that the Society will not undertake the defense of any member who, after investigation by the Executive Committee, is believed guilty of criminal abortion, feticide, homicide, or any criminal act or who has not complied with the recognized ethical laws in regard to these cases. The Society will defend only suits brought for any alleged malpractice, error or mistake done or claimed to have been done in the legitimate performance of the duties of his profession as a physician.

Resolved, that the Executive Committee of the Council shall have the power to decide whether or not a member is entitled to legal defense by the State Society against alleged malpractice claim or suit; and how many times, and to what extent he shall be defended for any claim or suit; and what aid shall be rendered in case of appeal from judgment of the court; and the procedure for conducting the defense shall be that embodied in the foregoing resolutions, and such other rules and regulations as the Executive Committee of the Council may authorize.

Resolved, that the Group form of malpractice defense with indemnity insurance adopted in 1921 for members of this Society be endorsed and commended, and every member be urged to avail himself or herself of this Group Insurance protection.

Resolved, that all resolutions herein adopted shall be deemed applicable to the Group Insurance Plan now in operation by the Medical Society of the State of New York, provided, however, that such resolutions as are pertinent be acceptable to the Insurance carrier.

Resolved, that a member in good standing of the Medical Society of the State of New York is entitled to malpractice defense by the Counsel of the Society, pursuant to resolution pertinent thereto, except, if at the time of the alleged malpractice claim, the member is carrying malpractice insurance and defense in any Insurance Company other than the Insurance Company under the Group Plan of the Medical Society of the State of New York, in which case the member is deemed to have waived any rights for malpractice defense by the Counsel of the Medical Society of the State of New York.

Resolved, that all previous resolutions heretofore adopted, pertinent to malpractice claims and defense, are hereby rescinded.

COMMITTEE TO REVISE THE PRINCIPLES OF PROFESSIONAL CONDUCT

The Committee to revise the Principles of Professional Conduct of the Medical Society of the State of New York presents the following amendments and additions to the Principles of Professional Conduct to the House of Delegates for ratification:

1. Page 1 remains as printed except that if the suggestions of the Committee are approved, the date mentioned in the 4th line should read "June 1, 1931" instead of "May 21, 1923."

2. The preface remains unchanged except

that at the bottom of the page the names of the present Committee should be substituted in place of the Committee as now printed.

3. Sections 1 to 30, inclusive of the Principles of Professional Conduct remain unchanged.

4. Sections 31, 32 and 33 are amended. A copy of the proposed amendments are appended.

5. Section 34 remains unchanged.

6. The Principles of Professional Conduct as now printed omit Section 35. Hence the present Section 36 becomes Section 35 and remains unchanged, and the present Section 37 becomes Section 36 and remains unchanged.

7. The present Section 38 becomes Section 37 and is amended in the manner appended.

8. The proposed Sections 38 and 39 are new. The Sections are appended.

9. Appendix I, which is the oath remains unchanged.

10. Appendix II, which is the recital of the medico-legal principles, remains unchanged except that in Section 8, page 13, the first word on the 6th line is changed from "doctor" to "physician."

Section 31 (a). Physicians shall not make use of, or knowingly aid or permit others to make use of them as subjects of, any form or manner of advertising or publicity through lay channels, either alone or in connection with others, which shall be of such character as to invite attention to themselves or to their professional position, skill, qualifications, achievements, attainments, specialties, appointments, associations, affiliations or honors and/or of such character as would ordinarily result in their self aggrandizement; nor shall they give to any person whomsoever whether for compensation or otherwise, any approval, recommendation, endorsement, certificate, report or statement with respect to any drug, medicine, nostrum, remedy, surgical or therapeutic article, apparatus or appliance or any commercial product or article, or with respect to any property, quality or use thereof, or any test, demonstration, or trial thereof, for use in connection with their name, signature or photograph in any form or manner of advertising through lay channels; nor shall they boast of cases, operations, cures or remedies or knowingly permit the publication of reports thereof through lay channels.

(b). Physicians should not become or remain associated or identified with any corporation, organization, group or individual, medical or lay, resorting to or making use of direct advertising to the public for business of a medical or therapeutic nature or having to do with the diagnosis, care or treatment of the sick or injured, the maintenance of health or the prevention of disease.

Section 32. Physicians shall not give nor offer, nor shall they undertake or promise to give, either directly or indirectly, any gift, gratuity, commission or bonus in consideration of or in return for the referring, recommending or procuring of any patient for medical, surgical or other treatment or in consideration of or in return for the referring, recommending or procuring of any person, specimen or material for diagnostic or other study or work, nor shall any physician request, solicit, accept or receive any such gift, gratuity, commission or bonus.

Section 33. Physicians should not hold any personal ownership in patents for any drug, apparatus, instrument or appliance used in medicine or surgery. Physicians should not request, solicit, accept or receive rebates or commissions from the prescribing of any agent used therapeutically. Physicians should not dispense or promote the use of secret remedies nor assist any person to evade legal restrictions governing the practice of medicine.

Section 37. Component county medical societies should cooperate with the properly constituted authorities in the enforcement of the laws of the State of New York and of their respective localities relating to the public health and to the practice of medicine and should report promptly to such authorities any evidence received by them indicating any violation of such laws. The commission of any act or acts by a physician which would subject him to reprimand or discipline or which would subject his license to practice medicine to revocation, suspension or annulment under the laws of the State of New York at the time, shall constitute a violation of these Principles of Professional Conduct.

Section 38. Any component county medical society, from time to time, may constitute, adopt, amend, alter and/or repeal, such further and additional regulations respecting professional conduct, binding only upon its own members, not inconsistent or in conflict with these Principles of Professional Conduct or with the intent and purposes hereof or with the Constitution and By-laws of The Medical Society of the State of New York, as such county society shall deem advisable for the reasonable regulation of the conduct of its members and the furthering of its aims and purposes; through by-law provisions adopted in accordance with the provisions of its own constitution and by-laws and of the Constitution and By-laws of The Medical Society of the State of New York.

Section 39. Each component county medical society is charged with the duty of carrying

out and enforcing, within their respective jurisdictions, the terms and provisions of these Principles of Professional Conduct. Any breach or infraction of any one or more of the terms or provisions of these Principles of Professional Conduct, or of any one or more of the terms or provisions of any further or additional regulations respecting professional conduct adopted as herein provided by any component county medical society shall subject the offender to and shall be sufficient cause for discipline. Each component county medical society, through by-law provisions adopted in accordance with its own constitution and by-laws and in accordance with the Constitution and By-laws of The Medical Society of the State of New York, (a) shall fix and determine the degree or degrees of discipline and the nature and extent of the penalty or punishment which may be imposed and (b) shall adopt its own rules and regulations of methods and procedure respecting all disciplinary investigations, proceedings and action. Interpretations and rulings of each component county medical society with respect to these Principles of Professional Conduct or with respect to any further and additional regulations respecting professional conduct adopted by it as herein provided shall be binding upon its members until modified, revised or reversed upon appeal by The Medical Society of the State of New York, or by a court of competent jurisdiction.

Respectfully submitted,
DANIEL S. DOUGHERTY, *Secretary.*
April 15, 1931.

REPORT OF THE TRUSTEES

To the House of Delegates—
Gentlemen:

I have the honor to report for the Board of Trustees that the financial condition of our Society is very satisfactory.

The Board of Trustees was organized primarily to relieve certain officers of part of their irksome responsibilities and to devise a policy for the stabilization of the finances of the Society.

As a result of conferences between the Board of Trustees and the Secretary and Treasurer of the Society, the policy was established of investing our funds in carefully selected revenue bearing securities, the list of which is as follows:

$10,000 Fourth U. S. Liberty Loan 4¼% 1933-38.
8,000 American Telephone & Telegraph Co. 35 yr. S/F G/D 5% 1960.
3,000 Arkansas Power & Light 1st & Ref. Mtge. Series 5% 1956.
3,000 Canadian National Rys. Equip. Tr. Series K 1929 5% 1931.
4,000 Chicago, Milwaukee & St. Paul Ry. Co. Gen. Mtge. G/B Ser. "A" 4% 1989.
5,000 Cleveland, Cincinnati, Chicago & St. Louis Ry. Co. Ref. & Imp. Series "D" Mtge. Bd. 5% 1963.
3,000 Consolidated Gas Co. G/D 5½% 1945.
5,000 Erie Railroad Co. Conv. 50 yrs. Series "A" G/B 5% 1953.
3,000 International Great Northern RR. Series "B" 1st Mtge. 30 yr. 5% 1956.
5,000 New Orleans Texas & Mexico Ry. 1st Mtge. G/B Series "B" 5% 1954.
5,000 New York, New Haven & Hartford RR. Co. 1st Ref. Mtge. G/B 4½% 1967.
5,000 New York Power and Light Corp. 1st Mtge. 4½% 1967.
3,000 New York Steam Corporation "A" 1st Mtge. 6% 1947.
3,000 Norfolk-Western Ry. Co. 1st Cons. Mtge. 4% 1996.
3,000 Northern Pacific Ry. Co. Prior Lien Ry. & Land Grant 4% 1997.
8,000 Northern Pacific Ry. Co. Ref & Imp. Series C & D 5% 2047.
3,000 Pennsylvania Railroad Co. Const. Mtge. 4½% 1960.
3,000 Puget Sound Power and Light Co. 1st & Ref Mtge. Series "A" 5½% 1949.
5,000 St. Louis, San Francisco Ry. Consol. Mtge. Series "A" 4½% 1978.
8,000 Standard Oil of New Jersey Tem. Deb. 20 yr. Gold 5% 1946.
5,000 So. California Edison Company Ref. Mtge. 5% 1952.
3,000 Utah Power & Light Co. 1st 5% 1944.
3,000 Utilities Power & Light Co. G/B w/w 5% 1959.
5,000 Wabash Railway Co. Ref. & Gen. Mtge. Series "C" 4½% 1978.
5,000 Western Union Tel. Company 25 yr. Gold 5% 1951.

These securities were purchased after conference with recognized financial authorities.

At the present time the total amount of funds invested for the Society is $116,000, which in the year 1930 produced an income of $4,662.50.

These holdings are occasionally analyzed by three separate, independent financial experts,—one bank, one financial service and one brokerage house.

The analyses made by these three agencies correspond in major details and indicate that in our entire list of holdings there is none they would recommend for sale.

The Board of Trustees has also created three separate and distinct Trust Funds: viz.

First, the Journal Fund,
Second, the Directory Fund, and
Third, the General Investment Fund.

The income from the first two funds will ultimately cover the deficit incidental to these activities.

The General Investment Fund will ultimately produce an income which might be used for extraordinary disbursements or might be considered in the nature of a "War Chest" when and where needed.

The following Budget was prepared by the Executive Committee and approved by the Trustees:

Rent	$ 2,900.00
Telephone	200 00
Postage	600.00
Stationery and Printing	900.00
Salaries	18,000.00
Contingent Fund	1,000.00
Annual Meeting—Printing and Postage and Stenographer for House of Delegates	1,700.00
Printing District Branch Programs, and Postage for mailing paid through Secretary's Office	800 00
Auditor	600.00
Traveling Expenses—General Including President and Secretary	5,000 00
Traveling Expenses, A. M. A. Delegates	2,500 00
Counsel—Salary	14,000 00
Counsel—Expenses	257.41
Secretary—Honorarium	3,000.00
Secretary—Expenses	600.00
Executive Officer's Salary	9,000.00
Executive Officer's Expenses	1,500 00
Standing Committees	
Legislation	5,500 00
Medical Economics	2,500 00
Public Health and Medical Education	8,000.00
Public Relations	2,500.00
Medical Research	250.00
Scientific Work	250.00
Special Committees	
Physical Therapy	800.00
Periodic Health Examinations	1,000.00
District Branches	
For Annual Meetings as allowed under the By-Laws	2,000 00
Special Appropriations	
Conference of County Secretaries	750.00
Conference, Executive Committees, District Branches	200.00
Christmas Bonus	600.00
Tri-State Conference	150.00
Journal	
Printing and Cuts	35,000.00
Postage—Mailing Journal	3,600.00
Postage—General	400.00
Commissions	8,000.00
	300.00
	500.00
	5,000.00
portorial Work	500.00
Dr. Stedman (Medical Progress Dept.)	1,200.00
London Letter ($25.00 Per Letter)	600.00
Rent	1,658.00
Salaries	4,420.00
Extra Clerical Work for Executive Editor at Patchogue	500 00
Telephone	200.00
Subscriptions to Journals	250.00
Wrappers for Journals	600.00
Stationery and Printing—General Office Supplies, including Furniture, Fixtures, Ice, Water, Towels, etc.	800 00
Directory	
Printing Directory	14,000.00
Wrapping and Delivery	1,700.00
Postage	700.00
Commissions	1,200.00
Stationery, Printing and Expenses	800.00

Although it is very gratifying to make a report containing so many conforting thoughts, it is only fair to say that the facts herein presented have been made possible very largely by reason of the active cooperation of our Secretary and the constructive suggestions of our invaluable Treasurer.

Respectfully submitted,

HARRY R. TRICK, *Chairman.*

April 15th, 1931.

REPORT OF THE BOARD OF CENSORS

To the House of Delegates:

Gentlemen:

There has been held during the year but one session of the Board of Censors.

The Board convened in the offices of the Society, 2 East 103rd St., New York City, on Monday, June 17, 1930, at 10 A.M., to hear the appeal of Dr. Edward S. Cowles against the action of the Medical Society of the County of New York excluding him from membership.

The following Censors were present: Drs. George B. Stanwix, Edgar A. VanderVeer, E. Carlton Foster, William L. Munson, Augustus B. Santry, W. Ross Thomson; William H. Ross, presiding; D. S. Dougherty, Secretary.

The appellant was represented by Mr. Samuel Untermeyer and Mr. George Gordon Battle; the respondent by Mr. Lloyd P. Stryker and Mr. Reed B. Dawson; Mr. Lorenz J. Brosnan acting as legal advisor for the Board.

At the end of three and one-half hours, the hearing adjourned, sine die.

Later by mutual agreement the appeal was withdrawn.

Respectfully submitted,

D. S. DOUGHERTY, *Secretary.*

April 15, 1931.

REPORT OF THE TREASURER

CHARLES GORDON HEYD, TREASURER, IN ACCOUNT WITH THE MEDICAL SOCIETY OF THE STATE OF NEW YORK

Dr. Cr.

CASH RECEIPTS, YEAR ENDING MARCH 31, 1931

Balance—April 1, 1930		$10,833.36
RECEIPTS:		
Annual Dues, Arrears	$492.00	
Annual Dues, 1929	1,320.00	
Annual Dues, 1930–1931	122,014.00	
Journal Advertising	35,835.58	
Journal Sales	411.57	
Directory Advertising	4,407.99	
Directory Sales	4,214.32	
Annual Meeting, 1930, Exhibits	1,910.00	
Annual Meeting, 1930, Delegates' Dinner	344.50	
Interest on Investments	4,922.50	
Interest on Bank Balances	511.45	
Annual Meeting, 1931, Exhibits	1,882.50	
Clerical Work	204.76	
Bad Debts Recovered	88.00	
Miscellaneous Income	101.58	
TOTAL RECEIPTS		$178,660.75
TOTAL		$189,494.11

CASH PAYMENTS, YEAR ENDING MARCH 31, 1931

Salaries, General and Directory	$18,594.50	
Rent, including Journal Office	4,557.96	
Stationery and Printing, General	775.01	
Postage, General	309.75	
Telephone, General	161.96	
Auditing	475.00	
Censor's Special Account	247.74	
Accrued Interest on Investments	186.41	
Journal Publication	31,838.45	
Journal Salaries	4,823.15	
Journal Postage	3,696.54	
Journal Stationery	140.10	
Journal Telephone	170.35	
Journal Subscriptions	160.05	
Journal Commissions	6,724.34	
Journal Office and Sundry Expenses	529.44	
Traveling Expenses, Adv't'g Mgr.	208.17	
Executive Editor's Salary and Traveling Expense	5,289.40	
Literary Editor's Salary	1,200.00	
Honorarium, Editor-in-Chief	500.00	
County Secretaries' Conference	401.16	
Tri-State Conference	90.22	
Annual Meeting, 1930, Expenses	4,833.06	
Committee on Legislation	6,324.96	
Committee on Public Health and Medical Education	6,730.70	
Committee on Medical Economics	567.07	
Committee on Physical Therapy	532.32	
Committee on Periodic Health Examination	763.47	
Committee on Scientific Work	221.41	
Committee on Public Relations	2,115.02	
Committee on Medical Research	82.48	
District Branches	2,051.96	
Special Appropriation District Branches	200.00	
Executive Officer's Salary	8,750.00	
Executive Officer's Expenses	1,479.10	
Honorarium and Expenses, Sec'y	3,475.00	
Legal Expenses	14,464.82	
Traveling Expenses, A. M. A.	761.82	
Traveling Expenses, General	4,971.00	
Petty Cash Disbursements, General	422.33	
Furniture and Fixtures	180.25	
Directory Printing	13,541.65	
Directory Commissions	793.50	
Directory Delivery	1,489.05	
Directory Postage	552.00	
Directory Stationery and Expenses	430.28	
Annual Meeting, 1931, Expenses	1,255.85	
Office and Sundry Expenses	800.77	
Refund of 1930 Directory Sales	24.00	
Refund of Overpayment of 1929 Dues	3.00	
TOTAL DISBURSEMENTS		$158,896.57
Investments Purchased		15,937.50
BALANCE—March 31, 1931:		
Guaranty Trust Company	$12,945.04	
The Chase National Bank	1,678.83	
Petty Cash	36.17	14,660.04
		$189,494.11

JOURNAL ACCOUNT FOR THE YEAR ENDED MARCH 31, 1931

Income		
Advertising	$38,570.22	
Subscriptions and Sales	411.57	
Income from Dues	12,791.00	
		$51,772.79
Cost of Journal		9,722.00

Expenses	
Publication—Printing and Cuts	$33,248.51
Postage	3,699.08
Rent	1,657.92
Office Salaries	4,823.15
Commissions	8,515.71
Discounts	1,244.75
Honorarium, Editor-in-Chief	500.00
Executive Editor's Salary	5,000.00
Executive Editor's Traveling Expense	289.40
Literary Editor's Salary	1,200.00
Stationery	140.10

DIRECTORY ACCOUNT

Income		Expenses		
Advertising	$1,870 00	Publication—Printing	$13,541 65	
Sales	4 218 32	Salaries	4,683 12	
Income from Dues	12 791 00	Commissions	829 00	
		Discounts	28 29	
		Delivery	1,489 05	
		Stationery	426 00	
		Postage	552 00	
		Sundry Expenses	79 23	$21 628 34
		Net Income		250 98
	$21 879 32			$21,879 32

BALANCE SHEET AT MARCH 31, 1931

Assets			Liabilities		
CURRENT ASSETS			CURRENT LIABILITIES		
Petty Cash	$36 17		Account Payable	$1,410 06	
Cash in Banks	12,513 00		Committee on Medical Research	278 36	$1,688 42
		$12 549 17			
ACCOUNTS RECEIVABLE			TRUST FUNDS		
Journal Advertising	$1,496 29		Lucien Howe Prize Fund	$3,357 37	
Directory Advertising	1,312 50		Merritt H Cash Prize Fund	1,627 11	
Directory Sales	73 50		Wear, Loss and Depreciation	5 468 75	
		2 882 29	Journal Fund	20,108 12	
Investments (Bonds—Par Value $73,000 00)		70,131 51	Directory Fund	20,195 25	50 756 60
Accrued Interest on Investments		1,045 63	SURPLUS		
Inventory of Directories		227 50	Balance—April 1, 1930	$75 284 34	
		$86 836 10	DEDUCT		
TRUST FUND INVESTMENTS			Furniture and Fixtures Purchased and Written Off	$180 25	
UNION DIME SAVINGS BANK			Transferred to Journal Fund	3,000 00	
Lucien Howe Prize Fund	$1,593 71		Transferred to Directory Fund	3,000 00	
Merritt H Cash Prize Fund	869 00				6,180 25
		$2 462 71			$69,104 09
		45,500 00	ADD		
		2,110 87	Excess of Income over Expenses for Twelve Months Ended March 31, 1891		16,044 59
Accrued Interest on Investments		683 02			
		50 756 60			
FIXED ASSETS			BALANCE—March 31, 1931		85,148 68
Furniture and Fixtures		1 00	TOTAL		$137,593 70
		$137,593 70			

WOLF & Co., Accountants,
Per Frank Selvaggio, C P.A of New York

STATEMENT OF INCOME AND EXPENSES, APRIL 1, 1930, TO MARCH 31, 1931

Income		Expenses	
	$492 00		$6,824 96
	1,320 00		
	96 429 00		6,730 70
	3,048 85	Committee on Medical Economics	567 07
	511 45	Committee on Physical Therapy	532 32
	204 76	Committee on Periodic Health Ex-	
	626 65		763 47
	88 00		221 41
Miscellaneous Income	101 58		2,115 02
Directory Net Income	250 98		401 16
		Tri State Conference	90 22
		Censor's Special Account	247 74
		District Branches	2,051 96
		Special Appropriation District Branches	200 00
		Executive Officer's Salary	8,750 00
		Executive Officer's Expenses	1,479 10
		Honorarium and Expenses, Sec'y	3,475 00
		Salaries, General	13,911 38
		Legal Expenses	14,464 82
		Traveling Expenses, A M A	761 82
		Traveling Expenses, General	4,971 00
		Rent	2,900 04
		Stationery and Printing	775 01
		Telephone	161 96
		Auditing	475 00
		Postage	354 00
		Annual Meeting, 1930	2,578 56
		Bad Debts Charged Off	1,009 04
		Office and Sundry Expenses	993 92
		Cost of Journal	9,722 00
		TOTAL EXPENSES	$87 028 68

REPORT OF THE COUNSEL

To the House of Delegates—

Gentlemen:

Your Counsel herewith submits his report of the activities of the legal department of the Medical Society of the State of New York for the period from March 1, 1930 to and including February 28, 1931. Since your present Counsel did not take office until the first of April, 1930 this report covers, in addition to his own activities, a period of one month during which time his predecessor, Lloyd Paul Stryker was serving as Counsel to your Society.

Lloyd Paul Stryker resigned as Counsel for the Medical Society of the State of New York on the 31st day of March, 1930, and your Counsel was then appointed in his place and stead. Mr. Stryker had served as General Counsel for the Medical Society of the State of New York for a period of over four years. During his tenure of office he won the respect, admiration and affection of all with whom he came in contact. We believe that your worthy Secretary, Dr. Daniel S. Dougherty expressed the sentiments of every member of the Medical Society of the State of New York when, in commenting on Mr. Stryker's resignation, he said: "Through the resignation of Mr. Lloyd P. Stryker as our Counsel the Society has experienced a great loss and to the Secretary the loss has been both official and personal. During the years Mr. Stryker has been with us the Society has grown to appreciate not only his work but also his personality. He was the friend of every member of the Society, looking upon the physician as a man necessarily of high ideals and character and always judging him as such. He proved himself a man and 'to know him was to love him.'"

Your present Counsel has been identified with the work of your Society since 1920 and hence was fully familiar with every phase of the activities of the office of the General Counsel, and during the tenure of office of his predecessors, George W. Whiteside and Lloyd Paul Stryker, he had conducted the defense of a great number of malpractice actions.

During the recording period we suffered a severe loss in the sudden death of Mr. Maxwell C. Klatt, the Attorney for your Society. Mr. Klatt had been identified with medico-legal work for nearly a decade, having served under Mr. Whiteside, Mr. Stryker and your present Counsel. Upon Mr. Klatt's death, the Executive Committee appointed the writer's associate Mr. Thomas H. Clearwater to the position of Attorney previously held by Mr. Klatt. Mr. Clearwater, a graduate of Yale University and Columbia University Law School and a nephew of former Supreme Court Justice Alphonzo T. Clearwater, brings to his official position a wide legal experience and in addition those personal qualities of integrity and honor so essential to the successful representation of your Society and its individual members.

Your Counsel wishes to acknowledge his appreciation of the spirit of cooperation shown by the officers of your Society. He has come to know many of them very well and to cherish highly their friendship. It has been a real pleasure to serve under your President, Dr. William H. Ross who, since taking office, has travelled throughout the State in the interests of your Society. Your efficient and worthy Secretary, Dr. Daniel S. Dougherty is a tower of strength to your profession; he brings to the office of Secretary a wide and varied experience in medical problems, a keen and perceptive judgment as well as marked gifts of leadership. Your Counsel wishes also to acknowledge his indebtedness to your Speaker, Dr. John A. Card and to your Treasurer, Dr. Charles Gordon Heyd (who together comprise the Insurance Committee) for their splendid cooperation and excellent judgment in the problems which have come before them for decision. Your Counsel has greatly enjoyed his relations with the members of your various committees with whom at one time or another he has been in conference and consultation.

At this point the writer also wishes to record the fine work of his loyal and devoted office associates whose wholehearted endeavors have contributed in no small measure to the results shown by this report.

We are pleased to be able to report that in the latter part of this year there will be ready for publication a book defining the legal duty of a physician in relation to his patient. This work will set forth the principles of law that apply between patient and physician, with the adjudicated cases of the courts setting forth such principles. The author is your former Counsel, Lloyd Paul Stryker. This book will constitute a practical legal guide to the individual practitioner. The writer has been in frequent conference with Mr. Stryker about this work, has offered numerous suggestions with respect to the make-up of the book and has read the manuscript thus far prepared. We believe that when published this volume will fill a real need in the professional life of the individual doctor.

In making his report, your Counsel adheres to the convenient category employed in previous years whereby his activities have been divided into three main divisions: (a) the actual handling of malpractice actions before courts and juries and in the appellate tribunals; (b) counsel work with officers, committees and individual members

of the Society, and (c) legislative advice and activities

Litigation

The practice of medicine and surgery is an extra-hazardous profession This should be recognized at the outset It must be remembered that the physician's rights in our courts are passed upon by twelve men unversed in medicine or surgery So much has been said on this subject both by your present Counsel and by his predecessor, through the written and the spoken word, that it would be a work of supererogation to enlarge upon this point To be sure cases without merit are instituted against physicians — many that could properly be termed strike suits On the other hand, as has been so often said in these annual reports of Counsel there are cases where the physician sued unfortunately has failed in some particular to follow the approved methods in general use among competent physicians Cases of this kind have been settled However actions in which the writer has felt that the physician has a valid defense have been vigorously fought We do not attach any nuisance value to our cases thus serving notice on the attorneys who bring malpractice cases that they cannot obtain any settlement merely by the commencement of an action But for the principle here enunciated, which has been steadfastly adhered to since the inception of our group plan in 1920, our physicians would be swamped with claims and suits for malpractice

From Table I it will be noted that in the past year only 26 cases have been settled as compared with 28 in the preceding year On the other hand 286 actions were instituted in the period here reported on as compared with 192 in the previous period This difference is accounted for in large measure by the fact that at the close of the last accounting period there were pending between 150 and 200 claims In Counsel's last report it was said with respect to these claims that "actions have not yet been begun, but many of which ultimately will result in actions in court" Many of these claims did result in actions during the period covered by the

TABLE I

COMPARISON OF THE NUMBER OF SUITS INSTITUTED AND DISPOSED OF IN 1929 1930 AND 1930-1931

	INSTITUTED		DISPOSED OF	
	1929-1930	1930-1931	1929-1930	1930-1931
1	7	27	13	16
2.	20	25	14	10
3.	1	2		
4 Burns, X Ray, etc	15	23	21	12
5 Operations Abdominal, Eye, Tonsil Ear, etc	52	93	42	41
6 Needles Breaking	3	2	5	7
7 Infections	23	16	10	9
8 Eye Infections	5	2	2	3
9 Diagnoses	12	13	6	9
10 Lunacy Commitments	3	1		4
11. Unclassified—Medical	9	21	7	8
12 Loss of Services Wife, Child	42	61	24	40
TOTALS	192	286	144	159
FURTHER COMPARISONS				
Actions for Death	7	26	4	10
Infants' Actions	15	21	8	17
TOTALS	22	47	12	27
HOW DISPOSED OF				
Settled			28	26
Dismissed, Discontinued, Abated or Tried (Verdict for Defendant)			114	130
Judgment for Plaintiff			2	3
TOTALS	192	286	144	159
FURTHER COMPARISONS				
Appeals Judgment for Defendant			2	7
Pending on February 28, 1930	451			
Pending on February 28, 1931		578		

TABLE II

COMPARISON OF THE NUMBER OF MEMBERS INSURED IN 1928, 1929, 1930 AND 1931, AND THE NUMBER OF MEMBERS IN THE COUNTY SOCIETIES AND THE PERCENTAGE OF INSURED MEMBERS

	1928			1929			1930			1931		
	No. of Members in County Society	No. of Members Insured	Percentage Insured	No. of Members in County Society	No. of Members Insured	Percentage Insured	No. of Members in County Society	No. of Members Insured	Percentage Insured	No. of Members in County Society	No. of Members Insured	Percentage Insured
Albany	220	126	57	228	129	57	235	136	58	247	145	59
Allegany	28	22	79	30	8	26	32	11	34	32	10	31
Bronx	755	364	48	785	435	55	859	476	55	924	477	52
Broome	117	49	42	123	60	48	123	61	49	130	62	48
Cattaraugus	56	29	52	51	29	56	48	32	66	47	35	74
Cayuga	61	33	54	57	31	56	58	28	48	53	30	56
Chautauqua	93	38	41	90	38	42	89	40	45	90	43	48
Chemung	57	38	67	60	40	67	62	45	72	66	46	70
Chenango	34	18	53	34	18	53	36	18	50	34	21	62
Clinton	26	15	58	26	13	50	27	14	51	29	15	52
Columbia	37	19	51	35	19	54	36	21	58	36	19	53
Cortland	20	8	40	19	6	31	24	7	29	25	7	36
Delaware	23	4	16	22	4	18	22	6	27	25	5	20
Dutchess-Putnam	118	61	52	121	63	52	120	62	52	124	64	52
Erie	671	439	65	690	368	53	718	428	60	735	451	61
Essex	24	13	54	26	14	53	25	13	52	22	13	59
Franklin	56	16	29	56	12	21	53	11	21	55	12	22
Fulton	41	28	68	38	25	65	38	24	63	36	23	64
Genesee	25	10	40	28	9	33	31	12	38	34	16	44
Greene	24	12	50	27	15	52	23	13	56	21	12	57
Herkimer	49	35	71	48	38	79	50	37	74	47	36	77
Jefferson	80	34	43	82	38	46	82	40	49	83	41	49
Kings	1639	1017	62	1878	1189	63	2021	1257	62	2225	1265	57
Lewis	17	7	41	16	6	37	14	6	43	15	6	40
Livingston	28	9	31	30	12	40	28	14	50	38	16	42
Madison	31	16	52	30	15	50	30	15	50	31	14	45
Monroe	436	251	58	436	244	56	451	256	57	460	269	58
Montgomery	50	13	26	51	13	26	49	14	28	48	11	23
Nassau	151	91	60	155	94	61	173	101	58	182	119	65
New York	3623	2171	60	3782	2240	59	3881	2348	60	3945	2374	60
Niagara	98	56	57	99	56	57	102	63	62	110	62	56
Oneida	184	91	49	192	99	52	194	101	52	195	96	49
Onondaga	333	198	59	330	228	69	346	241	70	342	234	68
Ontario	72	38	53	76	36	47	75	35	47	78	37	47
Orange	107	64	60	111	68	61	116	71	61	113	70	61
Orleans	19	9	47	18	9	50	18	9	50	20	9	45
Oswego	48	23	48	49	21	43	50	24	48	45	26	58
Otsego	44	22	50	42	20	48	44	22	50	44	22	50
Queens	376	253	67	416	286	69	465	304	65	496	324	66
Rensselaer	108	59	55	122	50	41	120	48	40	123	50	41
Richmond	80	45	56	84	43	51	89	50	56	95	51	54
Rockland	46	25	54	47	23	49	48	27	56	53	28	53
St. Lawrence	68	23	34	65	24	37	65	26	40	59	25	42
Saratoga	46	24	52	50	26	52	48	25	52	50	24	48
Schenectady	114	94	82	116	83	71	115	85	74	120	86	72
Schoharie	18	6	33	18	5	28	20	6	30	19	6	31
Schuyler	11	4	36	11	4	36	11	3	27	10	5	50
Seneca	23	7	30	21	8	38	20	9	45	21	9	43
Steuben	73	43	59	72	41	57	68	38	56	70	41	59
Suffolk	118	59	50	114	46	40	114	49	43	129	50	39
Sullivan	28	16	57	32	18	56	36	20	55	35	21	60
Tioga	24	9	38	22	9	41	21	8	38	19	7	37
Tompkins	57	26	46	53	23	43	56	25	45	57	27	47
Ulster	66	28	42	59	29	49	65	34	52	64	36	56
Warren	40	28	70	39	23	58	39	25	64	43	27	63
Washington	38	16	42	40	14	35	41	17	41	41	16	39
Wayne	38	22	58	38	25	66	40	29	72	44	32	72
Westchester	353	192	56	365	197	54	399	204	51	429	230	54
Wyoming	29	9	31	30	12	40	32	12	37	29	12	41
Yates	20	13	60	21	13	62	20	14	70	20	14	70
	11259	6488	58	11806	6764	57	12314	7170	58	12812	7334	57

present report. In many others we were successful in persuading the claimant not to commence an action against the physician.

It will be noted that in the present period 159 cases were disposed of as compared with 144 last year, representing an increase of 15 disposals. Of the number of cases disposed of only 26 were settled; in 130 either judgments for the defendant have been secured or they have been disposed of through dismissal, discontinuance or abatement. Throughout the reporting period only 3 cases resulted in judgments for the plaintiff, and of these 3 one is now on appeal. On February 28th of this year there were actually pending in court 578 cases as opposed to 451 of the preceding year. These figures do not, however, include a large number of claims now pending in which no action has yet been started, but undoubtedly many of them will result in actions in court. The figures in the accompanying Table I are self-explanatory and we feel require no further comment.

Also the ever-increasing value of our group plan renders it unnecessary to go into this subject at any great length. Time and again physicians who have been sued and who have not taken advantage of the benefit of our group plan have expressed themselves as deeply regretting their failure to obtain insurance. A lawsuit is not a pleasant experience, but at least the physician who has obtained adequate insurance is free from the worry and mental strain which comes to a physician who is facing a malpractice action without financial indemnity. It should be noted at this point that a physician who permits his insurance to lapse finds himself in exactly the same position, so far as financial benefit is concerned, as the non-insured doctor if a claim is brought against him arising subsequent to the time when his policy became inoperative by reason of such lapse.

It is pleasing to record that the carrier under our group plan has cooperated to the fullest extent with your Counsel and has at all times, in relation to your Society as well as its individual members, displayed a spirit of fairness that has won the commendation of your Insurance Committee. The recognition by individual members of your Society of the fruits and benefits of the group plan is due in large measure to the indefatigable labors of your efficient Insurance Committee. The Committee is made up of Drs. John A. Card and Charles Gordon Heyd. Each year Dr. Card goes throughout the State speaking to the members of the various component county societies on the benefits of malpractice insurance. The results of his labors in this respect are matters of record. Excellent work has also been done in this field by the Society's authorized indemnity representative, Mr. Harry F. Wanvig.

We append hereto Table II which gives a comparison of the number of members insured in 1928, 1929, 1930 and 1931 and the number of members in the county societies and the percentage of insured members in the county societies and in the entire State Society. These figures are sufficiently clear to obviate the necessity of extended comment. It will be noted that there are now 12,812 members of the State Society as compared with 12,314 in the previous reporting period, and that there are now 7,334 insured members as compared with 7,170 in the previous period.

Counsel Work

During the period of this report, your Counsel has prepared for publication in the Society's Journal articles in the nature of editorial comment. These editorials have included the following:

"Bootleg Insurance" Attacked by the New York Superintendent of Insurance.
Defendant's Right to X-ray Examination of Plaintiff in Personal Injury Actions.
Attorneys, Courts' Inherent Power of Discipline.
Habit Forming Drugs—State Statutes Analyzed.
The Institute of Law of Johns Hopkins University.
Liability Insurance—Necessity of Assured Giving Prompt Notice.
A Doctor's Certificate.
The Defendant's Right to Blood Test of Plaintiff in Personal Injury Actions.
Insurance Policy—Distinction between Accident and Disease.
The Doctor as an Executor.
Medicine and Law Join to Save the Life of a Child.
Confidential Communication—Waiver of Privilege by Patient.
Expert Testimony and the Use of Medical Textbooks.
A Salutary Decision.
Malpractice—Statute of Limitations.
Executor and Trustee—Amount of Commissions.
Husband and Wife—Court's Refusal to Annul Marriage on Ground of Epilepsy.
Confidential Communications between Physician and Patient.
A Just Censure.
Criminal Law—Confession Secured by Threats and Violence Condemned.
Our Group Plan—A Physician's Claim for Reimbursement Examined and Disallowed.

Your Counsel has also digested and there have been published in the Journal reports upon malpractice action which it has been felt were of special interest to the profession. The case reports published during the previous year are as follows:

Claimed Negligence in Setting of Compound Fracture of Finger.
Claimed Negligence in Treating Scars with Nitric Acid.
Facial Paralysis Resulting from Claimed Negligence in a Mastoid Operation.
Claimed Negligence in Caesarian Section, Resulting in Death.
Claimed Injuries Received during Claimed Negligence in Confinement.
Death Claimed Due to Mustard Bath.
Claimed Wrong Diagnosis of Ectopic Pregnancy

Claimed Negligence in Causing Burn during Hernia Operation.
Inflammatory Reaction from the Use of Picric Acid.
Claimed Negligence in Removal of Broken Needle.
Claimed Negligence in Failure to Discover Carbuncle on Neck.
Blindness Claimed Due to Negligence in Treating and Operating Upon Lacerations of the Eye.
Retention of Sutures Claimed Due to Neglect.
Claimed Failure to Repair Laceration Sustained during Delivery.
Claimed Negligence in Setting of Fractured Radius and Ulna.
Claimed Negligence in Reducing a Fracture of the Arm.
Death Occasioned by an Administration of Anaesthesia.
Alleged Negligence in Skin Grafting Operations.
Claimed Negligent Breaking of Needle during Novocaine Injection.
Alleged Unauthorized Removal of Appendix.
Claimed Negligent Treatment of Powder Wound.
Claimed Negligence Causing Needle Break.
Claimed Negligence in Diathermic Treatment of Leg.
Claimed Negligent Operation on Eyelid.
Alleged Negligence in Tonsil Operation.
Claimed Negligent Treatment of Scrotal Hydrocele.
Alleged Negligence in Treating Injured Finger.
Death Claimed Due to Failure to Detect Heart Condition during Pregnancy.
Alleged Negligent Treatment of Hemorrhoids.
Death Claimed Due to Negligence in Caesarian Section.
Death of Child Alleged to Have Been Caused by Doctor's Negligence.
Alleged Negligent Treatment of Mastoid Wound.
Claimed Negligence in Removal of Cartilage from Nose.
Claimed Negligent Treatment of Neuralgia.
Alleged Negligent Tuberculin Injections.
Alleged Negligence in Prescribing Mercury Injections.
Alleged Negligence in Failure to Complete Operation.
Pan-Sinusitis and Otitis Media.
Tonsillectomy, Removal of Uvula.

It is pleasing to your Counsel to find that these editorials and case reports are read by the members of your Society with great interest and approval.

In addition to his other duties, your Counsel receives frequent requests for opinions on various subjects. It should be remembered that the Executive Committee of your Society has ruled that all requests coming from individual members of your Society or from component county societies must, in the first instance, be referred to that body for action. If the Executive Committee deems the inquiry a proper one for opinion by legal Counsel, it refers the same back to him for reply. Some of the matters upon which advice has been thus rendered are as follows:

Inquiry regarding the legal liability of physicians who experiment in treatment of patients.

Inquiry as to whether the group policy of insurance covers a physician as manager of a public hospital.

Inquiry as to whether the State Society will defend a physician in a civil action growing out of an abortion.

Inquiry regarding the legal responsibility of a physician who elects to do his own interpretation of X-ray plates, and as to whether additional insurance protection would be advisable in such cases.

Inquiry regarding the reliableness of a foreign insurance company not authorized to do business in this State.

Communications regarding the legality of giving information to insurance companies for statistical purposes.

Inquiry regarding the legality of taking a Wassermann test of all patients entering a hospital.

Inquiry as to whether the statutes directing physicians to report all cases of syphilis to the local Boards of Health are mandatory or discretionary.

Inquiry as to whether, where a physician has expressed a willingness to continue to treat without charge, his duty is to call at the patient's home where the child is in fit condition to be brought to the doctor's office.

Examination of the statutes in regard to the following inquiries:

(a) Is a registered nurse permitted to administer anesthesia for surgical or obstetrical operations?

(b) Does the administration of anesthesia come under the Medical Practice Act?

(c) In case of accident due to faulty administration of anesthesia at the time of operation, is the hospital or the attending surgeon liable to malpractice suit?

Inquiry as to the advantage of a group plan policy as opposed to a malpractice insurance policy with a foreign insurance company not authorized to do business in this State.

Inquiry as to whether the submission and payment of a doctor's bill for services affects the patient's right to recover, and as to the advisability of submitting such bill before the Statute of Limitations in malpractice actions has run.

Your Counsel has also rendered opinions in respect to the following inquiries which were referred by the Executive Committee to the Committee on Group Insurance in conjunction with Counsel:

Inquiry as to whether a physician is compelled by his group insurance policy to assign a judgment for costs in a malpractice suit to the group carrier where the plaintiff is impecunious.

Inquiry as to coverage under the group plan in so-called "property damage" (loss of service) suits.

Inquiry regarding the status of a State Society member who becomes a non-resident, in regard to membership in the Society, protection against malpractice suits and the effect of such removal upon his group plan policy of insurance.

Opinion of Counsel has been requested by the Executive Committee and has been rendered as to the following matters requiring examination of the statutes and judicial decisions:

The legal status of a State Society member who has been suspended from the rights and privileges of the Society.

What constitutes the practice of medicine by corporations, and how is the term "practicing medicine" defined by judicial decisions?

The rights of the NEW YORK STATE JOURNAL OF MEDICINE under its present contracts to cancel unethical advertisements.

Proposed revision of the contracts between the NEW YORK STATE JOURNAL OF MEDICINE and advertisers.

In addition to the matters referred to under this heading, your Counsel also acted as counsel to the Board of Censors of your Society in two appeals brought before that Board for decision.

Legislative Advice and Activities

Throughout the reporting period various bills of interest to the medical profession have been introduced in the Legislature We have been requested to render an opinion with respect to many of these, and our advice and opinion have been promptly given The usual chiropractic bill was introduced, and this bill we made the subject of comment in our editorial of March 1st of this year

Conclusion

The writer deems it a great privilege and a pleasure to have represented your Society and its individual members The position of General Counsel of the Medical Society of the State of New York is a position of great trust and honor Its obligations are many and varied Yours is a noble profession, your work is sometimes misunderstood by the lay public and frequently unjustly criticized Your Counsel has endeavored in his contacts with courts, juries and lawyers to bring about a better understanding and a keener appreciation of the splendid and unselfish work that is being done by the medical profession

Respectfully submitted
LORENZ J BROSNAN, *Counsel*

March 1, 1931

REPORT OF THE COMMITTEE ON PUBLIC HEALTH AND MEDICAL EDUCATION

To the House of Delegates—

Gentlemen

In the preparation of the annual report of the Committee on Public Health and Medical Education to the House of Delegates the reports of this Committee for the previous five years have been carefully reviewed This review indicates that there has been a definite trend in the work of the Committee Its policy may be summed up briefly as consisting of two parts *One* the investigation of public health activities and the education of the physician in such matters *Two* the contribution in the field of public health on the part of the medical profession in aiding to provide adequate medical care through the continued instruction of the physician by means of graduate education

Graduate Education

As in the past, the largest part of the Committee's attention and funds have been devoted to graduate education The following is a report of the courses sponsored by the State Society under the direction of this Committee during the current year (The figures after each course indicate the number of lectures in that course)

Fall of 1930

Rockland Seneca Wayne Monroe Livingston)	Heart Disease	5
Genesee (with Orleans & Wyoming)	Tuberculosis	5
Tioga	Periodic Health Examination	4
Cortland	General Medicine	6
Washington	Clinical Day	5
Sullivan	Traumatic Surgery	6

Spring of 1931

Dutchess Putnam	Internal Medicine	5
Schoharie	Surgery	6
Otsego	Surgery	6
Onondaga	Surgery	6
Cayuga	Surgery	6
Steuben	Traumatic Surgery	6
Chemung	Traumatic Surgery	6
Tompkins	Heart Disease	5
St Lawrence	Traumatic Surgery	6
Jefferson	Traumatic Surgery	6
Clinton	Internal Medicine	6
Franklin	Internal Medicine	6

Following its custom of the past years the Committee has kept detailed records of the courses which it has sponsored In as much as the work of the current year is not completed at the time of the writing of this report a summary can only be given of the courses held before January 1, 1931 This is as follows

Total number of courses	9
Total number of lectures	41
Number of county medical societies before which courses were given	13
Total attendance of all courses	1 237
Largest attendance for one course (Monroe)	566
Smallest attendance for one course (Tioga)	59
Total cost of all courses	$1 862 02
Average cost per course	206 89
Average cost per county	143 23
Average cost per attendance	1 51

However, the entire work for the previous year 1929 30 can now be given The figures for the two previous years are also tabulated for the sake of comparison as well as such information as can be reported for the current year at this time

	1927-28	1928-29	1929-30	1930-31
Total number of courses	21½	21½	16	21
Total number of lectures	116	105	91	116
Number of county medical societies before which courses were given	22	31	19	25
Total attendance of all courses	3,268	4,809	3,296	
Largest attendance for one course	(Albany) 495	(Monroe) 836	(Monroe) 841	
Smallest attendance for one course	(Greene) 42	(Herk.) 66	(Rock.) 57	X
Total cost of all courses	$ 4,524.82	$ 4,777.07	$ $3,705.42	
Average cost per course	215.47	217.96	231.59	
Average cost per county	205.67	154.10	195.02	
Average cost per attendance	1.38	.98	1.12	

These figures indicate that the work has continued much the same during the past four years. There has been a slight variation in the total number of courses and the number of counties before which courses have been given. However, in each year approximately one-third of the component county societies have been reached in this work. The attendance during the year 1928-29 was much higher than in other years. This apparently was due to the fact that during that time the lectures were on subjects of the most practical interest. The figures indicate that the cost of the work has gradually been reduced. It is expected that there will be no increase shown in the figures for the current year.

An analysis of the Committee's experience of graduate education indicates definite lines along which this work should be carried on. The lectures must deal with practical subjects. In order to meet the needs and the demands of audiences whose interests are so diversified they can not be too highly technical nor can prolonged instruction be given on any one subject. The lectures must continue to be distinct from the regular meetings of the county society, though occasionally an exception may be made for the lecture to replace the scientific program of the county society. The experience of the Committee indicates that it is well for small adjacent counties to join a large metropolitan county in this work especially where travel facilities are most convenient. Also better results follow the plan, rapidly being adopted, of two nearby counties having identical courses both of which can be given on the same day. The reasons for the above statements are too obvious to need comment.

Some of the courses sponsored by the Committee have not been as satisfactory as others. Criticism of the courses may be justified on the grounds that the subjects have not been of enough practical importance to attract the attention of the physician or that the lecturer has failed to present the subject in a practical way or that the lecturer has lacked the ability to make his talk interesting as well as instructive. The Committee is constantly trying to correct these faults wherever they occur. It is making preparations for courses to be available during the next year which will deal with most practical subjects such as Acute and Chronic Infections, Pre-clinical Signs of Disease, Emergencies, Functional Diseases and Treatment. These courses will be made up by the Committee itself after consultation with various medical teachers outside the Committee. The scope of each lecture will be definitely outlined so that the services of difference lecturers can be utilized for one subject. The Committee will be very careful in selecting these lecturers and hopes to be able to secure men of wide clinical experience thoroughly accustomed to speaking to present these subjects. Where courses have not been completely satisfactory to county societies, in some cases, criticism of the society itself in this regard is justified. In the first place some societies have made unwise selection of courses, usually despite advice of the Committee. This mistake can be obviated by having a strong committee on graduate education in the county society appointed early in the year which would give sufficient time to discover the wishes of the society as well as to confer adequately with the State committee and to be guided to a proper extent by the latter body. Many of the county societies are doing this at the present time. Secondly, some county societies have selected an unsuitable time for the course to be presented due to conflict with other medical meetings either in various parts of the county or elsewhere. Thirdly, some counties still fail to give adequate publicity regarding the course to its members as well as to other physicians in the county. A strong committee on graduate education in the county society would eliminate all these mistakes.

That graduate education is rapidly becoming an integral part of other State medical societies is indicated by a pamphlet issued by the University of Virginia in connection with the Medical Society of Virginia. According to this pamphlet, "Various plans in thirteen American States, Colorado, Iowa, Michigan, Minnesota, Missouri, New York North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, West Virginia and Wisconsin, are known to have been inaugurated, with different degrees of success, as State programs of graduate medical education." Summarizing the data from these States the pamphlet states that New York has the largest undertaking conducted by a strong State society on the most

X—(Data not available until July 1, 1931)

generous plan. The entire work of the Medical Society of the State of New York in graduate education is reviewed in detail in this pamphlet and a number of the features of our activities are cited as being worthy of special comment.

During the past year the Committee tried out the plan of substituting a clinical day of several lectures in place of the usual method in which one lecture was given at weekly intervals. The results in this instance were not satisfactory and while a poor choice of time as well as a bad selection of the part of the county in which the lectures were held may have been largely responsible for this, nevertheless, it is the feeling of the Committee that the majority of physicians prefer the weekly single lecture. Conference with representatives of various county societies tends to justify this statement.

During the past four years there have been 80 courses comprising 428 lectures. Of these 21 have been on the subject of internal medicine as outlined by Dr. Walter W. Palmer of New York City and have reached 27 county societies. Seventeen were courses on Heart Disease outlined by Dr. John Wyckoff of New York City and these have reached 23 counties. Several counties have had a course each year. Two counties have had a course each year since the work was first started through cooperation with the State Department of Health. During the present year one county (Dutchess-Putnam) which previously had had no course is having its first course. Another county (Seneca) in which no course hitherto had been given but which had joined with nearby counties for previous courses has had its own course for the first time this year. No courses in graduate education have been given in Allegany, Madison, Richmond, Schuyler and Westchester Counties. The proximity of Westchester County to the city of New York with its tremendous facilities for graduate education may nullify the need for a course in that county. The comparable inaccessibility of Richmond County to the rest of the city of New York does not justify the same conclusion.

The Committee especially recommends to county societies for consideration for future study a course on Tuberculosis as also courses in Obstetrics and Pediatrics, neither of which subjects have been presented during the past three years. The beneficiary results of a graduate course to county societies as well as the benefits to the public in general, together with the interest of the physicians in the course justify the continuance of this work which it is now demonstrated can be carried on without undue expense.

Other Activities

The Committee has arranged and aided county medical societies in preparing the scientific programs and obtaining speakers for regular county society meetings. It also aided in the preparation of the scientific program of two district branch meetings. It has postponed temporarily publication in the State Journal of short articles dwelling on the importance of preventive medicine in the regular work of the physician, in as much as the Committee on Periodic Health Examinations had under contemplation the publication of somewhat similar material but in a more detailed way. The Committee at the present time is not in favor of a graduate course on Periodic Health Examinations feeling that better results would be obtained from one lecture on this subject.

The Committee is maintaining its interest in general public health activities and endeavoring to stimulate county societies to appoint active committees on this subject. The activities of the Public Health Committee of the County of Monroe are especially noteworthy. This Committee, under the chairmanship of Dr. E. G. Whipple, has dealt with Tuberculosis, Heart, Cancer, Social Hygiene, Child Welfare, Diphtheria Prevention, Mental Hygiene, Pre-natal Care, Health Education, and Periodic Health Examinations. Its messages over the radio have reached so many as to make a long review of its work unnecessary. The activities of this county should serve as a model for other county societies to follow. The need for such committees is especially urgent at the present time in view of new health legislation about to be enacted in this State. It is regrettable to have to admit that the Committee on Public Health of the State Society as well as county societies have not been consulted about these matters either during the period of their investigation or during the construction of legislative bills. The Monroe County plan of having sub-committees on the various phases of public health under the direction of a general committee on public health might well be considered by the State Society where the tendency to appoint special committees on subjects within the province of standing committees has been steadily growing.

During the year the Committee cooperated with the State Department of Health in making available to county societies information regarding the possibility of an increased incidence in measles in certain parts of the State and methods for the control of the same. It offered its services to the State Department of Health in arranging in specified sections of the State intensive courses in the treatment of this disease and its complications.

The Committee is still investigating the subject of maternal mortality and in this regard still urges legislation requiring the licensure of all private hospitals. The Committee was invited to partake in a study of maternal mortality by the Department of Health of Cattaraugus County. As this was an activity limited to one county the

Committee felt that it should be referred to the local county society and in the meanwhile that society has been informed that the Committee's services in an advisory capacity are available to it if requested.

The Committee on two occasions has sent information to the White House Conference regarding its work in giving instruction in Obstetrics and Pediatrics. For the President of the State Society it compiled a list of all courses given in all counties of the State since July 1, 1924.

The Chairman of the Committee has attended all the Executive Committee meetings of the State Society held during the year, three meetings of the Public Relations Committee and one each of the Committee on Physical Therapy and the Committee on Periodic Health Examinations. He has attended the President's Conference of the chairmen of standing committees, the conference of secretaries of county societies, the conference of chairmen of Public Relations Committees and with three other members of the Committee attended a conference of the State Department of Health. He has attended meetings of the Executive Committee of the Fifth and Eighth District Branches and the Third and Seventh Annual District Meetings. He has attended meetings of the following county societies; Genesee, Wyoming, Orleans, Chemung, Cayuga, Otsego, and held conference with representatives of the Societies of Steuben, St. Lawrence and Jefferson.

The Committee has continued to operate well within the limits of the appropriation made to it each year, and it has tried to be economical in the expenditure of its funds without, however, affecting its work to disadvantage. It has in its files accurate records of all its activities, readily accessible, as well as the business-like system of its accounts.

Again the Committee wishes to express its sense of obligation and appreciation to the many lecturers who have so generously given their time for graduate education and especially to Drs. John Wyckoff, Walter W. Palmer, Edward R. Baldwin, Alan R. Anderson, John J. Moorhead, and Charles Gordon Heyd, who have outlined courses and organized groups of instructors for the work. The Chairman of the Committee wishes to express his appreciation to the members of the Committee for their wholehearted cooperation and active interest. Acknowledgment is again made of the excellent cooperation extended by the other committees of the State Society, particularly of the most cordial relations that have continued to exist between the chairmen of these committees and the chairman of this committee. As in the past the Secretary, Treasurer, and the Executive Officer have been most kind in their aid to the Chairman and members of this Committee and it has been an inspiration as well as source of personal pleasure to serve as Chairman of one of the standing committees under the excellent leadership of President Ross.

Respectfully submitted,

THOMAS P. FARMER, M.D.,
Chairman.

April 15, 1931.

REPORT OF THE SPECIAL COMMITTEE ON CANCER PREVENTION

To the House of Delegates—

Gentlemen:

Your Special Committee on Cancer Prevention begs leave to submit the following report for the current year.

The Special Committee on Cancer Prevention held a meeting on Friday, October tenth in New York City and adopted the following recommendations:

(1) The Committee felt that each county medical society should devote at least one meeting a year to the subject of cancer.

(2) The Committee advised that a list be prepared of physicians who were capable and willing to give talks on cancer before county medical societies, especially emphasizing the responsibility of the doctor in the question of cancer.

(3) It is recommended that the Committee arrange to provide speakers as coming from the State Medical Society for public programs arranged for the American Society for the Control of Cancer or any of its branches when requested to do so.

(4) The Committee desires to cooperate with the American Society for the Control of Cancer or any of its branches.

(5) It was decided that a questionnaire be sent to the deans of all medical colleges of the state in order to survey what is being done in teaching cancer prevention to medical students. Dr. Burton T. Simpson agreed to prepare a letter and questionnaire dealing with this subject to be sent to the deans.

(6) It was left to the Committee on Public Health and Medical Education to arrange with county medical societies for a meeting each year to be given over to the discussion of cancer.

Through the office of the Committee on Public Health and Medical Education a letter was sent to the secretary of each county medical society

urging each county society to devote at least one meeting a year to the subject of cancer. Twenty-two replies were received and at the time of the writing of this report there have been meetings at which this subject was discussed in nine county societies. Five other county societies are planning such meetings in the very immediate future and six county societies have the matter under consideration. Several of these meetings were arranged with aid from the Committee on Public Health and Medical Education.

Complying with the second recommendation of the Committee a list has been prepared of capable speakers on the subject of cancer, who are willing to give talks before county medical societies.

The questionnaire prepared by Dr. Simpson was sent to the deans of all the medical colleges of the State and all but one replied. This information is in the hands of the members of the Committee for study at the present time.

The Committee's plans for the future are along the policies indicated in this report.

Respectfully submitted,

THOMAS P. FARMER, *Chairman.*

April 15, 1931.

REPORT OF THE COMMITTEE ON PUBLIC RELATIONS

To the House of Delegates—

Gentlemen:

Your Public Relations Committee has continued its work along the lines adopted during the previous years and is encouraged in its efforts by many very apparent evidences of cooperation in health work which are noted in our county medical societies, and in letters of inquiry received relating to the work of the State Committee and its County Units.

There seems to be an ever broadening field of activity, likewise a definite realization upon the part of the medical men of the necessity of their cooperating with all health agencies, whether lay or governmental, and of their pushing forward, to a greater extent than formerly, the newer ideas in medicine relating to health measures and the prevention of disease. It is worthy of note that very few controversial questions have come before your committee for adjustment.

The personnel of the committee remains as of the previous year, except that our Ex-President, Dr. George M. Fisher, who during his term as President of your State Society, conceived the idea and originated this committee, has honored it by accepting appointment to the position left vacant by the advancement of Dr. Ross to the Presidency.

The committee has met monthly, in New York or Albany, to discuss and consider the many problems to be dealt with relating to the work.

The members of this committee have been active in addressing County Societies, District Branch meetings and various medical gatherings with reference to the necessity of vigorously carrying on the work of the County Medical Society Public Relations Committees, thus endeavoring to activate county committees to as great an extent as possible.

Health surveys from nineteen counties in the State have been received and published in the New York State Journal of Medicine. We regret that more of the County Society Public Relations Committees do not comply with our request for such surveys. Much important cooperative health work is going on in our counties and it is not given proper publicity. A basic survey submitted to this committee and published in the Journal, followed by an annual report, would overcome the present condition, likewise give the State committee a definite knowledge of existing conditions.

Bulletins and letters relating to the work to be performed by the County Committees have been regularly submitted to them and to others interested in the activities of this State Committee. We aim to keep the county society committees informed of the activities of the State Committee and of what is expected of them as county committees, and have stressed the point that our County Society Public Relations Committees must be made up of leaders in the medical profession, that they must be aggressive and cooperative; for their success will depend upon the ability of the members to impress the public with the viewpoint of organized medicine and to secure active cooperation of other Public Health agencies.

A Conference of the Chairmen of the Public Relations Committees of the County Medical Societies of this State was held in Albany September 18, 1930. At this meeting 32 County Medical Societies were represented by the chairmen of their respective County Society Public Relations Committee or by some one designated to represent it. In addition there were present the President, President-Elect, Secretary and other officers and committeemen of the Medical Society of the State of New York.

The agenda for this conference centered, principally upon the pertinent subject—

"How can we develop an active Public Relations Committee in each County Medical Society?"

The following principles were recommended to the County Committees:

1. The activities of each county committee should consist in expanding the health work which is already being undertaken in the county, by any organization, as well as to initiate new measures.
2. The members of each county committee shall seek to establish intimate contacts with the leaders of every volunteer health organization in the county. They shall not wait for invitations to cooperate with the lay organizations, but shall take the initiative, if necessary, in proposing it.
3. The Committee shall offer the advice and assistance of the medical profession as to the most practical ways of conducting any form of health service in the county, and if possible, shall see that every health organization in the county shall include at least one local physician on its governing body.
4. The State Committee on Public Relations is in the position to give consultation and advice to any county committee in caring for its problems in the field of Public Relations.

The discussion participated in by twenty-two of the members present was intensive and inspiring, demonstrating that in many of the counties real progress is being made far in advance of what we could have anticipated for the limited period of time that these committees have existed. Furthermore, this conference demonstrated that the personnel of the county committees had been well selected, as the chairmen present were the leaders in their respective county societies, men who recognize that there is an issue at stake and will seek out its solution. To those of us who have been hoping to see definite leadership by our County Public Relations Committees, it was most encouraging and inspiring to note the personnel and intensity of mind of those present.

We, as a committee, are impressed that this was an important conference and fully justified the expenditure of money, and would recommend that it be continued each year.

Your Committee has given much time, thought and consideration to the Rules and Regulations to govern the developing County Hospitals that are to receive State aid. These hospitals are general hospitals and the one at Warsaw in Wyoming County is in active operation. The second one in Lewis County is in the course of construction.

The following Rules and Regulations were recommended by your committee and received the sanction of the Executive Committee:

1. All registered physicians residing in the county shall be eligible to membership on the staff. Physicians residing outside of the county may use the hospital, but cannot become voting members of the staff.
2. From their number they shall nominate for election by the board of managers a medical board of not less than five members.
3. The medical board, subject to the approval of the board of managers and the State Commissioner of Health, shall have supervision and control of all medical service in the hospital. This shall include appointments for the necessary, efficient and adequate surgical, medical, special and nursing services of the hospital; the preparation of rules and regulations for the conduct of the professional work of the hospital and the formulation of whatever by-laws seem necessary for the efficient conduct of its (medical board's) business.

As indicated by this resolution, the committee was unanimous in feeling that every provision should be made to guarantee the privileges of these county hospitals to every practicing physician in the county.

We are much impressed by the importance of seeing that the developing State-aided county hospitals shall be of real worth to the public and of definite advantage to the medical profession practicing in those counties. Your committee wishes to express its appreciation to our President Dr. Ross, for the intense thought, careful study and wise counsel that he has applied to this subject. To him is due much of the credit for having placed this project in its present satisfactory condition.

A study of the Health Services in Colleges and Universities of New York State by one of our committee, Dr. O. W. H. Mitchell of Syracuse, has been made and published in the New York State Journal of Medicine of November 1, 1930. This represents a piece of work which will be invaluable in its influence in leading to better education in health matters, thus instilling into the minds of the youth of our State a proper appreciation of health and disease prevention. Reprints of this study were obtained and distributed widely.

Throughout the past years that your committee has functioned it has been dealing with problems relating to Public Relations as existing in the so-called up-State section and has not attempted to delve into the many and intricate problems of the Metropolitan area. This came about largely from the fact that we were gradually feeling our way, educating ourselves as to the scope of our work and planning for the future. After four years of intensive work in the area above the Bronx we were pleased to entertain from various officers and members of the organized medical body of the five counties of the Metropolitan District invitations to cooperate with them in their desire to establish better medical public relations. Such a contact was made January 8, 1931, when our committee met in New York City with representatives of the five County Medical Societies and discussed methods for betterment of Public Relations and furthering the activities of a coordinating committee, which had been in existence for some time, by adding to it a sub-committee from the State Public Relations Committee. The following motion was adopted:

"It is recommended to the State Committee on Public Relations that it appoint a sub-committee which in operation may act in an advisory capacity with the Five County Coordinating Com-

mittee." Such sub-committee was appointed and is cooperating with the Five-County Committee by meeting with it monthly and studying the problems of the Metropolitan District. We are already convinced that the State Society should develop an increasing interest in the medical affairs of the great city which seems destined to become the foremost medical center of the world.

Your committee thought wise to appoint a sub-committee composed of Drs. Hambrook, Fisher and Lawrence to make a study of the following laws: 1. The law relating to the medical care of the physically handicapped child.

2. The Public Welfare Law.

Such committee has reported as follows:

In that portion of the law which provides for the medical care of the physically handicapped children, we find the Department of Health charged with the following duties:

1. Arrange with all public private hospitals, clinics, and dispensaries and with practicing physicians, to send to the Department of Education prompt and complete reports of any persons under treatment in such hospitals, clinics, or dispensaries, or by such physicians, for injury or disease that may render them physically handicapped.
2. Arrange with health officers to send to the Department of Education prompt and complete reports of any persons who in the course of their official duties they find to be suffering from any injury or disease that may render them physically handicapped, if such persons have not already been reported.
3. Make physical examinations of any persons applying for or reported as needing rehabilitation, except persons reported by the Industrial Commission.
4. Make, within the limits of the appropriations made therefor, physical examination of physically handicapped children who are prospectively or actually incapacitated for the normal pursuit of an education and make recommendations for treatment.
5. On its own initiative or on request of the commission, provide, within the limits of the appropriations made therefor, such surgical, medical or therapeutic treatment or hospital care and necessary appliances and devices for physically handicapped children as in its judgment are needed When the children's court of any county or city whether established under the children's court act or under any special act, shall issue an order for the surgical, medical or therapeutic treatment, hospital care or necessary appliances and devices for any handicapped child, the commissioner of health, if he approves such order, shall issue a certificate to such effect in duplicate, one of which shall be filed with the clerk of the board of supervisors or chief fiscal officer of a city and one in the office of the Commissioner of Health.

The department of health, as will be seen, is directly instructed to cooperate with the Department of Education in locating children who would come under the act, and it is further directed to make physical examination of persons applying for or reported as needing rehabilitation.

It is also instructed to provide, within the limits of the appropriation made therefor, for the medical care of physically handicapped children. The proper procedure for securing the rehabilitation of a physically handicapped child is to have the case presented to the children's court, which will issue an order for rehabilitation based upon the physician's examination and recommendation. This order must be approved by the State Commissioner of Health and, following such approval, the court or the proper representatives should see that the child receives the medical care recommended. The fees and charges incident to such procedure shall be presented by the court or the authority designated to take charge of the child, to the board of supervisors, who shall submit a statement to the Commissioner of Health and receive from the State a sum equal to one-half the amount expended. This procedure is clearly defined in sections No. 1,211 and No. 1,212.

Section No. 1,211 states that one-half of the cost of providing surgical, medical or therapeutic treatment of hospital care and necessary appliances and devices for physically handicapped children as certified by the Commissioner of Health * * * is hereby made a charge against the county or city in case such city has a special children's court act, in which such physically handicapped child resides, and the remaining one-half of the cost thereof shall be paid by the State out of monies appropriated therefor. All claims for services rendered * * * shall be paid in the first instance by the board of supervisors of the county or chief fiscal officer of a city in case such city has a special children's court act, in which such physically handicapped child resides, upon vouchers presented and audited in the same manner as in the case of other claims against the county or city.

Section No. 1,212 * * * states that the clerk of the board of supervisors of each county, or chief fiscal officer of a city of the State * * * which has paid claims as provided herein, shall * * * transmit to the Commissioner of Health, in case the expenditure was made as required by certificate issued by him, a certified statement in the form prescribed by him, stating the amount expended for the purposes specified herein, the date of each expenditure, and the purpose for which it was made. Upon the receipt of such certified statement the Commissioner of Health * * * shall examine the same and if such expenditures were made as required by law, he shall approve it and transmit it to the comptroller for audit.

To us it seems clear that the law intends that the Department of Health shall stimulate local interest in the physically handicapped children, and does not intend that the State shall itself undertake the treatment of such children unless no other way were practicable; and, likewise, we believe that the law intends that when the Commissioner of Health gives his approval to an order of the court, he is certifying that the rehabilitation, whatever it may be, is wisely planned and should be carried out, and it does not intend that he shall make a personal inspection of the bill of fees submitted by physicians or hospital, or both. Such responsibility, in our opinion, rests primarily with the children's court that requested the work and the board of supervisors who audit the accounts and submit the statement to the Commissioner of Health.

The interpretation of this section has been a matter of discussion in certain parts of the State and for that reason we have made a special study of it.

The Public Welfare Law specifically places upon the welfare officer the responsibility of providing medical care for the indigent in his jurisdiction and permits him to decide whether the patient shall be institutionalized or treated at home, with the admonition that "as far as possible families shall be kept together and they shall not be separated for reasons of poverty alone. Whenever practicable, relief and service shall be given a poor person in his own home."

It is the duty of the legislative unit, whether county, city or town, to employ physicians to care for its sick or disabled, and physicians should be very careful to secure authority from the proper welfare officer before they undertake the care of indigents, for which service they expect to be paid. Physicians properly authorized will be paid for their services.

Approval of the proper public welfare officer must always be secured for hospitalization of cases and only "hospitals maintained by the municipality" or "visited, inspected and supervised by the State Department of Social Welfare," can be used.

Therefore, after much study of the laws which provide for the care of the physically handicapped persons and the indigent, we have reached the following conclusions which we offer for your consideration:

1. That the intent of the laws is to have the State assist those who because of some physical or mental infirmity are not able to exercise their full *privileges of citizenship, to remedy or remove such* infirmity;
2. That the State prefers to have such medical care rendered in the homes when practicable and possible, rather than in State or county-provided institutions. Hospitalization for such surgical care is expected and for such purpose the local hospital is to be preferred;
3. That the immediate responsibility for the supervision and conduct of all such work should rest with the proper local body or official;
4. That the welfare officer, when possible, should employ the physician preferred by the indigent;
5. That the State Department of Health, which is authorized to make examination of physically handicapped children, should do so for the purpose of approving or disapproving the recommendations for medical treatment made by the court, but should not express a preference for attending physician or surgeon, nor refuse to honor bills submitted for work performed if charges are commensurate with those generally prevailing in that community;
6. That the State should use its offer of assistance to encourage communities to take financial responsibility of the care of its wards and not to stress clinic work where physicians and hospitals receive no compensation;
7. Every county society should, by resolution, present formal communications to the judge of the children's court and welfare officials, offering the services of the members of the Society.

Your committee, conceiving that its function is literally what its title expresses—that of developing amicable relations with the public—has outlined the following program for future work:

It will seek a conference with representatives of Federated Labor, for the purpose of discussing with the leaders of that large organization the function of the physician in the administration of the workmen's compensation law. We are inclined to feel by the character of bills proposed to the legislature each year that both labor and industry are not adequately evaluating the position of the physician in relation to the injured and incapacitated. Insurance carriers and proprietors of industries, physicians have contended for some time, frequently are not sympathetic with the physician's efforts at rehabilitation.

We have had some contact during the year with another far-reaching organization—The Parent Teachers' Association. We hope to develop a closer relationship with it in the development of a public health program, such as the immunization of children against diphtheria, vaccination against smallpox, etc. A close conference between medical organizations and this group of mothers cannot help but result in profit to the children.

The Farm Bureau and Home Bureau, two powerful organizations in our rural districts, both very progressive and exceedingly well informed on all subjects, have never had the advantages of close relationship with the Medical Society. We are very confident that a more intimate contact with these organizations will be mutually beneficial.

The Chambers of Commerce are wide-awake organizations and every community of any size in the State supports one. All are combined into one State organization and your committee plans to make a contact with this State organization. During the last several years the National Chamber of Commerce has stimulated in local communities an interest in public health conditions and awarded prizes to certain communities where surveys made by the Chamber of Commerce indicate that the health conditions are superior to other comparable communities. It will be our ambition to interest this organization in the practice of medicine as it exists in the communities of the State, as well as in the public health conditions.

The Conference of Mayors, organized some years ago by a prominent physician, has always had a lively interest in public health conditions and the activities of city health officers. The problems of the practicing physician and the advantages a city derives from an active medical organization have never been considered by this Conference and we hope that we can introduce this idea to them.

The Women's clubs of the State, through their Federation and individually, have committees on public health and hygiene and we have occasionally had contact with some of them, but never have we attempted to develop those contacts. This will also be carried in our future program.

The committee is of the opinion that the public has very indefinite and inaccurate knowledge of what the practice of medicine today involves or aims to accomplish. It probably entertains no delusions in regard to the physician's ability and desire to practice curative medicine, but if the magazine articles indicate public opinion, some physicians must be considered unreasonably commercial and hostile to the employment of methods of disease prevention. That such notions should gain widespread acceptance is due in large measuse to two factors: The physician is the first and prime offender in developing and maintaining an exclusive *scientific atmosphere* about himself

and his work, and since we now have specific remedies for some diseases, he is tempted to treat the disease rather than the patient. The second factor has probably been more influential in developing in the public a spirit of impatience with the physicians. Science daily gives the public some new observation of fact relating to physical welfare and happiness. Most of these have real news value and are heralded far and wide They are usually adopted by some group which, for its own advantage, exploits them upon the public until they become fads. The public usually knows more than the physician about the advertised virtues of these fads and gradually it has come to believe the physician is purposely unfriendly to the propagation of these new ideas.

If the physician and the everyday public could only sit down together and talk over their points of view, we are convinced the misunderstandings would be eliminated and the propagandist would be obliged to leave the domain of health.

Your committee, with full realization of the enormity of the task, nevertheless has outlined a program in which it will play the role of ambassador to the public; or, stated in the language of the street, we hope to "sell medicine" to the public through its organized units.

The committee wishes to express its appreciation to Dr. Joseph S. Lawrence, Executive Officer, for his active cooperation and service in the interest of the work of the committee. Without his aid and almost continuous help it would have been impossible to have carried on this work to the extent that it has.

It also desires to express its appreciation for the publicity given the work of this committee by the NEW YORK STATE JOURNAL OF MEDICINE. The Publication Committee and Editors have been most generous in their allotment of space to all matters relating to the activities of this committee.

Respectfully submitted,

JAMES E. SADLIER,
Chairman,

April 15, 1931.

REPORT OF THE COMMITTEE ON ARRANGEMENTS

To the House of Delegates.

Gentlemen:

The Committee on Arrangements desire to report the following:

The tenth floor of the Hotel Syracuse has been reserved for the meeting of the Medical Society of the State of New York from June 1st to June 3rd inclusive. On this floor will be the registration booth, the meeting for the House of Delegates, the general banquet, all scientific and commercial exhibits and the meetings for the scientific sections with the following exceptions:

(1) The section on Surgery Tuesday morning will be held on the Roof Garden of the Onondaga Hotel.

(2) All sections of Obstetrics and Gynecology will be held on the second floor of Huntington Hall which is one block from the hotel.

(3) Physical Therapy Session will meet at Huntington Hall on the first floor.

(4) Public Health and Hygiene sections will meet in the West Memorial Chapel of the Mizpah.

The banquet will be held on Tuesday evening, June 2nd. There will be a varied entertainment of an excellent character, mainly amateur. The main feature will be an address entitled "Comings and Goings" and will be delivered by T. Wingate Todd, Professor of Anatomy at Western Reserve School of Medicine in Cleveland. Dr. Todd is an anthropologist of note. His addresses are intensely interesting and, in particular, entertaining. Those, who have heard him, say they will never miss hearing him again if given the opportunity.

It is desirable that the out-of-town members purchase their tickets for the Tuesday evening banquet as soon as possible so that necessary arrangements can be confirmed. Tickets may be purchased from Dr. F. S. Wetherell, Chairman of the Banquet Committee, 713 E. Genesee Street, Syracuse.

The various hotels in Syracuse have all signified their willingness to give you their best service.

Any members desiring to play golf can do so by communicating with the Chairman of the Committee on Arrangements.

The Women's Entertainment Committee are planning a garden party on June 2nd, from three to five o'clock at the home of Mrs. Carl Muench, Rocky Dunes, Fayetteville; cars will be provided. Those wishing to attend, meet in the lobby of the Syracuse Hotel, at 2:30 P. M.

On June 3rd a luncheon will be held at Drumlins Country Club at one o'clock. Those who desire may remain and play bridge or be driven about the city in cars which will be provided. Those wishing to attend the luncheon meet in the lobby of the Syracuse Hotel at 12 noon.

Respectfully submitted,

FREDERICK H. FLAHERTY,
Chairman.

April 15, 1931.

REPORT OF THE COMMITTEE ON LEGISLATION

To the House of Delegates:

Gentlemen:

Another anxious and eventful legislative session has just closed and the staff of the Legislative Bureau of the Medical Society of the State of New York are on the verge of nervous exhaustion from the anxiety of imminent defeat. Again the Osteopathic and Chiropractic bills came very very near passing the legislature. I feel certain that unless the medical profession take some positive action these and other similar bills will become laws in the near future.

What is the Medical Society of the State of New York going to do about it? What are you going to do about it? Are you going to continue to delegate this important function to the few members of the County and State Legislative Committees or are you going to take a personal interest in the matter and see what can be done about it?

Unless our policy of purely active or passive resistance is changed we are bound to be beaten. No contest in history has ever been decisively won by a purely defensive attitude. Any privilege worth having has always been coveted by outside groups and unless the possessors were willing to do more than simply resist they were invariably worn out and defeated by constant and repeated attacks. Only a few years ago, in a weak moment, the osteopaths and physiotherapists "broke in" and it was not long before they imitated the proverbial camel. Other groups are waiting at the door.

The practice of medicine is undergoing a most radical change. At the same time we are being attacked on all sides by our everlasting enemies, ignorance, quackery and charlatanism, which combined in various cults are ever hungry for the prey—the gullible, sick public. Some of our so-called friends, the welfare organizations, are doing us irreparable harm by their constant encroachment on our legitimate field of work.

The first skirmish of any coming attack is usually a bill introduced in the legislature under some plausible excuse or in the guise of some well-meaning purpose. Under the circumstances, the legislative committees (County and State) are our first line of defense. They must be well organized, present a united front, and must be in intimate contact with the rest of the medical profession so that in case of danger every member may be called upon to aid in its defense. Theoretically, we have some such organization. Practically, we have nothing of the sort.

"ORGANIZATION—CONTACT—SUPPORT"

Our organization is seriously defective in several important phases. Few, if any, of our county legislative chairmen are in direct contact with their respective Comitia Minora and the general membership. While our opponents are usually pouring in thousands of letters and telegrams into the legislative chambers, the general medical profession outside of the legislative committees is rarely heard from. The medical profession as a body knows very little of what is going on in the legislature during the most important and critical period—the last two weeks, and there is no way at present in which the legislative committee can reach the general profession during the last few days of the session—a contact which is almost vital.

RECOMMENDATION

Each and every County Society should establish a direct contact between the chairman of the legislative committee and the membership, through its Secretary.

In case of emergency the chairman of the county legislative committee should be given the power to call directly on the membership for letters, telegrams or telephones to the legislators at the expense of the Society.

ORGANIZATION—POLITICAL

In the course of their professional work, the doctors come in contact directly or indirectly with nearly every voter in the State, within a fortnight. Leaders of both political parties have told me that *potentially* the medical profession is the most powerful political group in the State. *Actually* they are considered of no importance politically because of their well known antipathy to politics and their individualism. In the present critical situation in the practice of medicine it is urgent that we organize, not to meddle with politics, but to make every effort to prevent the renomination and election of a legislator who by his action has shown himself hostile to the welfare of our group.

RECOMMENDATION

That each and every County Society study the records of their respective legislators in relation to the practice of medicine and take effective action through the local press and personal propaganda to prevent the renomination and election of those who are avowedly hostile to their interest.

"A UNITED FRONT"

The necessity of a united front for any effective action is so self evident as to require no explanation. The State Legislative Committee is ever ready and anxious to consult or confer with any medical group on matters of legislation. The main function of the State Committee is advisory and executory. It simply carries out the wish of the majority where such a wish has been expressed and advises the Executive Officer as to the best procedure where the wish of the majorities is not known. This Committee has often been embarrassed and dismayed by individual actions of County Societies, who, without consulting either

the State Officers or the Committee, have gone directly to the legislature. Take for example our experience of last winter.

The House of Delegates by a unanimous vote at two sessions ordered the State Committee to introduce a certain bill. Before the bill was prepared (early last January) and without consulting the Legislative Committee, one of our counties protested to the members of the legislature. Such action does irreparable damage to the prestige of the State Medical Society at Albany without accomplishing anything.

RECOMMENDATION

That the House of Delegates call the attention of the County Societies that as members of the State Society it is their duty to abide by the decision of the House of Delegates, and the House of Delegates instruct County Societies that all matters of legislation be transacted through the State Legislative Committee.

For a number of years two facts have rankled in my mind until I find it difficult to give them calm expression.

1. For years the medical profession has been fighting the fight of the public against medical inefficience, fraud and charlatanism. The actual financial loss to the individual physician from the admission of chiropractor to practice or the permission of untrained men to perform surgery would be too small to merit consideration. The danger to the public from the spread of contagious disease, neglected cases of tuberculosis and cancer, etc., is great. Our representatives in Albany are not only unconscious of the fact, but actually suspicious of our activities and ready to believe that our motives are selfish, low and sordid.

2. Modern medicine has eliminated most of the dread diseases. It has saved millions of lives and has prolonged the lives of millions of others. Medicine is taught as a recognized science in all the highest universities of the world. Before a man is permitted to practice medicine he must go through a preliminary course of education at high school and college and a most thorough course of preparation. In the halls of our legislature he stands no higher and is considered no better than a *chiropractor*.

RECOMMENDATIONS

1. That a committee consisting of members of the State Society and the Academies of Buffalo, New York, Rochester, Syracuse and Utica be appointed whose duties it shall be to acquaint the public by well prepared, *repeated* publicity—that it is to the public's vital interest to see that the practice of medicine is kept at the highest possible level, that the public should be more concerned in keeping out the quack and unfit than the medical profession, and that organized medicine is tired of fighting the public's fight single handed.

2. That a committee consisting of members of the State Society and the Academies of Buffalo, New York, Rochester, Syracuse and Utica be appointed whose duty is shall be to urge the following proposition on the presidents and faculties of the great universities of the State of New York.

If there is a grain of scientific truth in the theory of chiropractic, it is their duty to teach it. If, on the other hand, chiropractic is a fraud and has no foundation in truth, then it is the duty of the said universities to their respective communities and the people of the state—to come out and say so.

That the universities be urged to appoint a group of *non-medical* scientists to investigate and report on the theories and practice of chiropractic, and that, if necessary, the medical profession pay for the expense of the investigation.

Although more bills (4312) were submitted to the legislature this year than last, a slightly fewer number of them (126) had a bearing upon the practice of medicine and, therefore, a direct interest for us. On the other hand, this has been the most difficult legislative year we have had for some time. This opinion is not ours alone, but has been expressed by representatives of other organizations and even by certain officers of the legislature.

We had the usual number of objectionable bills to combat, but for certain reasons over which we could exercise no control, some of them were much more troublesome than in previous years. For a while the sentiment in the Education Committee of the Assembly seemed to be strongly against advancing either the chiropractic, the osteopathic or the physiotherapy bills. However, when it closed its business it only defeated the physiotherapists' bill.

The osteopathic bill was the first of these bills to be voted upon by the legislature and passed the Senate with only seven negative votes, but was defeated in the Assembly by a vote of 55 to 81 and laid on the table. On the last day of the session an effort was made to take it from the table, but was not successful, lacking one vote of the necessary 76.

The chiropractic bill passed the Assembly by a vote of 78 to 57, but in the Senate could muster only 12 votes in its support. More personal canvassing of the legislators for support of these bills was conducted this year than in previous years.

Several bills providing for free choice of medical care by the injured workman were introduced by representatives of both political parties, but all met the same fate; they were killed in the Labor Committees. A greater number of bills were introduced providing that each and every disabling condition arising out of occupation should be compensable than in any previous year, but all were defeated in the Labor Committees.

The Wicks-Hutchinson bill which arose from the report submitted by the Governor's Special Health Commission, met with some opposition and was amended so as to carry these several features—the erection of three state tuberculosis hospitals and an amendment to the law regarding the treatment of venereal diseases. It also provides for the creation in the Department of Health of two divisions; namely, a division of orthopedics and a division of cancer control. Another portion of the original Wicks-Hutchinson bill was drafted into a new bill, but was not reported favorably by the committee. This bill contained, among other things, a statement of the function of the Public Health Council regarding the approval of public health work and the establishment of qualifications for public health employees. Discussion of this bill by some legislators indicated that there is a feeling that the legislature should not delegate so freely to State Departments the right to frame rules and regulations that have the force of law. Before laws can be enacted by the legislature they are subjected to considerable publicity and opportunity is accorded citizens of the state to argue before the legislature the worth of the proposed laws. State Departments do not accord the public the same privilege with regard to the rules and regulations they draft and enact. This argument appeals to us and we present for the consideration of the House of Delegates the following proposition to form the basis of an amendment to the law:

RECOMMENDATION

That in the future the Public Health Council shall cause to be printed in "Health News" all proposed rules and regulations and modifications of the sanitary code. Before any such rules, regulations and modifications shall be adopted, the Public Health Council shall announce not less than ten days in advance of the hearing a place and date not less than one month subsequent to the first publication of the proposed measures, where it will hear those who may have objections to the proposed measures.

This would afford the public an opportunity to assist the Public Health Council in framing the laws by which our public health is administered. We feel that a similar provision should be made with regard to the enactment of the sanitary code in New York City. We feel quite confident that the legislature would heartily endorse a proposition of this character and we believe it to be in the interest of the public that it should be adopted.

The bill providing that in cities of more than 50,000 health officers appointed in the future shall be obliged to devote their entire time to the office, had an uneventful career, passing through both houses with no opposition and the bill now rests with the Governor.

Acting as directed by your body last year, we, through the Executive Officer, sought a conference with the Commissioner of Labor, for the purpose of redrafting the bill providing for the creation of a medical advisory council in the Department of Labor, but met with indifferent success. We wrote to the Commissioner on November 8th, asking for a conference, but received no reply. We spoke with her twice on the telephone and finally called upon her when she was in the Capitol. She frankly stated that she did not want a medical advisory council created and suggested that the matter be brought before the commission appointed by the Governor to review medical and surgical problems in connection with the workmen's compensation law. Realizing that no bill could pass if she opposed it, we accepted her suggestion.

Again our relations with the legislature were very cordial. We were frequently asked to discuss proposed health measures by individuals and before committees.

We are particularly happy to report that the county chairmen afforded us greater aid this year than in any previous year. Probably their greater cooperation is due in part to the interest aroused by the conference of chairmen which was held in Albany on February 10th. Thirty-three counties were represented at that conference. Our suggestions to the chairmen at intervals, asking them to communicate with their legislators, have been very generally followed out. We have had abundant proof of this from the legislators themselves. The prompt and hearty support received from those chairmen appealed to, the night before the chiropractic bill was voted upon in the Senate, must have had a great deal to do in determining the character of that vote.

Respectfully submitted,

HARRY ARANOW, *Chairman.*

April 20, 1931.

REPORT OF THE COMMITTEE ON MEDICAL ECONOMICS

To the House of Delegates—
Gentlemen:

The Committee on Medical Economics of the Medical Society of the State of New York is composed of the following physicians:

Drs. George F. Chandler Chairman, Edgar A. Vander Veer, Edwin MacDonald Stanton, William L. Bradley and John L. Bauer.

By arrangement with proper authorities the sum of twenty-five hundred dollars was set aside by the State Medical Society for use of this Committee.

A file was purchased which is the property of the State Medical Society to be turned over to them June 1, 1931. The correspondence stationery has been furnished the Committee from the headquarters of the State Society. Accounting of all moneys expended has been transmitted to the Treasurer of the State Society including postage, long and short distance telephoning, printing, stamped envelopes, salary of Miss Conway as Secretary and ten girls as clerical workers, as communications have been sent to every physician who is a member of the State Society.

The Committee after deliberation felt that matters incident to the medical and surgical care of employees in connection with the Workmen's Compensation Law were most pressing and the greater part of its time was spent on this matter.

Bulletins were issued to County Societies.

Letters were written to the Milbank Fund, to the State Charities Aid Association and to the Department of Health of the State of New York for reports as to their activities. It was felt that this was advisable because it would let such organizations know that their activities were being scrutinized by organized medicine.

The compensation matter which in toto represents the expenditure of forty millions of dollars a year in the State of New York of which from nine to twelve millions go for the medical and surgical care of patients, was such an involved proposition that it is impossible to give in a short report the procedure, the trials, the number of meetings, the conferences and all of the activities incident to the consummation of the plan that has been put in motion. Copies of letters sent County Societies, Agreement and Fee Schedule are as follows and are self-explanatory:

To the Secretary of .....
County Medical Society.

1. Will you kindly at the November meeting of your Society, or at a special meeting, bring the matter of the enclosed agreement between your Medical Society and the Compensation Carriers up for action through the Economic Committee of your County Society?

2. It is necessary that such agreement be completed within the month of November.

3. It is the earnest desire of the State Economic Committee that favorable action be taken upon this agreement between each County Medical Society and the Compensation Carriers.

4. We expect that this agreement will be very quickly consummated between the five counties comprising the Metropolitan District and the 80 or 90 Insurance Carriers, and this means that about 10,000 physicians in the State are favorably inclined. The State Economic Committee wishing all of the Counties to have the benefit of this agreement are forwarding copies to each County Society so that the remaining four or five thousand physicians may be benefited.

5. Practically all of the Insurance Carriers will be in agreement and this will mean that any case can be treated by any reputable member of the State Medical Society without authorization by the Insurance Carrier; that a board of arbitration consisting of two members from the Insurance Carriers and two physicians who are members of the County Society properly designated shall be the last word in adjustment of bills and other matters.

Should this agreement be mutually accepted, it will accomplish what has been in the minds of physicians for many years. It is a gentlemen's agreement, can be given a trial and later on if there are some things to be taken up, such as the matter of proper fees, they can be easily adjusted. It is to be noted that it will not be necessary to have any legislation, and we of the State Economic Committee have been given assurance that it is looked upon with favor by the Industrial Commissioner and the representatives of organized labor.

Again may we request that this be acted upon immediately and that the agreement be signed and forwarded to the Chairman of the Committee on Medical Economics.

Dear Doctor:

Enclosed find tentative agreement as formulated by the Committee on Medical Economics of the Medical Society of the State of New York and insurance carriers.

You will note that this agreement is between the separate county medical societies and the carriers. It is a voluntary agreement on the part of both parties and is designated primarily to furnish a means whereby the family physician and general practitioner may treat compensation cases without authorization and can play his part in rendering the best care in cases of industrial disease or injury.

Copy of a fee schedule is herewith enclosed. This fee schedule is understood to represent a working basis for charges. It has been formu-

lated on a flat rate, full treatment plan with the idea of offering full remuneration for results obtained irrespective of the number of office calls and details of treatment. It is believed that the rather high fees allowed will be justified by the absence of any incentive to multiply the number of calls.

You will note that provision for consultations, *x*-rays, and all forms of therapy are provided for.

It is urgently requested that physicians will endeavor to fill out C-4 forms within the first week after assuming medical or surgical care of an employee.

The plan is such that improvements can be made from time to time.

Arbitration Boards are being formed in central locations throughout the State consisting of two representatives designated by a county medical society and two representatives designated by the insurance carriers.

Should difficulties arise, get in communication with the chairman of the committee on medical economics of the County Medical Society of which you are a member.

STATEMENT OF PRINCIPLES AND AGREEMENTS BETWEEN THE MEDICAL SOCIETY OF THE COUNTY OF ..... AND THE COMPENSATION CARRIERS COMPRISING THE STOCK COMPANIES, MUTUAL COMPANIES, STATE FUND AND SELF-ASSURED

STATEMENT OF AIMS

The aims of the County Medical Society are

To secure for its members the acquiescence of the carriers to recognition in treatment of compensation claimants by those physicians who fall within the definition as hereinafter more fully set forth without formal authorization from employers.

The aims of the Carriers are

1. To receive the cooperation of the County Medical Society and its members in the interests of a proper administration of the Workmen's Compensation Law from the standpoint of the employee, to wit: That the employee receive skillful medical and surgical care; that the necessary forms be promptly completed so that the carriers will be able to promptly pay compensation, and that the necessary forms be quickly filed; in the desire of securing reasonable and prompt bills for services rendered to employees by the medical profession, and that the bills and forms be forwarded to the companies and not to the Compensation Commission as has been done in the past by some physicians who have been uninformed.
2. To express in words the present practice of reputable carriers and remove from the minds of the medical profession the existing erroneous opinion that the carriers indiscriminately and captiously lift cases of injured employees from the care of competent and qualified family physicians of those employees.

Thus, in correspondence with the preamble the following agreements are entered into:

1. The County Medical Society will use every reasonable effort to impress upon its members the importance of careful and skillful treatment of industrial injury and occupational disease cases, and bring home to its members the thought that the chief principle in treating these cases is that the injured employee be brought back as quickly and fully as possible to as near an efficient and economic person as is possible.

   In line with this the County Medical Society will urge upon its members that if cases reach them in which the physician is not entirely sure that he is, by training and experience, capable of handling, the doctor will immediately communicate with the carrier for advice.
2. The County Medical Society further agrees that it will impress upon its member, and secure from its members, an agreement to complete the necessary paper work, or forms, such as C-4 or C-5 and other forms, within one week in each case, and that these forms will be promptly sent to the carriers; that on these forms will be furnished such information as the physician has at the time of completing the form, and that the physician will furnish such other reasonable supplementary information as requested; and, finally, will submit promptly an itemized, self-explanatory bill for services rendered.
3. The County Medical Society of.....will evolve from time to time fee schedules, and submit them to carriers for approval, for service rendered to injured employees, and will call upon its members to conform to such fee schedules, it being clearly understood that this fee schedule shall be a guide to the treating physician in the preparation of his bill for services.
4. The Medical Society of the County of..... further agrees that it will participate in the creation of a joint committee of physicians and carriers to act as an Arbitration Board, for the settlement of disputed bills between physicians and carriers. This Committee shall consist of two members of the County Medical Society and two representatives of the carriers. No arbitrator shall sit in any case in which he or the party he represents is interested. Any physician submitting to arbitration shall abide by the decision of the Board.

   The County Medical Society will expect its members to present all cases of disputed bills to the Arbitration Board as above stated for prompt action.
5. The members of the County Medical Society agree to seek the advice and abide by the decision of the carriers as respects consultations, X-rays, physical therapy and other treatments beyond ordinary treatments, and, further, the physicians will cooperate with representatives of the carriers in securing for the carriers examinations of claimants at reasonable times.

   Although the members of the County Medical Society shall generally adhere to the above stated principle, still in emergency cases where, in the opinion of the attending physician, the welfare of the patient demands, and the protection of the physician requires, an immediate consultation or X-ray, it is understood that the physician shall proceed properly and the question of the necessity of such action and the reasonableness of the charges incurred, if disputed, shall be passed upon by the Arbitration Board.
6. The County Medical Society agrees to hold meetings at which such physicians as are specialists in industrial medicine and surgery may appear to discuss improved phases of this work, and will further provide meetings at which persons familiar with the operation of the Workmen's Compensation Law may appear and inform the members of the Society in respect to the detail matters necessary to the proper carrying out of the compensation laws.

7. The County Medical Society agrees to develop and establish standards both of equipment and training for physical therapy and X-ray. After such standards have been arrived at, the County Medical Society will expect its members to comply therewith.

1. The carriers agree that when they participate in the Arbitration plan, as set forth above and present disputed bills for services between the carriers and physicians who are members of the County Medical Society, they will abide by the decisions of the Board.
2. Carriers agree to participate with the County Medical Society in setting up and adhering to the fee schedule.
3. The carriers agree to waive the question of authorization for family physicians who are members of the County Medical Society and who will comply fully with the agreed plan of the County Medical Society and the carriers. Reasonable charges for services of such physicians will be promptly paid.
4. The carriers agree to furnish literature, as may be available and take other measures to aid in instructing the members of the County Medical Society in relation to the industrial medical and surgical fields, and also with regard to the detail and paper work which is so important a feature in the efficient administration of the Workmen's Compensation laws.

Letter forwarded to the Chairman of the Medical Economic Committee in each County Society through the secretary of each County Medical Society so that physicians may understand the procedure necessary in the arbitration of difficulties arising in connection with the medical and surgical treatment of cases incident to the Workmen's Compensation Law in the State of New York.

Enclosed are copies of (a) the Arbitration Agreement (b) Doctor's statement of case and (c) Carrier's statement of case.

These forms are to be used in connection with the arbitration of medical and surgical cases incident to the Workmen's Compensation Law in the State of New York. Arbitration Boards throughout the State are being set up at designated points based upon the experience of the Board that is functioning in New York City.

In the event that a physician desires to arbitrate a matter he should notify the chairman of the Economic Committee of his County Medical Society of this fact. Upon receipt of such notice, the Chairman of the Economic Committee of this County Medical Society will send the physician wishing to arbitrate, a copy of the blank headed "Doctor's statement of case." The doctor shall then fill out this blank and attach detail copies of all bills in connection with his case and then return it to the Chairman of the Committee on Medical Economics of his County Society. The County Chairman of the Committee on Medical Economics will then forward the completed doctor's statement of case to Mr. William P. Cavanaugh of the National Bureau of Casualty & Surety Underwriters, 1 Park Avenue, New York City, who will immediately notify the Company involved and secure a statement of the case from them. Shortly after this, arbitrators will be selected and the matter will be placed upon the Arbitration calendar for hearing. Both the physician desiring to arbitrate and the insurance company will be notified of the time and place of hearing which will be arranged conveniently for both parties. They will then appear and present such witnesses as they see fit.

If, the County Medical Economic Committees have not been formed, or for one reason or another such committee is not functioning, the secretary of the County Medical Society can attend to this matter instead of handling it through the Economic Committee.

Fee schedule as basis of charges in connection with the Workmen's Compensation Law as suggested by a committee of insurance carriers and the committee on Medical Economics of the Medical Society of the State of New York.

EXPLANATIONS

The charges listed in this fee schedule are flat rate, full treatment charges and unless otherwise arranged for by the carrier shall include all treatment ordinarily furnished by the surgeon and his assistants. The fees as listed do not include hospital charges, or charges for X-rays, anaesthetics or special laboratory examinations. Extra charges for physiotherapy and other forms of special treatment shall be made only when sanctioned by the carrier for the individual case.

The rate for compound fractures shall be 50% greater than for simple fractures, and in cases in which dressings are required after three weeks extra charge of $2 per dressing can be made.

Amputations—

Arm	$ 75
Forearm or hand at wrist	75
Arm at elbow joint	75
Arm at shoulder	150
Foot	75
Foot between ankle and tarsal joint	100
Leg at knee joint	100
Thigh between hip and knee	100
Thigh at hip joint	150
Finger or toe	25
Fingers or toes	50
Finger or toes distal to last phalangeal joint	25
Fingers or toes 2 or more, to last phalangeal joint	50

Excisions—

Shoulder, hip, knee, elbow, wrist—same as amputations.

Fractures—

Humerus	$100
Elbow joint	100
Ulna and radius	75
Ulna or radius	50
Colles'	50
Femur	125
Patella	75
Tibia into knee joint	100
Fibula above ankle joint	25
Tibia	75
Tibia and fibula	75
Potts	75
Hand, to include carpal and metacarpal	25
Finger	20
Great toe	30
Small toes	15

Tarsal, Metatarsal	50
Jaw—by surgeon or dentist-surgeon	50
Ribs, one or more	25

(In case of extensive injuries additional charges relative to seriousness of injury).

Pelvis	75-150
Spine with cord involvement	200

The charge for fractured spine with cord involvement does not include late neurological treatment.

Spine, cord not involved	100
Spine, transverse processes only	50
Nose with deformity	25
Clavicle	50
Scapula	50
Skull—non-operative	30
Skull—operative	100
Skull—severe types, non-operative	50

Dislocations—

Shoulder	$ 35
Elbow	35
Wrist	35
Hip	50
Knee	75
Ankle	50
Spine with paralysis	150
Finger or toe	15

Special Operations—

Laparotomy	$125
Chest (op. wall or contents)	100
Hernia, single	75
Hernia, double, if ordered by Carrier	100
Injury to urethra, perineum or bladder depending on severity	10-100
Prophylactic injection tetanus anti-toxin	5
Incision for abscess	5
Incisions for more extensive infections	25
Lacerations of soft tissues requiring operation with no anaesthetic	10-15
Lacerations of soft tissues requiring anaesthetic	10-25

In case of wounds requiring numerous dressings, additional charges for dressings can be made after two weeks.

Medical—

First aid, or single office call including C4	$5
Office calls—after first call	2.50
Office call with dressing of infection	3.50
House call—day	3
House call—night	4
Hospital call	3
Office (specialists)	3-5

Special Items—

Baking or high frequency (Including office call)	$ 3
X-rays 5x7	5
X-rays 10x12	7
X-rays 11x14	8
X-rays 8x10	6
X-rays 14x17	10
Stereoscopic	50% extra
Fluoroscopic	5
Consultation	10
Examination in lunacy written report	10
Complete physical examination	5
Autopsy with report written	50
Autopsy, attending not performing	10
Introducing catheter	5
Attendance and testimony as to fact before Commission	15

Testimony as expert witness to be arranged with Carrier.

Before June first these same fee schedules will be in the hands of the Supervisors of each County so that they may have a working idea of the proper fees to expect under the new Welfare Law in the care of County cases. Already they are in the hands of the Secretaries of each County Medical Societies who are forwarding them to the Supervisors of their Counties.

You will note that the agreement and the whole machinery of the comprehensive plan of Arbitration Boards and fee schedule are made between the separate County Medical Societies of the State of New York and the insurance carriers through the activities of the Economic Committee so that the State Society as such is not committed. It is a mutual agreement without legislation and can be tried out on the same principle as the trying out of improvements in machinery in the laboratory for it is an earnest effort to clarify this much disputed question of the exchange of moneys between the employer and the doctor.

After it is in operation if there are any faults they can be easily cleared up and then possibly from this laboratory experiment, if I may call it such, legislation may be forthcoming if necessary.

We of the Committee felt that there would be in some quarters a certain amount of opposition to a plan which involved a fee schedule but we also felt that no progress could be made unless some individual or group of individuals was willing to take the responsibility for an earnest trial to better existing conditions.

The fee schedule after long deliberation we consider liberal but honest and no improvement could be made without some financial standard as a working basis. The Committee therefore assumes full responsibility in this matter hoping that the results will be more than a gesture and will accrue to the advantage of both employer and employee with the ultimate result that the doctor will be paid a fair amount for his services and the employee will get the best medical and surgical treatment, and this to be done by the family doctor without designation.

The Committee feels that it cannot make its report without special reference to the invaluable help it received from Dr. Morris Rosenthal, Chairman of the Committee on Economics of the Medical Society of the County of New York. He was untiring, and many of the fundamentals of the mutual agreement between the insurance carriers and the county societies originated with him.

There are other matters for this Committee but the work entailed in the compensation law has been so tremendous that very little else could be given attention.

Respectfully submitted,

GEORGE F. CHANDLER, *Chairman.*

April 15, 1931.

REPORT OF THE COMMITTEE ON SCIENTIFIC WORK

To the House of Delegates—
Gentlemen:

The Committee on Scientific Work has held three meetings, the first in Albany on October 15th, the second in New York City on December 11th, and the final one in Syracuse on March 8th. At the last conference the section rooms were investigated and, through the cooperation of the local Committee on Arrangements, we expect every one to be housed in a most satisfactory way.

The Scientific Program will follow the plan inaugurated last year, that is Tuesday and Wednesday morning will be given over to Section meetings and the afternoons will be devoted to the special consideration of major problems.

The Tuesday afternoon assembly will be opened with an address by William Gerry Morgan, M.D., Washington, D. C., President of the American Medical Association. This will be followed by a Symposium on Psychopathology and Psychotherapy under the leadership of Dr. Smith Ely Jelliffe with the cooperation of Dr. Frankwood Williams and Dr. Abraham Brill. This will give all members of the Society an opportunity to meet together and hear a modern exposition on this increasingly important division of medicine.

Wednesday afternoon a Symposium on Head Injuries will be presented in a popular way by Dr. Wells P. Eagleton of Newark N. J., Dr. Albert G. Swift and Dr. Foster Kennedy. Your Committee is convinced that the subject is of vital interest to every physician because of the increasing number of serious automobile accidents.

Each section chairman has arranged a most attractive program. Several speakers from other states will be present to deliver talks and join in the discussion. Many papers will be illustrated with lantern slides and some moving picture demonstrations will be staged.

Your Committee has had great difficulty in arranging an instructive program because of the conflict between our meeting and that of many of the special societies. We most respectfully suggest that, if possible, our annual meeting be held at a time when the leaders of medical thought are not obligated to attend their special societies.

The Chairman of the Scientific Committee has received the hearty support and cooperation of the members of his Committee and it affords him great pleasure to acknowledge his indebtedness to them.

Respectfully submitted,
ARTHUR J. BEDELL, *Chairman.*
April 15, 1931.

REPORT OF THE COMMITTEE ON MEDICAL RESEARCH

To the House of Delegates—
Gentlemen:

In behalf of your Committee on Medical Research I have the honor to present the following report:

Two matters have engaged the attention of your Committee. The bill to exempt the dog from all experimentation which was introduced into the Federal Congress, and referred to the Committee on the District of Columbia, was opposed by all the organized medical bodies of the United States. Your Committee took formal action in the way of letters to the representatives of New York State in Washington. Our objections to this bill were also presented in less formal but perhaps more effective ways.

The second occasion to engage the attention of your Committee was the introduction into the Assembly of the State Legislature of the perennial Vaughan bill to exempt the dog from all experimentation. A hearing was held by the Committee on Codes on February 24, 1931. Your chairman wishes to acknowledge the active support given by the institutions most concerned in the direction of medical teaching. Those who appeared were: Dr. Hartwell, President of the New York Academy of Medicine; Dr. Wadsworth, of the New York State Department of Health; Dr. Robinson, Director of the New York Hospital Cornell Medical College Association; Dr. Wyckoff, Secretary of the New York University and Bellevue Medical College, also representing the Tuberculosis and Heart Association; Dr. Rous, of the Rockefeller Institute, Associate Editor of the Journal of Experimental Medicine; Dr. Horatio Williams of the College of Physicians and Surgeons of Columbia University; Dr. Gerster of the Association for the Control of Cancer; Dr. Stanton of Schenectady; Dr. Schiff of the Laboratory Association. Dr. Morton of the University of Rochester was prevented by illness from attending.

No official report of the action of the Committee on Codes has been received.

Respectfully submitted,
JOSHUA E. SWEET, *Chairman.*
April 15, 1931

REPORT OF THE COMMITTEE ON PERIODIC HEALTH EXAMINATIONS

To the House of Delegates:

Gentlemen:

I have the honor to present the annual report of the Chairman of the Committee on Periodic Health Examinations.

The first year's work of the Committee was devoted to the formulation of a policy and a procedure. This involved primarily the application of medicine as a science to a practical service. On the scientific side, it was recognized that the field of preclinical medicine was new. It required stimulation. But most of all, it needed wise beginnings to avoid later correction. The health examination, on its practical side, had to be adapted to the several and diverse needs of children, adults, men, women, workers in industry, teachers in schools, farmers, fathers, mothers, etc. It was a procedure which should be adjusted to greatly varied conditions of age, occupation, sex and circumstance.

In addition to its integrity as a scientific procedure and its diversity as a practical measure, the health examination has a reciprocal bearing upon organized medicine, the body politic, the official organizations of the state, nation, city and county, and the great groups of men and women organized in membership societies, in insurance companies, to say nothing of the social and philanthropic organizations touching upon the field. In addition, the organization and progress of this movement are a part of the organization and progress of the Medical Society of the State of New York, and its operation has proceeded harmoniously with the several Committees, to wit, on Public Relations, Medical Economics, Public Health and Medical Education, and Legislation. All this was reflected in the report rendered to the House of Delegates a year ago.

The resolutions of the House of Delegates on our recommendations gave to the Committee approval, direction and encouragement, and provided in effect, a charter on which it proceeded to work. This year has been devoted to that work. Whereas, the first year was largely a survey of the field of operation, this year has been one of labor in plowing and planting in this field. While a continuing harvest is prepared for and is in prospect, there are some results which have already been attained.

The objective of the Committee is, "The health examination of all of the citizens of the State of New York," conducted primarily in the office of the private physician. This result is not to be attained in a short time. Progress toward this end involves first, the bringing of the public to the physician's office, and second, the provision of a good and satisfactory examination. This report will omit the many phases of the work which have been given in detail in the monthly reports, the minutes of the Committee meetings, and the articles which have been published in the Journal during the current year, and will confine itself to a very few of the more important matters in progress.

I. *For the Physician—*

A. To aid the physician in giving addresses on Health Examinations to lay audiences, a series of suggestions has been prepared by the Committee and is about to be published in the NEW YORK STATE JOURNAL OF MEDICINE. This gives a clear picture of the fundamentals of the subject, avoids heresy, and provides workmanlike methods of presentation. This is prepared primarily to help physicians giving addresses to the women's groups in connection with the drive for health examinations conducted by the New York State Federation of Women's Clubs in cooperation with our Society.

B. In connection with the continuing effort of the Federation of Women's Clubs and other women's organizations, it is proposed to provide for our members medical information especially designed to aid them in conducting health examinations for women. To this end, there is presented the following, so that the members of the Society may contribute their best professional efforts to this movement.

A Selected List of Topics for a Series of Medical Articles and Addresses on the Subject of the Health Examination of Women

It is proposed that these shall be submitted to the Journal, reprinted, collected, and perhaps published in a single volume. Members of the Medical Society of the State of New York are invited to submit manuscripts to the Committee for publication

A. Special problems according to Age Period, such as:
   1. The Menopause and the menopause period.
   2. The woman of 60.
   3. The young matron and her personal health.
   4. Premarital health examination.
   5. The college women's health problems and health examination.
   6. The high school girl's health examination in school or in the physician's office.
   7. The prepubertal period in the young girl and its relation to school, the home and medical guidance.

B. Special problems relating to Special Status.
   1. What is practical in the health examination of the woman in the village and small town.
   2. Industrial health examinations for women. Their aims and limitations.
   3. Health Exhibitions and Health Contests at County Fairs.
   4. The Y.W.C.A. program and the neighborhood physician.
   5. What the Girl Scouts are doing for health from the standpoint of the practising physician (also Camp Fire Girls, and Girl Reserves, 4 H Clubs.)
   6. The Health Examination of women in institutions, state and private.

7. Trade unions and the health examination.

C. Special problems relating to special regions of the body or to special diseases, not only the contribution of the specialist to the information of the general practitioner, but the viewpoint of the health examiner on his own problems. This should include:

1. A simple practical method of examining the part or the system.
2. A statement of the commonest findings, not the rare, peculiar and exciting.
3. A simple statement of what to do and how to do it, i.e., the first prescription which informs, motivates and carries forward further diagnosis, care, treatment in a consistent diagram, in which the various specialists and departments of medicine have their proper place, properly coordinated. For example:
   a. The pelvis, examination routine, common findings and general landmarks.
   b. The kidney with special reference to undiscovered pyelitis in women.
   c. Digestive neuroses in women.
   d. The heart, its functional disturbances in women, etc., etc.

C. Post-graduate medical education. The foregoing project has been discussed with Dr. T. P. Farmer, the Committees, and a sub-committee consisting of Dr. M. C. Potter and Dr. Walter A. Calihan has been appointed to put forward plans and methods in cooperating with the Committee on Public Health and Medical Education. A course of lectures has been given to the Tioga County Medical Society, and a second course, consisting of lectures and clinics has been given to the Queens County Medical Society.

D. A questionnaire has been submitted to the Council of the Society, approved, and has been sent to the constituent County Societies. The purposes of the questionnaire are as follows:—First, to get the benefit of the experience of the local Societies for the benefit of all. Second, to ascertain the status of the subject in every part of the State, and to move toward the development of a state-wide cooperative effort. The questionnaire is herewith included so that every member of the Society may have an opportunity to aid his County Society, as his ability and inclination may urge.

QUESTIONNAIRE

1. Have you a committee on Health Examinations?
   Is it active?
   When first appointed?
   Please attach names of members, and address of chairman.
2. If there is no special committee, is this subject assigned to another committee or committees?
   If so, what?
   Please give names of chairmen.
3. Please give names of other members especially interested in the subject.
4. Has the Society
   a. Held meetings on the subject?
   b. Passed resolutions?
   c. Adopted a policy?
   d. Adopted a program?
   Please send data with this report.
5. Have you conducted a campaign for Health Examinations?
   If so, please send us data on purpose, plan, publicity, cost, methods and results.
6. Have you solicited and received the cooperation of other Organizations?
   Local?
   State?
   Federal?
   Private?
   Welfare? etc.
7. Have any of the above organizations functioned in this field independently of you?
   To what effect?
8. To what extent are industries conducting Health Examinations?
   Have you made a study of their work and its effects?
9. Have your hospitals or clinics any special Health Examination service?
   From whom may data be obtained?
10. Have you used the radio for Health Examination propaganda?
    Please send data.
    Have you any suggestions relative to its use?
11. Have you used the motion pictures for Health Examination propaganda?
    Please send data.
    Have you any suggestions relative to its use?
12. Have you used newspapers for Health Examination propaganda?
    Please send data.
    Have you any suggestions relative thereto?
13. Have you used public lectures for Health Examination propaganda?
    Please send data.
    Have you any suggestions relative to them?
14. Have you originated or procured and used any literature, pamphlets, placards, notices, etc., which you have found useful?
    Please send samples, specify sources, and make recommendations.
15. What cautions, safeguards, limitations, objections, would you urge upon the State Committee?
16. We are asked to supply speakers to address various organizations on Health Examinations. Will you furnish a list of those who are qualified and who would offer their services?
17. To what extent, if any, has the work of the State Committee come to your notice?
    Have you any recommendations with reference to its policy and program?
    How has it helped you?
    How can it help you?

E. Who conducts Health Examinations? As the Chairman studies the situation from year to year, certain of the economic features of the health examination question obtrude themselves increasingly. Certain facts appear: First, health examinations of various kinds have been done increasingly in the State for forty years, but they have been done by organizations in a more or less wholesale fashion. Health examinations by physicians in their private offices form, in comparison to this vast number, an almost insignificant proportion. This has been stated and referred to in the Committee's reports. It is important that the members of the medical profession should see the facts clearly. Therefore, the

Chairman has prepared the following estimate, which is presented as a speculative point of departure, rather than a statistical finality.

GENERAL ESTIMATE OF THE PROPORTIONATE SERVICE OF THE VARIOUS FACTORS IN CONDUCTING HEALTH EXAMINATIONS IN NEW YORK STATE

Organizations Conducting Health Examinations	*Estimated Percentage*		*Estimated Number*
1. Federal, State, City, County Examination of school children, school teachers, public employees, inmates of city, county and state institutions.		67%	2,000,000
2. Industries			
a. Qualifying examination for admission to employment.	16%		
b. Periodic check-up examination	1%	17%	500,000
3. Insurance			
a. Examinations for policies.	5%		
b. Examinations for annual check-up	2%	7%	200,000
4. Social and Philanthropic Agencies (Y.M.C.A., Y.W.C.A., lodges, labor unions)		3%	100,000
5. Doctors' Offices Health examinations done on private patients, including examinations made for citizens military training camps and pre-school health examinations of children		1½%	50,000
6. Life Extension Institute			
a. For the Public.....	15%		
b. For insurance companies..	85%	1½%	50,000
7. Health Clinics Health Examinations		.1%	3,000
8. Unclassified		2.8%	97,000

II. For the Public.

The twelve million citizens of New York State may be reached through the newspapers, motion pictures, radio, periodicals, trade journals, industries, schools, federal, state, city and county departments of various kinds, and membership organizations such as the American Legion, Y. M. C. A., Boy Scouts, Rotary, etc. An analysis of these organizations was given in our last annual report.

We can reach the public indirectly but very effectively through membership organizations which have a medium of contact from their central headquarters to the homes of their members throughout the State. Realizing this can be one of the most powerful and economical methods that could be devised, we selected the women's organizations for first operation.

A. Women's organizations. Representatives of the New York State Federation of Women's Clubs, the Congress of Parents and Teachers, and Business and Professional Women's Clubs were invited to attend the open dinner meeting of the Committee, held June 4, 1930, upon the occasion of the Convention of the Medical Society of the State of New York. This meeting was made possible through the cooperation of the Medical Society of the County of Monroe, Dr. Walter A. Calihan, Dr. William A. Sawyer, Dr. Floyd S. Winslow, and the Rochester Chamber of Commerce. It gave a strong impetus to the whole subject throughout the State. The two great women's organizations passed resolutions (printed in the State Journal, January 1, 1931,) calling upon their members to get health examinations for themselves. The New York State Federation of Women's Clubs made the health examination one of its three central projects for the year. Each of these organizations has a membership greater than our own. They have taken over our project and made it a matter personal to themselves. This is highly satisfactory. The work has only begun.

The New York State Federation reports seven special committees devoted to health affairs, such as mental hygiene, nursing, maternity, cancer, welfare of the blind, etc. The program of each of these stresses the health examination, in addition to the emphasis given by the general organization itself.

The local women's clubs throughout the State have been instructed to put on a program on health examinations during the year. They are requested to ask the State Committee on Health Examinations for a speaker. This Committee, on receipt of these requests will work through the County Medical Society in providing a speaker. It has already prepared to give its medical representative suggestions with reference to his talk, as indicated above. In addition, the State Federation of Women's Clubs will distribute to its members a pamphlet on the Health Examination, the text of which it asks our Committee to provide. This text is being carefully prepared. It will carry the gospel of the health examination exactly as we wish to state it, into every corner of the State.

In addition, the Committee has asked the State Federation of Women's Clubs to cooperate with it in the following project:

B. Radio: The Committee has been working at the radio problem for many months. Radio broadcasting has been done by local societies, notably the County of Monroe and the New York County Medical Society in cooperation with the Academy of Medicine and the New York Tuberculosis and Health Association, etc. The work of the Committee, it was realized, represented the Medical Society of the State of New York. While it should encourage and aid the local societies in their radio work, it should independently and for the State Society, establish its own radio standards, programs and outlets. Therefore, a sub-committee was appointed, consisting of Dr. Nellis B. Foster and Dr. Walter D. Ludlum. The field was searched thoroughly.

As a result, we are prepared to report that we have received the offer of an outlet, giving a thirty to fifty station hook-up every week for fifteen minutes, between ten and eleven o'clock in the morning, for the coming year. This time is best for reaching the women in the home, and coordinates with our present effort to advance the health examination for women as our major project for this year and next.

It is proposed to provide a medical speaker who will submit his talk to the Committee two months in advance to be edited and brought into harmony with the standards of the Committee. The Committee proposes to cover the field of woman's health in a substantial, practical and inspiring fashion. The second broadcast in each month will fall on the same day as the meeting of the Council. The Committee hopes to have the Officers and Chairmen of the working Committees of the Society present to the public the methods and ideals of organized medicine, with special reference to the service of the practicing physician in this oncoming field of preventive medicine. This will carry the message well and far.

C. Films: One of the most effective ways of reaching the public is by the use of the motion picture film. There are several films on this subject. They are not up to date, and the Committee feels that they can be improved. This matter is being directly investigated by a subcommittee headed by Dr. Guy H. Turrell. By the time this report is printed, it is expected that the Committee will have seen and judged all the films that may be offered. We are in receipt of a tentative request for our cooperation in the provision of not only a full-length talking film on this subject, suitable for an evening's entertainment, but also a series of short film releases to be sent out throughout the State and the Nation, at regular intervals during the next several years. This is a large project. It cannot be entered into lightly. The rewards are great. Whether or not this Committee should undertake this laborious matter is being carefully considered.

D. Press. The Committee believes that much may be done by the Medical Society of the State of New York in carrying its message to the people of the State through the public press. The Committee lacks the time, energy and funds obviously necessary to undertake this project in this field of public education. The opportunity is great, however and the field should be cultivated. Certain especially promising phases of the subject are under consideration, and are ready to be tested out in the coming year.

F. Boy Scouts of America: It is with great pleasure that the Chairman has to report that the newly organized program for Junior Scouts has made a new epoch in the field by adopting a comprehensive health examination plan which was prepared by us. This preserves the influence of the home, recognizes the service of the family physician, and trains the young boy of America to appreciate the value of the health examination.

Thus, the Chairman begs to present the foregoing as some of the work of the Committee, and in closing, begs also to express the appreciation of the Committee for the interested cooperation of the State Officers, Chairmen of Committees, and the Executives of the Society.

Respectfully submitted,

C. WARD CRAMPTON, M.D., *Chairman.*

April 15, 1931.

REPORT OF THE COMMITTEE ON PHYSICAL THERAPY

To the House of Delegates:

Gentlemen:

Your Committee on Physical Therapy continued on its work along the lines inaugurated last year and endeavored to carry out the recommendations contained in the minutes of the House of Delegates of June 2, 1930.

The principal activities of your Committee can be enumerated as follows: (1) educational, including a survey of physical therapy in hospitals of the State; (2) fostering and correlating the work of the physical therapy committees in the various county societies; (3) surveillance of the physiotherapy clause in the Medical Practice Act.

1. Your Committee transmitted to the Medical Colleges of the State the recommendation of the House of Delegates that more adequate instruction in physical therapy be given to undergraduates as well as to graduates. In order to encourage post-graduate instruction it published a list of physical therapy departments in Medical Schools and other clinics open without charge to practitioners of medicine who wish to observe the practical work in physical therapy. The attention of the County Societies was called to the post-graduate course in physical therapy offered through the Committee on Public Health and Medical Education and to the courses offered by medical institutions. Your Committee feels that further efforts are needed to stimulate more active interest of medical schools in teaching and research in physical therapy.

Manufacturers of physical therapy and *x*-ray apparatus were asked to cooperate with the Committee's effort to promote the teaching of physical therapy in undergraduate and post-graduate schools and to do away with commercial lecture courses. At a conference held with the leading

manufacturers, they readily subscribed to the principle enunciated by the Committee that instruction in diagnosis and therapy belongs solely to the province of the medical profession. The Committee wishes to thank Dr. Farmer, Chairman of the Committee on Public Health and Medical Education for his active interest in attending this conference and his continued cooperation.

Your Chairman addressed special physical therapy meetings held by the County Medical Societies of Nassau, Queens, Cayuga, Erie and Essex. Following the large attendance of the Physical Therapy Session inaugurated at last year's Annual Meeting a request was received from the Chairman of the Committee on Scientific Work for the arrangement of a similar Session at the 1931 Annual Meeting, and the Committee complied with this request.

A State-wide survey of physical therapy in hospitals was made and its result is as follows:

Number of questionnaires sent out..	250	
Number of replies received.....	173	70%

Question No. 1—
Do you possess a physical therapy department?

	Yes	*No*
Hospitals from all over the State	57%	43%
Hospitals in metropolitan zone..	65%	35%
Hospitals outside of metropolitan zone	53%	47%

Question No. 2—
Is it under the control of a qualified physician?..... 84% 16%

Question No. 3—
Do you intend organizing such a department? 34%

Question No. 4—
Can we be of assistance to you in this respect?—Number replying "Yes" 34

Question No. 5—
Would you want one of your physicians trained in order to be able to direct your physical therapy department?—Number replying "Yes"..... 11

Subsequently a pamphlet on institutional work in physical therapy was sent out to all hospitals, and emphasis was laid on the advisability of the actual direction of every physical therapy department by a specially trained physician instead of a nurse or technician.

2. During the past year nineteen (19) counties have appointed special committees on physical therapy in response to the suggestion of your Committee as compared to seventeen (17) in the previous year. The attached tabulation of the activities in the counties demonstrates that thirty-one (31) of the sixty (60) counties in the State have had some activity in physical therapy. The Chairman and members of the County Committees were regularly invited to attend the monthly meetings of the State Committee which were held for the purpose of regional contacts in New York, Albany, Syracuse and Buffalo. The Counties of Albany, Bronx, Broome, Erie, Genesee, Kings, Queens, Nassau, Onondaga and Ulster were represented at these meetings. Your Committee realizes that the most direct way to insure a better appreciation of physical therapy as an integral part of the modern practice of medicine leads through the carrying on of the work in every County Society and through the correlation of the activities of the special committees appointed in each county.

Physical Therapy Activities in County Societies
1929—1930

C—Committee Appointed.
CA—Committee Appointed and Active.
I—Inquiry.
P—Paper or Special Meeting on Physical Therapy.
LC—Lecture Course on Physical Therapy.

	1929	1930
Albany	C—P	C
Bronx	CA	CA
Broome	—	C
Cayuga	—	C—P
Columbia	LC	—
Delaware	C	—
Dutchess-Putnam ...	P	—
Erie	C	CA—P
Essex	—	P
Genesee	C	C
Jefferson	I	—
Kings	CA—P	CA
Lewis	C	—
Livingston	—	CA
Montgomery	C	—
Nassau	C—P	CA—P
New York	CA	CA
Oneida	—	C
Onondaga	C	CA—LC
Orange	C	—
Otsego	P	—
Queens	CA—P	CA—P
Rockland	C	—
St. Lawrence	C	—
Schoharie	—	C
Suffolk	C	C
Tompkins	—	C
Ulster	—	CA
Warren	LC	—
Washington	LC	C
Westchester	CA	C

No Action Taken by the Following County Societies

Allegany	Herkimer	Schenectady
Cattaraugus	Madison	Schuyler
Chautauqua	Monroe	Seneca
Chemung	Niagara	Steuben
Chenango	Ontario	Sullivan
Clinton	Orleans	Tioga
Cortland	Oswego	Wayne
Franklin	Rensselaer	Wyoming
Fulton	Richmond	Yates
Greene	Saratoga	

3. Your Committee welcomed the order issued on November 21st, 1930, by the Board of Regents of the University of the State of New York containing a definite regulation of the practice of registered physiotherapists. It cooperated with the Secretary of the State Board of Medical Examiners in adjusting questions relative to this practice. Your Committee is of the opinion that an amiable relationship between the medical profession and the registered physiotherapists is desirable.

Other activities. Repeated efforts were made to approach the problem of physical therapy in relation with compensation work, through cooperation with the Committee on Medical Economics. The latter Committee, however, in issuing its recent recommendations has so far not consulted with the Committee on Physical Therapy as to the physical therapy phase of the situation. Inasmuch as physical measures play a most important part in the after treatment of industrial disabilities, your Committee recommends that in carrying out the compensation agreement now pending consideration be given to competent representation of physical therapy.

The Chairman wishes to thank the members of your Committee, Floyd O. Reed of Yonkers, Philip L. Forster of Albany, Homer J. Knickerbocker of Geneva, Guy H. Turrell of Smithtown Branch, Lee A. Hadley of Syracuse and Frederic E. Elliott of Brooklyn, for their loyal cooperation and also expresses his appreciation to the Staff at the State Society Office and at the Legislative Bureau for their very kind help in the technical details of the Committee's work.

Respectfully submitted,

RICHARD KOVACS, *Chairman.*

April 15, 1931.

REPORT OF THE COMMITTEE TO STUDY THE NURSE PROBLEM

To the House of Delegates:

Gentlemen:

Your Committee appointed to study the nurse problem, reports continuous observation through personal contacts with nursing service and through association with local, county society and national committees—which are actively searching for practical solutions of the problem of furnishing adequate nursing service to the individual sick patient at a price within his means—and in furnishing adequate nursing service to the community in the discovery of disease, in protection of contacts and in active disease prevention.

During a year which has shown a continuously favorable balance in diminishing case rates and death rates from communicable disease, due largely to wider popular understanding of preventive measures—through campaigns of educative propaganda—broadcast by radio and press and by national and local agencies, the economic plight of the nurse has been worse than ever before.

A mild winter during which no widespread epidemics developed has left thousands of nurses dependent upon the charity of hospitals, or relief organizations, or upon the care of family or friends. One hospital has been feeding seventy-five nurses daily during a long period of unemployment.

During such a lean year the 2,205 schools of nursing in this country added 25,300 graduates to this already overcrowded profession, and over the border from Canada has flowed a continuous stream of well trained or poorly trained competitors, most of whom have no intention of becoming citizens of the United States—while asking the special privilege of employment at the same fee as that of our own graduates.

In spite of this great general over-supply of nurses, physicians complain of a shortage of public-health nurses able to carry on ambitious programs of disease prevention—of a shortage of especially educated surgical nurses, or of those who know anything about contagious diseases—74 out of 113 New York schools graduated 1,453 nurses who had no experience in this field. They also complain of a shortage of well schooled obstetrical nurses—only 18% of all recently graduated nurses having had any adequate training in obstetrics—revealing a serious weakness in the educational system.

More than 25,000 nurses graduating every year possessing differing educational qualifications—furnish no satisfactory protection for the patient and additional thousands of unidentified foreign graduates and practicals all demanding about the same remuneration creates a situation which demands radical reform through standardized education and strict measures of character identification.

The sick patient gets little financial relief from

the practical nurse who has had no schooling, but who has a real place in caring for mild cases in the home as working housekeeper—because she is almost as costly as the trained individual who is unwilling to adapt herself to homely although necessary household service.

The very sick patient at home needs an even more highly equipped nurse than in the hospital, where supervision and consultation with qualified heads are immediately available.

The modern tendency to hospitalize the very sick patient where he may find the best nurses as well as the best physicians generally safeguards the prognosis and lowers costs, but at the same time proper administration of floor nursing and group nursing diminishes the numerical demand upon the nurse supply.

It is quite evident that there are too many schools and too many poorly qualified nurses.

The expense of operating hospitals with graduates only, as compared with the expense of conducting a school and the employment of student nurses is now being carefully studied by the managers of several small hospitals and should be studied by all.

If the present annual number of graduates continues—no lowering fees can give them living wages—further division of their field inevitably cutting the number of working days. The private duty nurse now works only seven months out of twelve and only institutional and public health nurses have a reasonable assurance of supporting themselves by their own professional efforts. Members of your Committee believe that a promise of solution may lie along a system similar to the course of medical education. They believe that the candidate for the nursing profession, while in her high school, or special school or college where there are competent teachers should complete a prescribed course in what a nurse should know of the basic sciences of anatomy, chemistry, physiology, hygiene and biology and in the history and theory and science of nursing —and then after passing an examination—enter an approved general hospital for a residence of at least two years where she shall have a rotating apprenticeship in every service to qualify her for an R.N. degree.

Your Committee recommends a study of such a plan.

Your Committee heartily commends the visiting nurses' organizations and urges the medical profession of the State to assist their work in every possible manner.

Your Committee commends the effort of the "Committee on the Distribution of Nursing Service" under the able chairmanship of Mrs. Annie L. Hansen of Buffalo—to develop general duty and group nursing in hospitals and hourly appointment nursing service in the community either in homes, or physicians' offices, or in the hospitals, this latter service to be sold on a time basis, rather than on a visit basis. Your Committee commends the work of the "Grading Committee in Nursing Schools" for establishing the facts of nursing and nursing education in such great detail that reliable fundamental summaries, soon to be announced, may be safely used for the basic structure of a new system of nurse education.

Respectfully submitted,

NATHAN B. VAN ETTEN, *Chairman.*

April 15, 1931.

REPORT OF COMMITTEE TO FORM A PLAN TO MAKE TOXIN-ANTI-TOXIN AVAILABLE TO EVERY CHILD IN THE STATE

To the House of Delegates:

Your Committee appointed to promote the availability of Toxin-Antitoxin to every child in the State—regrets to report that the objectives of a five-year campaign started 1926 were not attained, and that one of the reasons for this failure is—the lack of enthusiastic cooperation on the part of the medical profession.

While in many sections of the state the response to the campaign was most satisfactory in attaining very nearly one hundred per cent results, in general the response of physicians was very much as it has always been to vaccination against Smallpox. The doctor seems to be afraid that he will get a patient in an unethical manner and is perfectly willing to let the Health Departments do his work for him and incidently take away his fee—and then complains about State Medicine and Government infringement upon his prerogatives.

Traditional individualism is still strong in the blood of physicians, many of whom have not wakened to the realization that if they would do their whole duty to society they must assume the leadership in community health problems which really belongs to them and for which they have been educated.

They should no longer wait to be pushed into being followers of organized lay groups which rightly enough become excited over high morbidity or mortality statistics. If State Medicine comes these doctors will take it lying down.

In spite of our disappointment in securing wholehearted cooperation the statistics shown in the following tables lifted from Dr. Godfrey's reports illuminate a splendid accomplishment in

preventive medicine and justify high hopes for the future when physicians and laymen shall have better assimilated public health education

The age group under five has been most difficult to reach as will be seen and really is the most important part of the problem for your serious consideration

Middletown led all of the cities of over 10,000 population in the percentage of immunization of children under five years of age and Putnam led the counties excluding the cities of 10,000 or over

The case rates and death rates have steadily declined since 1900 while the fatality per 100 cases has actually increased in the last 12 years

In the City of New York the brief campaign conducted by the Health Department with the active cooperation of the County Societies and Medical Practitioners has reduced the case rate and death rate to the lowest in the city's history

Here great numbers of individual practitioners have volunteered through their county societies to administer Toxin-Antitoxin free or at minimum fees and—excellent and constant publicity has been an effective stimulant of parental interest

The table on page 569, "Diphtheria, New York City Cases and Deaths," shows a sharp decline in 1930, the active year of the campaign

The campaign outside of New York City is over and it will be interesting to see the figures for the next five years

Your Committee has consulted with leaders of organized medicine throughout the State and all of them agree that publicity should be maintained by the State Departments of Health and Education and that each county society should assume as an important part of its public health program continuous stimulation of its members in taking a progressive attitude toward the elimination of a preventable disease

TABLE I—DIPHTHERIA

NUMBER OF PERSONS REPORTED TO HAVE HAD 3 DOSES OF TOXIN-ANTITOXIN SINCE JANUARY 1, 1922 INCLUDES ESTIMATE FOR ROCHESTER

	All Ages	Under 5	5–9	10–14	15 AND OVER
ALL PLACES					
1922–25	105,945				
1926	118,650	20,657	63,390	30,889	3,714
1927	212,968	39,133	111,189	55,081	7,565
1928	136 829	34,493	64,547	32,565	5,224
1929	143,760	44,976	71,865	23,897	3,022
1930	114,343	46,015	51,550	14,877	1,901
1926–30	726,550	185,274	362,541	157,309	21,426
PLACES OVER 10,000					
1922 25	80,115				
1926	64,086	11,316	36,602	15,299	869
1927	112,983	21,470	64,978	25,081	1,454
1928	82,779	23,354	40,756	17,386	1,283
1929	83,009	27,780	43,428	11,315	486
1930	66,929	30,337	29,484	6,563	545
1926–30	409,786	114,257	215,248	75,644	4,637
PLACES UNDER 10,000					
1922–25	25,830				
1926	54,564	9,341	26,788	15,590	2,845
1927	99,985	17,663	46,211	30,000	6,111
1928	54,050	11,139	23,791	15,179	3,941
1929	60,751	17,196	28,437	12,582	2,536
1930	47,414	15,678	22,066	8,314	1,356
1926–30	316,764	71,017	147,293	81,665	16,789

T-A IN PLACES OVER 10,000 POPULATION

NUMBER AND PER CENT OF POPULATION UNDER 5 YEARS* REPORTED AS HAVING HAD 3 DOSES OF TOXIN-ANTITOXIN, NUMBER GIVEN 3 DOSES IN 1930**, NUMBER WHICH HAVE TO RECEIVE 3 DOSES IN 1931 TO REACH AND MAINTAIN 35 PER CENT***, AND NUMBER WHICH HAVE TO RECEIVE 3 DOSES IN 1931 TO MAINTAIN THE PER CENT ALREADY ATTAINED IN PLACES NOW HAVING 35 PER CENT OR OVER

Places over 10,000 population	Under 5 Years of Age							
	Population	3 Doses of T-A			35% Population	No. to be done in 1931 to reach 35%***	No. to be done in 1931, in addition, to maintain 35%***	If 35% or over*, No. to be done in 1931 to maintain present per cent
		1925–1930*	%*	1930**				
OVER 250,000								
Buffalo	58,895	9,531	16	1,138	20,613	11,082	3,167	...
100–250,000								
Syracuse	19,839	5,075	26	2,224	6,944	1,869	1,483	...
Albany	9,819	2,577	26	1,794	3,437	860	623	...
Utica	10,287	2,212	22	621	3,600	1,388	698	...
Yonkers	14,201	2,905	20	955	4,970	2,065	954	...
50–100,000								
Binghamton	7,349	2,770	38	1,147	....	....	....	614
Troy	5,405	1,552	29	1,001	1,892	340	471	...
Mount Vernon	5,900	1,736	29	353	2,065	329	549	...
Niagara Falls	9,210	2,165	24	107	3,224	1,059	791	...
Schenectady	9,374	991	11	248	3,281	2,290	388	...
New Rochelle	5,033	365	7	50	1,762	1,397	123	...
25–50,000								
White Plains	3,201	1,458	46	444	.....	.....	.....	450
Kingston	2,065	746	36	264	.....	.....	.....	220
Poughkeepsie	3,751	1,331	35	619	.....	.....	.....	356
Auburn	3,361	1,012	30	389	1,176	164	319	...
Elmira	4,008	1,117	28	925	1,403	286	318	...
Newburgh	2,575	661	26	273	901	240	99	...
Jamestown	3,921	957	24	129	1,372	415	292	...
Rome	3,435	650	19	368	1,202	552	165	...
Amsterdam	3,685	676	18	417	1,290	614	181	...
Watertown	2,794	421	15	190	978	557	149	...
Lockport	2,113	68	3	....	740	672	32	...
10–25,000								
Middletown	1,406	1,031	73	160	.....	.....	.....	235
Ogdensburg	1,260	822	65	234	.....	.....	.....	193
Hornell	1,347	755	56	598	.....	.....	.....	233
Endicott	1,623	877	54	548	.....	.....	.....	387
Johnson City	1,357	725	53	552	.....	.....	.....	203
Geneva	1,603	785	49	617	.....	.....	.....	189
Port Jervis	952	464	49	235	.....	.....	.....	110
Rockville Center	1,365	609	45	197	.....	.....	.....	137
Ossining	1,155	472	41	215	.....	.....	.....	159
Mamaroneck	1,168	470	40	86	.....	.....	.....	170
Gloversville	1,815	700	39	307	.....	.....	.....	202
Glen Cove	1,140	431	38	100	.....	.....	.....	126
Peekskill	1,580	583	37	345	.....	.....	.....	150
Lackawanna	4,252	1,464	34	449	1,488	24	362	...
Port Chester	2,624	887	34	237	918	31	320	...
Johnstown	841	274	33	140	294	20	71	...
Batavia	1,721	511	30	215	602	91	138	...
Massena	1,063	314	30	....	372	58	105	...
Hudson	1,262	353	28	133	442	89	96	...
Oswego	2,122	592	28	....	743	151	225	...

T-A IN PLACES OVER 10,000 POPULATION

NUMBER AND PER CENT OF POPULATION UNDER 5 YEARS* REPORTED AS HAVING HAD 3 DOSES OF TOXIN-ANTITOXIN, NUMBER GIVEN 3 DOSES IN 1930**, NUMBER WHICH HAVE TO RECEIVE 3 DOSES IN 1931 TO REACH AND MAINTAIN 35 PER CENT***, AND NUMBER WHICH HAVE TO RECEIVE 3 DOSES IN 1931 TO MAINTAIN THE PER CENT ALREADY ATTAINED IN PLACES NOW HAVING 35 PER CENT OR OVER

Places over 10,000 population	Under 5 Years of Age							
	Population	3 Doses of T-A			35% Population	No. to be done in 1931 to reach 35%***	No. to be done in 1931, in addition, to maintain 35%***	If 35% or over*, No. to be done in 1931 to maintain present per cent
		1925–1930*	%*	1930**				
10–25,000—Continued								
Beacon	978	269	28	154	342	73	77	...
Ithaca	1,594	427	27	.....	558	131	137	...
Tonawanda	1,257	328	26	274	440	112	92	...
Rensselaer	833	199	24	175	292	93	59	...
Oneonta	1,063	224	21	35	372	148	87	...
Herkimer	1,201	240	20	147	420	180	85	...
Corning	1,477	297	20	88	517	220	98	...
Freeport	1,546	272	19	210	541	269	53	...
Oneida	896	162	18	96	314	152	51	...
Glens Falls	1,356	236	17	.....	475	239	98	...
Cohoes	2,269	372	16	251	794	422	109	...
Watervliet	1,416	217	15	189	496	279	79	...
Little Falls	1,390	202	15	.....	487	285	82	...
Cortland	1,285	179	14	78	450	271	61	...
Floral Park	1,001	120	12	28	350	230	53	...
Plattsburg	1,217	150	12	.....	426	276	64	...
Olean	2,290	277	12	234	802	525	96	...
Lynbrook	1,198	142	12	106	419	277	50	...
Saratoga Springs	990	105	11	.....	347	242	52	...
Fulton	1,323	148	11	62	463	315	57	...
North Tonawanda	2,308	265	11	106	808	543	111	...
Dunkirk	2,199	221	10	111	770	549	74	...
Valley Stream	1,179	79	7	43	413	334	33	...
Kenmore	1,646	98	6	.....	576	478	47	...
Hempstead	1,265	6	.	5	443	437	.....	...

*As of January 1, 1931.
**From records on file January 3, 1931.
***As of January 1, 1932.

T-A IN COUNTIES EXCLUSIVE OF PLACES OVER 10,000 POPULATION

NUMBER AND PER CENT OF POPULATION UNDER 5 YEARS* REPORTED AS HAVING HAD 3 DOSES OF TOXIN-ANTITOXIN, NUMBER WHICH HAVE TO RECEIVE 3 DOSES IN 1931 TO REACH AND MAINTAIN 35 PER CENT**, AND NUMBER WHICH HAVE TO RECEIVE 3 DOSES IN 1931 TO MAINTAIN THE PER CENT ALREADY ATTAINED IN PLACES NOW HAVING 35 PER CENT OR OVER

Counties (exclusive of places over 10,000 population)	UNDER 5 YEARS OF AGE						
	Population	3 DOSES OF T-A		35% of population	No. to be done in 1931 to reach 35%**	No. to be done in 1931, in addition, to maintain 35%**	If 35% or over*, No. to be done in 1931 to maintain present per cent
		1925–1930*	%*				
Albany	3,427	207	6	1,199	992	58	...
Allegany	3,391	417	12	1,187	770	156	...
Broome	2,898	349	12	1,014	665	116	...
Cattaraugus	4,874	919	18	1,741	822	262	...
Cayuga	2,474	290	12	866	576	101	...
Chautauqua	6,557	1,453	22	2,295	842	512	...
Chemung	2,728	349	13	955	606	98	...
Chenango	2,780	450	16	973	523	194	...
Clinton	3,916	569	15	1,371	802	195	...
Columbia	2,489	398	16	871	473	131	...
Cortland	1,252	135	11	438	303	52	...
Delaware	3,700	378	10	1,295	917	176	...
Dutchess	3,689	1,320	36	1,291	...	...	380
Erie	10,146	1,480	15	3,551	2,071	527	...
Essex	3,393	300	9	1,188	888	98	...
Franklin	5,024	1,052	21	1,758	706	310	...
Fulton	1,067	9	1	373	364	3	...
Genesee	2,725	370	14	954	584	127	...
Greene	2,062	439	21	722	283	133	...
Hamilton	393	6	2	138	132	2	...
Herkimer	3,807	423	11	1,332	909	106	...
Jefferson	4,725	728	16	1,654	926	245	...
Lewis	2,344	805	34	820	15	181	...
Livingston	3,380	663	20	1,183	520	249	...
Madison	2,684	240	9	939	699	90	...
Monroe	9,569	1,941	20	3,349	1,408	564	...
Montgomery	2,320	133	6	812	679	44	...
Nassau	24,571	3,339	14	8,600	5,261	989	...
Niagara	3,014	39	1	1,055	1,016	15	...
Oneida	6,138	741	12	2,148	1,407	242	...
Onondaga	6,400	1,086	17	2,240	1,154	383	...
Ontario	3,279	596	18	1,148	552	230	...
Orange	6,796	1,739	26	2,379	640	525	..
Orleans	2,588	196	8	906	710	66	...
Oswego	2,830	305	11	991	686	121	...
Otsego	2,670	237	9	935	698	115	...
Putnam	1,236	452	37	433	...	...	144
Rensselaer	3,343	350	10	1,170	820	133	...
Rockland	5,953	651	11	2,084	1,433	221	...
St. Lawrence	5,860	717	12	2,051	1,334	320	...
Saratoga	4,708	476	10	1,648	1,172	169	...
Schenectady	3,124	...	..	1,093	1,093	...	...
Schoharie	1,573	199	13	551	352	69	...

*As of January 1, 1931, from records on file January 3, 1931.
**As of January 1, 1932.

T-A IN COUNTIES EXCLUSIVE OF PLACES OVER 10,000 POPULATION

NUMBER AND PER CENT OF POPULATION UNDER 5 YEARS* REPORTED AS HAVING HAD 3 DOSES OF TOXIN-ANTITOXIN, NUMBER WHICH HAVE TO RECEIVE 3 DOSES IN 1931 TO REACH AND MAINTAIN 35 PER CENT**, AND NUMBER WHICH HAVE TO RECEIVE 3 DOSES IN 1931 TO MAINTAIN THE PER CENT ALREADY ATTAINED IN PLACES NOW HAVING 35 PER CENT OR OVER

Counties (exclusive of places over 10,000 population)	Under 5 Years of Age						
	Population	3 Doses of T-A		35% of population	No. to be done in 1931 to reach 35%**	No. to be done in 1931, in addition, to maintain 35%**	If 35% or over*, No. to be done in 1931 to maintain present per cent
		1925–1930*	%*				
Schuyler	1,162	339	29	407	68	107	...
Seneca	1,997	112	6	699	587	45	...
Steuben	4,633	378	8	1,622	1,244	139	...
Suffolk	14,473	1,275	9	5,066	3,791	407	..
Sullivan	3,171	1,011	32	1,110	99	299	...
Tioga	2,038	97	5	713	616	30	...
Tompkins	1,727	325	19	604	279	99	...
Ulster	4,341	858	20	1,520	662	314	...
Warren	1,378	355	26	482	127	86	...
Washington	4,182	350	8	1,464	1,114	149	...
Wayne	4,506	588	13	1,577	989	243	...
Westchester	16,812	3,781	22	5,884	2,103	1,201	...
Wyoming	2,586	581	22	905	324	177	...
Yates	1,355	396	29	474	78	123	...

*As of January 1, 1931, from records on file January 3, 1931.
**As of January 1, 1932.

DIPHTHERIA, NEW YORK CITY, CASES AND DEATHS

Year	Cases	Deaths	Year	Cases	Deaths
1921	15,110	891	1926	7,531	477
1922	10,427	873	1927	13,501	717
1923	8,050	553	1928	10,776	642
1924	9,687	714	1929	8,548	462
1925	9,051	663	1930	3,806	119

DIPHTHERIA

NEW YORK STATE (EXCLUSIVE OF NEW YORK CITY)

Year	Cases	Deaths	Rate per 100,000		Fatality per 100 Cases
			Case	Death	
1900	....	1,031	....	26.9	....
1901	....	959	....	24.7	....
1902	....	846	....	21.5	....
1903	....	850	....	21.3	....
1904	....	948	....	23.4	....
1905	....	758	....	18.5	....
1906	....	804	....	19.4	....
1907	....	862	....	20.5	....
1908	4,390	710	103	16.7	16.2
1909	4,613	598	107	13.9	13.0
1910	5,404	718	124	16.5	13.3
1911	6,523	679	148	15.4	10.4
1912	5,394	498	120	11.1	9.2
1913	5,662	519	124	11.4	9.2
1914	5,408	523	117	11.3	9.7
1915	5,527	491	118	10.5	8.9
1916	5,625	493	120	10.5	8.8
1917	6,559	597	139	12.6	9.1
1918	5,079	526	107	11.1	10.4
1919	11,063	817	233	17.2	7.4
1920	10,642	860	221	17.9	8.1
1921	11,916	812	243	16.5	6.8
1922	8,441	581	169	11.6	6.9
1923	7,044	455.	138	8.9	6.5
1924	5,883	370	113	7.1	6.3
1925	4,370	337	83	6.4	7.7
1926	3,647	249	68	4.6	6.8
1927	3,914	264	71	4.8	6.7
1928	2,898	221	52	3.9	7.6
1929	2,256	193	40	3.4	8.6
1930	1,613	144	28	2.5	8.9

April 15, 1931.

Respectfully submitted,
NATHAN B. VAN ETTEN, *Chairman.*

REPORT OF THE FIRST DISTRICT BRANCH

To the House of Delegates:
Gentlemen:

The meeting of the First District Branch was held in Hosack Hall New York Academy of Medicine, on the afternoon of October 7, 1930.

The meeting was opened with a buffet lunch which was followed by short addresses by the Officers of the Medical Society of the State of New York. This was probably the largest meeting ever held by this District, the attendance being some seven hundred.

The following officers were elected for two years: President, Charles D. Kline, Nyack; First Vice-President, C. Knight Deyo, Poughkeepsie; Second Vice-President, Samuel J. Kopetzky, New York; Secretary, Isidore J. Landsman, Bronx; Treasurer, John T. Howell, Newburgh.

The papers which were read by the following distinguished guests were both scientific and instructive.

"Symptomatology and Treatment of Diabetes," Dr. Elliott P. Joslin, Boston.

Discussion opened by Dr. Henry R. Geyelin, New York.

"Toxic Goitre," Dr Frank H. Lahey, Boston.

Discussion opened by Dr. Charles G. Heyd, New York.

"Essentials in Treatment of Fractures," Dr. John J. Moorhead, New York.

Discussion opened by Drs. James J. Sadlier, Poughkeepsie, and George A. Leitner, Piermont.

Respectfully submitted
GEORGE B. STANWIX, *President.*

April 15, 1931.

REPORT OF THE THIRD DISTRICT BRANCH

To the House of Delegates—
Gentlemen:

I have the honor to herewith present my annual report as President of the Third District Branch. The past year of the Third District Branch has been a quiet and peaceful one.

The annual meeting of the Branch was held in Albany on Friday, September 19, 1930, when the following interesting program was presented.

1. "Head Injuries," Dr. Max Peet, Professor of Surgery, University of Michigan, Ann Arbor, Mich.

2. "Surgery and Irradiation in the Treatment of Cancer," Dr. Burton J. Lee, New York City.

3. "The Poor Law and Its Relations to the Doctor," Mr. Clarence E. Ford, Assistant Commissioner, State Welfare Department.

The following officers were elected for two years:

President: Herbert L. Odell, Sharon Springs; First Vice-President, Clark G. Rossman, Hudson; Second Vice-President, Luther C. Payne, Liberty; Secretary, William M. Rapp, Catskill; Treasurer, Ernest E. Billings, Kingston.

The attendance was in the neighborhood of one hundred.

For several years now the meetings have been held in the large cities of the District and the attendance has not been what it should be and the retiring President would respectfully suggest that hereafter, for a few years at least, the meetings be held in the smaller cities or towns of the District.

On the 12th of December your President and the Executive Officer of the State Society attended a complimentary dinner of the Delaware County Medical Society in honor of Dr. Rayvesky and Dr. Payne. About a hundred physicians with their wives were present. Dr. Rayvesky although ill made a heroic effort to attend. A few days after the dinner he passed on to that place where patients do not telephone in the middle of the night and all is peace and quiet.

The Rensselaer County Medical Society celebrated the one hundred and twenty-fifth anniversary of their organization in December. A dinner was held at the Hendrick Hudson in Troy which was largely attended.

Mainly through the efforts of the Greene County Medical Society a hospital is to be established in Catskill which will serve as a county hospital and fill a long felt want.

In Ulster County a new tuberculosis hospital is to be founded, in the organization of which the members of the County Society took a leading part.

The meetings of the Columbia County Medical Society have been well attended.

In Schoharie County, the home of the new President, the meetings have been well attended and a new interest aroused in the economical side of medicine.

In Albany County the monthly meetings have been well attended and interesting programs presented. The Society is planning to celebrate the one hundred and twenty-fifth anniversary of their organization in the fall. Just what form this celebration will take has not as yet been decided.

In conclusion your retiring President wishes to thank the officers and members of the Branch for their unfailing loyalty and support which they have given him during the four years of his administration.

Respectfully submitted,

EDGAR A. VANDER VEER,
President.

April 15, 1931.

REPORT OF THE FOURTH DISTRICT BRANCH

To the House of Delegates—
Gentlemen:

The outstanding feature of this year's work is unquestionably a report delivered to the entire Fourth District Branch at its fall meeting in Saranac Lake by Mr. William M. Bronk, Welfare Commissioner of Washington County. The Commissioner pointed out the organization of the work done in Washington County with his views, which for a layman are rather unique. It is his belief that doctors are as much entitled to their pay for services as is the grocer or coalman for the materials delivered to indigent patients. The meeting went far beyond the supper hour with discussion which was participated in by practically every member of the Society. We are seeing some fruits of this report in other portions of the State where county medical societies are getting together with their welfare commissioners as was done in Washington County. Such constructive speeches are always good for medical men to hear.

Warren County through its President, Dr. Floyd Palmer and the Chairman of the Public Relation Committee has been very active, taking particular interest in public health work. Through an arrangement with the Board of Supervisors and Chairman of the Public Health Committee, Mr. Nelson A. Moss, a committee from the County Medical Society sits in eacl

month with a committee from the Board of Supervisors and listens to the reports and discussion concerning the work. This has been an admirable thing resulting in benefits both to the Medical Society and the Board of Supervisors. In addition to this they have conducted some extension work. Dr. Harlow Brooks has given a wonderful talk on "Angina Pectoris," which was freely discussed. Also a report and speech with relation to county health departments was given by Dr. Munson of Granville. The County Society has been active in supporting good public health measures at hearings in Albany and opposing bad measures.

Essex County with Dr. Harold J. Harris has been active in legislative matters. Dr. Kovacs is scheduled to address a forthcoming meeting.

Schenectady County Medical Society has had a very profitable year. They devoted much of their time to scientific medicine, having had speakers from various parts of this country and Canada.

The County Medical Society of Montgomery has had a year of very excellent relations with their Board of Supervisors with whom they have cooperated very extensively. This has resulted in finishing an up-to-date Sanitarium for Tuberculosis and also in extending the county laboratory services with branch laboratories and technicians at the Sanitarium and at Canajoharie. The County Society has also gone on record in favor of a county health department.

The Saratoga County Medical Society during the year has established the practice of four rather than two meetings and they have established weekly laboratory clinics which are held at the Saratoga Hospital. The Committee on Legislature and Public Health has been particularly active.

The Clinton County Medical Society have had the following activities:

(1) Post-graduate course in Neurology under the auspices of the Committee on Public Health and Medical Education.

(2) Completion of the Maternity Surveys of 1929. This covers the births handled by physicians and the answering of questionnaires concerning the phases of the cases.

(3) Appointment of committee to study and report on matter of charges to be made under the new Public Welfare Law.

This latter is an outgrowth of the discussion at the Fourth District Branch meeting.

During the year the Fulton County Medical Society held their regular meetings, which were attended by various outside speakers, Dr. L. Whittington Gorham, Albany, "Infectious Mononecleosis," Dr. Arthur Crede, New York, "Surgery of the Knee Joint," Dr. William Ordway, Mt. McGregor, "Undulant Fever," Dr. William Ross, Brentwood and Dr. Joseph Lawrence, Albany, "County Health Programs."

Respectfully submitted,

WILLIAM L. MUNSON, *President.*

April 15, 1931.

REPORT OF THE FIFTH DISTRICT BRANCH

To the House of Delegates—
Gentlemen:

As President of the Fifth District Branch of the Medical Society of the State of New York, I respectfully report as follows:

The Executive Committee of the Fifth District Branch, the Presidents of the component County Societies and Dr. Joseph S. Lawrence, Executive Officer of the State Society, attended a luncheon at the Hotel Utica, Utica, on Thursday, June 12th, for the purpose of discussing plans for the Annual Meeting. There was a full attendance and Dr. Lawrence gave an instructive talk touching on the policies and plans of the State Society.

An invitation received from Dr. V. M. Parkinson, President of the Herkimer County Medical Society, to hold the Annual Meeting at Little Falls was accepted. The Annual Meeting was held at the Masonic Temple, Little Falls, September 30, 1930. A chicken dinner was served at the Hotel Snyder at 1:00 P.M.

The District was honored by having as guests Dr. William H. Ross, President of the State Society, who always has a message; Dr. Daniel S. Dougherty, Secretary; Dr. John A. Card, Speaker; Dr. G. M. Fisher, Ex-President, and Dr. Joseph S. Lawrence, Executive Officer. The following scientific program was given:

Meeting called to order by the President, Dr. Augustus B. Santry, Little Falls.

Address of Welcome by the Mayor, John M. Tanzer, D.D.S., Little Falls.

"Some of the Newer Anesthetics," Dr. George S. Eveleth, Little Falls.

"Goitre," Dr. Frank H. Lahey, Boston.

"Medical Shock," Dr. Dana W. Atchley, New York.

Luncheon was served at 1:00 P.M. in the Hotel Snyder, the Medical Society of the County of Herkimer acting as host..

AFTERNOON SESSION, 2:00 P.M.

"Treatment of Varicose Veins," Dr. John Sutton, Jr., New York.

"The New Public Welfare Law," Hon. Richard W. Wallace, New York State, Department of

Social Welfare, Albany. R. W. Wallace was represented by Mr. Ford of the Department of Social Welfare and his explanation of the New Welfare Law was very instructive.

County Societies all report that they are going forward with the policies of the State Society and all its activities, but report a small attendance at their Meetings.

A great many physicians are suspicious and fearful of all Health Department activities and don't seem to understand the line of progress of preventive medicine. They are afraid of "State Medicine," or "Something." We lack organization. Every physician should attend all the meetings of his County and District Branch. Get together. Organize. Organize and protect sick and suffering humanity and our noble profession.

Respectfully submitted,

AUGUSTUS B. SANTRY, *President.*

April 15, 1931.

REPORT OF THE SIXTH DISTRICT BRANCH

To the House of Delegates—

Gentlemen:

The Executive Committee of the Sixth District Branch, the Presidents and Secretaries of the County Societies of this Branch, met at the Country Club at Owego on June 18, 1930. Dr. Joseph S. Lawrence, Executive Officer of the State Society, was with us. There were ten present. Luncheon was served at the Club House and a program was arranged and the place and date of the Annual Meeting fixed.

At the Annual Meeting held in Cooperstown, September 23, 1930, we were honored by having with us, Dr. William H. Ross, President of the State Society, Dr. Daniel S. Dougherty, Secretary, of the State Society, Dr. John A. Card, Speaker of the House of Delegates, Dr. Joseph S. Lawrence, Executive Officer, and about two hundred members.

Respectfully submitted,

GEORGE M. CADY, *President.*

April 15, 1931.

REPORT OF THE SEVENTH DISTRICT BRANCH

To the House of Delegates—

Gentlemen:

As President of the Seventh District Branch, I wish to make the following report.

The Executive Committee of the Seventh District Branch met in the Hotel Seneca in Rochester and discussed plans for the meeting in September.

This was an exceptionally interesting meeting as the class of papers to be given was discussed with a great deal of enthusiasm.

It was decided to hold the annual meeting at Keuka College, Keuka Park, on September 25, 1930. At this meeting although a very interesting program was offered the attendance was not as good as we anticipated, only about 100 physicians being present at the meeting.

Perhaps Monroe County has taken the lead in progress of any of the counties in the Seventh District Branch in any of their activities.

The Society has been broadcasting interesting talks for the last year and a half. These talks are under the physicians of the Public Health Committee of that county of which Dr. Sawyer is Chairman.

The Committee select the speakers and censor the papers before they are broadcast.

The County Medical Societies are standing the expense of the broadcasting which is given each Sunday night.

I have visited several of the County Medical Societies during the year and most of them are doing some public health work.

I attended the meeting of the Council in Rochester last May and also the meeting in December in New York City.

These reports are being submitted to you by their respective heads.

Respectfully submitted,

E. CARLTON FOSTER, *President.*

April 15, 1931.

REPORT OF THE EIGHTH DISTRICT BRANCH

To the House of Delegates:

Gentlemen:

The Executive Committee of the Eighth District Branch met at the Hotel Statler, Buffalo, in August, 1930. At this time we decided to have the twenty-fifth annual meeting at the J. N. Adam Memorial Hospital, Perrysburg, on October 2nd. The idea was a very happy one for we were able to make a tour of an extremely interesting hospital and Dr. LoGrasso was a most generous host.

After a tour of inspection Dr. LoGrasso read a paper on "The Value of Light in the Treatment of Tuberculosis." His paper was discussed by Dr. Brian O'Brien of Buffalo. The members of the Society were guests of the hospital at an elaborate luncheon. In the afternoon Dr. W. H. Ross, President of the Medical Society of the State of New York, talked briefly on medical leadership in health work. Dr. John Card, Speaker of the House of Delegates, discussed some phases of liability insurance.

The following papers were read:

"Epilepsies—Etiology and Diagnosis," William T. Shanahan, M.D., Sonyea; discussion, Edward A. Sharp, M.D., Buffalo.

"The Salient Features of Surgical Diagnosis in Conditions of the Abdomen," Charles G. Heyd, M.D., New York City; discussion, George W. Cottis, M.D., Jamestown, and Marshall Clinton, M.D., Buffalo.

The meeting was altogether one of the most successful and interesting ever held by the Eighth District Branch. More than three hundred and fifty were present and all had a very good time both intellectually and socially.

Respectfully submitted,

W. Ross Thomson, *President.*

April 15, 1931.

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For list of officers of County Medical Societies, see this issue, advertising page xxxii.

Next Annual Meeting, Hotel Syracuse, Syracuse, N. Y., June 1, 2, 3, 1931.

THE ANNUAL REPORTS

This Journal contains 112 pages—forty per cent more than the normal issue of 80 pages. The increase is due principally to the annual reports, which are of unusual length and interest because of the increasing number and importance of the activities of the Medical Society of the State of New York.

The reports are addressed to the House of Delegates; but specifically, each goes to a reference committee whose members recommend the action for the House to take. Let each member of the State Society imagine himself to be on a reference committee as he reads the reports and judges their practical application.

PRESIDENTIAL COMMENTS ON CURRENT EVENTS—NO. 21

As the year's contacts with County Medical Societies and their activities draw to a close, one almost subconsciously begins to think of the changes in medical opinion regarding relationships to other health interests in the State, the attitude toward medical problems and the growing tendency to assume somewhat more of a constructive effort to meet conditions that are steadily pressing for solution. Unfortunately we still have to destructively oppose many legislative proposals, some of them year after year, and they have to be settled in the same way by legislative vote.

There are problems before the profession year after year which ought to be more actively opposed by the Department of Education. This Department sets up standards for medical licensure. Several thousands have met these standards and have been licensed to practice medicine. It would now seem that an obligation rests upon the Department of Education to defend its required standards of professional education and not leave them to be defended so largely by the profession of medicine.

Medicine has for about three years increasingly discussed its problems of relationships, the public unrest, and the real influence of social conditions on the problem of the distribution of health and sickness service. There is a tendency to develop a constructive medical program. We have not yet gone very far but there is a new interest and a growing willingness to think these things through.

That scientific medicine has advanced farther than its availability has advanced is beginning to be understood. Many physicians believe that medicine would profit economically if sound procedures could be devised so as to protect individuals from the hazard of sickness by distributing the costs. Objectionable features permitted by some countries must be guarded against. This could be thought out by medicine if aided by expert opinion, such as actuarial service. It would make medicine more available to certain classes and would provide for compensation of the physician for these same classes to which he now contributes his services.

If there is no challenge there can be no progress. This principle is an incentive to work out constructively professional problems. Just that which has been brought out so many times in the last year or two in current literature may be having a stimulating effect on the profession. These things may be arousing medicine to assume more definitely than it has done, leadership in public medical affairs.

The profession of medicine ought to determine definitely its public policy. People have become more health conscious. Disease prevention is the hope of the future and the public is ready to be taken into confidence. Notwithstanding expressed opinion occasionally that public health activities should not be advanced, there are many evidences over the State of great advance in places where the public and medicine are cooperating.

In the President's report this year an effort has been made to discuss features that have come under his observation and to draw some obvious lessons from them. Far greater, however, than the obvious lessons are the intangible influence of opinion, mental attitudes, and cooperation that will continue to flow from these efforts. Generally speaking there is an indication over the State of a spirit of cooperation with public interest. There is greater civic interest on the part of the public. While public health has always been the concern of nations there has never been a time when there was more dependence ready to be placed upon the profession of medicine or when greater expectation existed that medicine should lead in all health activities.

The medical profession is absolutely indispensable in all programs of health and sickness service. Most of the public realize this. A comparatively few do not realize it. Among these are some intelligent people. An illustration occurred recently. A Senator speaking for a cult bill said, "For one hundred dollars I had a kink rubbed out of my shoulder that I might have paid a physician five hundred dollars for without result." This intelligent gentleman persuaded himself that he is able to get better medical service from an untrained individual than he could get from well trained physicians.

The profession of medicine surely has the capacity to change by a plan of ethical publicity. Occasionally one hears the representatives of groups of people say that the medical profession is not interested in them except when an individual is sick. If public benefit is to come from existing medical science there is an obligation resting upon us, as a profession. Organized medicine should constructively present sound policies regarding at least the major problems which are generally accepted as commanding public interest today.

Primarily, "Medicine is an art, not a trade; a calling, not a business."

In all conferences and in all bodies deliberating upon the medical phase of public welfare, physicians should have representation enough and be active enough to present plans of sound medical relationships. Medicine would hardly dictate the whole relationship any more than law or government, through legislation, would undertake to enact any regulation at variance with public opinion. Medicine must formulate its policy and present its plan constructively if the position of medicine is to grow into the indispensable position

in all public medical affairs that every physician would like to see it occupy.

We owe the public our assistance in establishing a standard of what is adequate service and as to what the public should expect medicine to provide. The observations of the year show that the profession of several counties of the State is helping the public to inform itself on medical problems and medical services. Wherever this has occurred, it has profited both the public and the profession.

During the year the President has read rather extensively the history of medicine in other countries in the writings of Rappleye and others. The history of medical organization in Denmark and the remarkable present day results are interesting. Their one hundred thirty year old method of controlling venereal diseases, the maternity mortality rate in Denmark, the degree of its hospitalization, the general prosperity of all classes, the general use of sickness insurance, and the twenty to thirty thousand kroners yearly income of physicians (five to eight thousand dollars), are at least interesting reading. Each of the twenty-three counties has from one to three hospitals where the major part of medical and surgical work is done. Every health officer in Denmark holds office for life. They are pensionable. They are appointed by the government and subject to central regulation. Every health officer is a State officer and among his duties are treating the poor who are not insured and treatment for the prevention of disease.

This may be thinking too far ahead. Physicians in the present, however, will lose nothing by planning for the future.

LOOKING BACKWARD

This Journal Twenty-five Years Ago

Centennial of Orange County Society:—This Journal of May, 1906, contains the following note:—

"The centennial anniversary of the founding of this society will be celebrated in July. An appropriate feature of the commemoration of this event will be historic reviews of the lives of the notable physicians who have labored in this community. Dr. John H. Thompson will present the history of Dr. Benjamin Tusten, who introduced vaccination into Orange County, served as soldier in the Revolution, and who as colonel and surgeon fell at the battle of the Minisink. This memorable battle, or massacre, for such it proved, witnessed an act of splendid heroism in Colonel Tusten. The historian says that, while the battle was raging, and before the alternative of massacre or flight had culminated in the conflict, Dr. Tusten had gathered the wounded in a sheltered place behind a cliff of rocks when the privileged retreat commenced. There were seventeen disabled men under his care at the moment, to whom he was ministering; and while thus engaged they were all attacked by the savages, and with relentless cruelty every one perished under the tomahawk and scalping knife. Though the opportunity with the others who had fled was available on the part of Dr. Tusten, nevertheless he voluntarily remained at the post of service, performing with self-sacrificing fidelity the humane offices of the ever dutiful and faithful physician. He thus died at the early age of thirty-six, protecting the wounded whom the fortunes of war had placed within his care."

MEDICAL PROGRESS

The Endocrine Function of the Salivary Glands.—There are a number of definite facts, say M. and F. Cahane, that demonstrate beyond a doubt that the salivary glands possess an internal secretion. The first observations to suggest this hypothesis were in the field of the pathology of the parotid gland. Medical science has long been familiar with the frequency with which orchitis occurs with mumps. After an exhaustive research it is still impossible to conclude whether there is a direct relation between the parotid gland and testicle; it is only known that in these cases orchitis makes its appearance during or after the parotid congestion. On the other hand it is interesting to emphasize that we may see pancreatitis following mumps. In view of the well known fact that troubles of internal secretion of the pancreas form part of the clinical picture of pancreatitis, the authors call attention to a case they have recently observed in which a young man had hypertrophy of the parotid glands associated with diabetes mellitus. The hypertrophy had followed mumps, and 5 years later diabetes also appeared. This case suggests the desirability of studying the carbohydrate metabolism during mumps. The authors have shown experimentally in six dogs that 7 to 12 days after extirpation of the submaxillary glands there was an increase of blood sugar. During several months that these animals were under observation there were no signs of cachexia. Their own observations led the authors to conclude that the parotid gland behaves as an antagonist toward the pancreas, whereas the submaxillary gland is synergistic with the latter. Histologically the resemblance of the salivary glands to the pancreas has long been known, so that the name abdominal salivary gland has even been conferred upon the latter. This leads naturally to the supposition that the salivary glands have an endocrine function that accords with their normal histologic structure. The only one of these glands of which the product of secretion has been isolated is the submaxillary, the chemical character of which resembles that of insulin. Extirpation of the submaxillary glands causes hypoglycemia and increase of the glycogen of the liver. Specific troubles caused by their extirpation may disappear if grafts are carried out or injections of their extracts made. Although there are still obscure points in this connection which demand more research, the facts already acquired entitle the salivary glands to a place among the endocrine glands, and accord them an important rôle in the organism.—*Revue française d'endocrinologie,* October, 1930.

Salicylic Acid Fruit in the Prevention and Treatment of Rheumatism in Children.—Starting with the supposition that rheumatism in children is secondary to a metabolic or vitamin derangement, J. Epstein made a clinical, dietetic, and therapeutic study of 33 normal children and 98 rheumatic children, extending over five years. A survey of the diet taken by the rheumatic children showed in a general way that the children received an abundance of food of fair variety and quality, but with a decided deficiency of fresh vegetables and fruits. Salicylic, benzoic, citric, and tartaric acids are antirheumatic. They are found in various proportions in a free state, or in a form of a precursor, in strawberries, huckleberries, raspberries, plums, cherries, lemons, grapefruit, and melons. The organic acids in these fruits inhibit intestinal putrefaction, reduce toxemia and the indicanuria so frequently found in rheumatic disorders (in over one-half of the 98 cases). The alkaline ash, which is formed in the process of metabolism of the organic acid salts, aids in neutralizing the acid products of the tissues and of bacteria. It also reduces the acidity of the urine, saliva, and sweat, so common in rheumatism. None of 20 normal children who were given an abundance of salicylic acid fruit developed any signs or symptoms of rheumatism. In the 98 rheumatic children foci of infection were removed and every possible means was taken to improve their general health. Of this group 83 children received salicylated fruits with uniformly favorable results, while those who did not take these fruits did not progress so satisfactorily. Failure in the treatment of rheumatism in children is mostly due to the fact that they are treated sporadically with salicylates in large doses, which injure the tissues of the body and diminish resistance, while the salicylated fruits can be given over a long period of time, with uniformly beneficial results. Beginning with the second year of life juices of these fruits should be added to the diet to prevent rheumatism. The general plan for the management of rheumatic children includes conservation of body strength, removal of infected foci, a dry, warm climate, a nutritious diet, and salicylated fruits. The children in the cardiac group who, in addition to the usual hygienic care, received salicylated fruits showed better therapeutic results than the controls.—*Archives of Pediatrics,* February, 1931, xlviii, 2.

Protective Therapy of the Air Passages.—Discussing the very special laws governing the

air passages by virtue of their ciliary epithelium, Ludwig Bauer points out that it is only possible for the deeper of these passages to perform their function through the span of a lifetime if there is proper coordination between the various parts of the respiratory tract, so that all its defensive mechanisms can interact with mutual precision. Every cell of this epithelium is provided with a vibratory cilium, sensitive to every change of external condition, such as lack of moisture or warmth. Even a slight lowering of the temperature causes this ciliary motion to cease. In addition the large number of mucous glands pour a constant stream of secretion over the surface of the mucous membranes, and a constant stream of leucocytes is always being forced through to the surface epithelium from the underlying tissues. The extreme sensitivity of these membranes points the way to a logical and effective therapy whenever their normal relations are disturbed. Sparing them from irritation is the first law for every form of affection of the air passages. The good results of the silence treatment have already pointed in this direction, showing to what an extent the withholding of irritation enables the diseased mucosa to recover through its own powers. In this class of treatment belongs the introduction of a properly adapted breathing air. The inhalation of salty air in a room impregnated with brine will possess all the prerequisites for avoiding every irritation of the mucous membranes. Not only are the proper warmth and moisture secured, but because of the brine there is provided an isotonia of the particles of moisture that enter the breathing passages. Should there by chance be a hypertonia present, it is advantageous rather than otherwise, as it merely increases the activity of the mucous glands. But for tender, sensitive cells, only the physiologic solution presents the medium which will preserve without injury their protoplasmic characteristics. Hence in all affections of the air passages, the best results are produced by the breathing as quietly as possible of salt air, combined with silence therapy and short, humming expirations. Only in this way will the mucous membrane be in a position to mobilize a maximum of resistance and to remanufacture the qualities indispensable for permanent normal functioning.—*Münchener medizinische Wochenschrift,* February 6, 1931.

Treatment of Spasmodic Croup Based upon Clinical Findings in the Colon.—Lawrence P. Crawford believes that spasmodic croup is a result of absorption of colonic toxins from the small intestine. He has found acetone in the urine of 100 per cent of patients with spasmodic croup and there have been areas of dullness and tympany on percussion over the colon in all patients with this affection. If a child is permitted to go to sleep with impacted feces and pocketed gas in the colon, it seems reasonable that relaxation of the muscles produced by sleep would allow either exit of the gas via the rectum or would force colonic toxins through the ileocecal valve into the small intestine. This causes spasm of the larynx and awakens the child. In a few cases of spasmodic croup in adults the author has found that the urine showed a continuous acetone reaction, and *x*-ray examination has revealed atonic and hypertonic areas of the colon musculature, and an incompetent ileocecal valve. Treatment directed to the colon musculature resulted in restoration of a uniform tone in the colon, acetonuria disappeared, and the patient had no further attacks of spasmodic croup. In over 100 cases of spasmodic croup treatment of the colonic condition has been uniformly successful. Three small soapy water enemas will usually remove the impacted feces from the colon. More than one-half pint should not be given to a child or one pint to an adult at one time. The elevation of the fountain syringe should not exceed twelve inches. As soon as the first enema is expelled, the second is given, and when this is evacuated the third is administered. Other medication is unnecessary. Toxic manifestations, other than spasmodic croup, which are probably frequently due to the absorption of colonic toxins from the small intestine are nosebleed, uterine bleeding, eczema, bronchial asthma, and an arthritis that is not due to ordinary focal infection. It is therefore as important to know the status quo of the ileocecal valve as it is to know the condition of the tonsils, teeth, or sinuses. It is as important to know how to diagnose and treat an incompetent ileocecal valve as it is to know how to diagnose and treat an infected sinus or its complications.—*New England Journal of Medicine,* February 26, 1931, cciv, 9.

Arteriovenous Anastomosis in Raynaud's Disease.—On the basis of a case in which he operated Trincas Mario discusses the value of arteriovenous anastomosis in Raynaud's disease. The procedure consists in utilizing the veins to send the blood to the disease tissues which are suffering with gangrene from under-nourishment, and in letting it flow back through the arteries. Despite the statements of certain authors that the valves of the veins offer an insurmountable obstacle to the centrifugal current, clinical results in many cases have shown immediate benefit. In fact, in the case under discussion, where the anastomosis was femoro-femoral, the first phenomenon observed was the mitigation of the pain for hours at a time, such as had not occurred in many years. The cyanosis disappeared from the foot except the great toe, the temperature of the foot increased, but without surpassing that

of the other thigh (previously amputated at lower third) However, the improvement was ephemeral, all the symptoms returning after 25-30 days with even greater gravity When arterial blood is made to flow in a vein if it does not encounter obstacles in the form of the valves it reaches the last branchings of the veins with ease But since the pressure of the arterial blood is gradually reduced as it approaches the capillaries, and especially because the pressure in the arteries is positive, the blood stream is arrested At the level of the capillaries there is established a confluence of two hydraulic streams animated by the same propulsive force, with the difference that the normal one is directly sustained by the systolic pulse, while the inverted one is not aided at all in its reflux course by the diastolic aspiration of the heart, thus it becomes blocked by the normal arterial current The result is a stasis of the blood, manifested by the usual characteristics of hyperemia which is easily mistaken for improvement But this state of affairs cannot last long, for the increase of intravenous pressure will oblige the mass to become distributed by centripetal tracks, thus favoring the formation of collateral routes The collateral stream will then annul the passive hyperemia and will gradually reestablish the preoperative conditions In this case the disease resumed its inexorable course after a brief respite, and as in the other limb amputation was necessary —*Riforma medica* February 9, 1931

Sympathectomy for Megacolon —D E Robertson reports three cases of megacolon, or Hirschsprung's disease, successfully treated by interference with the lumbar sympathetic trunk, and in a footnote he states that since writing this paper he has had three additional cases of megacolon in which sympathectomy resulted in a cure He recalls that Royle, who devised an operation for the relief of spasticity of the lower extremities in cases of upper neurone lesions observed in his first case that the patient was cured of constipation, and subsequently he reported 13 additional cases thus cured He believes that Gaskell's explanation of the innervation of the bowel is correct, viz , that the large bowel is supplied by both the sympathetic nervous system and the parasympathetic pelvic nerve The pelvic nerve is concerned with the movements of the bowel, while the sympathetic nerves are inhibitors of bowel action and also control the sphincters of the bowel In the cases here reported Robertson employed the approach to the lumbar sympathetic advocated by Royle An incision is made which extends from the twelfth rib down to the posterior superior spine and around the crest of the ilium to near the anterior superior spine The trigonum lumbale is located and pierced Through this opening the finger is able to identify the lateral edge of the erector spinae muscles, and the incision is carried upward through the fascia and across the lower fibers of the latissimus dorsi In the lower part of the wound the attachment of the external oblique is divided from the ilium The fingers then separate the fascial planes, care being taken to keep close to the peritoneum The fingers pass over the psoas muscle to feel the bodies of the lumbar vertebrae, on which may be felt a small cord, covered with fascia Through an opening in this fascia the lumbar sympathetic is raised on hooks and freed from fascia to the level of the first lumbar vertebra and as low as the fourth lumbar enlargement Royle divided the white rami communicantes, and the branches which ran mesially from the second, third, and fourth enlargement In two of his cases Robertson removed the entire lumbar cord from the level of the second enlargement Associated with the relief of the bowel condition in these cases, there was a decided improvement in the temperature of the leg denoting an increased blood supply —*Canadian Medical Association Journal*, March, 1931, xxiv, 3

The Processes in the Circulation During Shock —According to G Ganter and A Schutzenmayer, the chief finding in the circulation in shock in the human being is the fall of blood pressure If this fall were due, as some authors teach, to a contracting mechanism in the lungs or liver, the administration of relaxing drugs, such as nitrites, would tend to overcome or at least improve the threatening changes of the circulation But this is not the case, as the authors were able to show by animal experimentation If, however, the drop of blood pressure in shock is the result, as they assume, of a general peripheral loss of tonus of the vessels, then a remedy which produces a tonus reaction opposite to the effect of a shock poison would be able to compensate the drop Such a drug exists in adrenalin or ephedrin, which has the effect of increasing the tonus of all arteries of the systemic circulation which are innervated by the sympathetic system As a matter of fact this is precisely what occurs in animal experiments; the marked drop in blood pressure in shock is compensated by ephedrin injection Conversely, the contraction of vessels, that is, the increase of blood pressure by means of adrenalin, is suppressed by corresponding amounts of histamine The authors were led to conclude that the lowering of blood pressure in anaphylactic shock from histamine and peptone is due neither to a pulmonary nor to an hepatic contraction, but is the result of a general dilatation of the arteries of the greater circulation Since dilatation of the body arteries occurs in just the same way after

exclusion of the vegetative system by gynergen and atropine, the conclusion seems warranted that the shock poisons act directly upon the vessel musculature without intermediary action of the nervous system. After these experiments, the theory of a pulmonary or hepatic contraction seems no longer tenable. In view of the demonstration that there is a general dilatation of the arteries of the greater circulation as a fundamental effect of shock poisons, and of the fact that this dilatation is overcome and the blood pressure raised by substances acting like adrenalin (ephetonin, ephedrin), the treatment of shock with ephedrin and similar drugs should be the method of choice.—*Klinische Wochenscrift,* March 14, 1931.

The Interpretation of Pain in Infancy.—Wilfred Sheldon, writing in the *British Medical Journal,* March 28, 1931, i, 3664, calls attention to the help that may be gained in the interpretation of pain in infancy by noting the character of the cry, whether it is intermittent or continuous, piteous, wailing, or a short, sharp scream. Whether it occurs at a particular time of the day or night and its relation to the time of feeding should be noted. The baby's posture during bouts of pain should be observed, and the clinical examination may reveal areas of tenderness, indicating the location of the pain. The commonest cause of gastrointestinal pain is some error in diet. If the pain arises in the stomach, it will usually be manifested within a few minutes after feeding; if the cause is further down in the intestinal tract, pain is likely to occur from half an hour to an hour after taking food. If the fault is unchecked, chronic indigestion will follow and pain will become continuous. Excessive peristalsis leads to colicky contractions with intermittent pain. The baby cries at intervals of a few minutes, draws his knees up to the abdomen, presses his elbows to his sides and maintains this attitude for two or three minutes. When a baby sucks for a few minutes and then cries and refuses to continue sucking, the breast may be empty, the hole in the rubber nipple may be too small, or there may be a painful condition in the infant's mouth, such as catarrhal stomatitis, thrush, or small shallow ulcers. Screaming while having a bowel movement is usually the result of constipation. Occasionally, especially in females, there may be anal spasm, which may be detected by digital examination. Another cause of painful defecation is anal fissure. In a previously healthy baby, the sudden onset of screaming and intestinal colic, with attacks recurring every few minutes, is suggestive of intussusception. Volvulus, strangulation by peritoneal bands and appendicitis are marked by sudden vomiting, constipation, abdominal distention, and collapse. Screaming with irritability, fever, and often mild diarrhea should lead to a careful examination of the ears, a procedure too frequently omitted. Attacks of sharp screaming may occur in the first stages of basic meningitis or of tuberculosis. Pain during micturition may be due to highly acid urine coming in contact with excoriated buttocks, to the passage of oxylate crystals, or in boys to an ulcer at the urinary meatus. Severe attacks of pain may occur in pyelitis. Pain in the limbs should suggest syphilitic epiphysitis, scurvy, osteomyelitis, or acute poliomyelitis.

Autohemotherapy in Mental Diseases.—Eustachio Zara says that the frequency with which states of mental confusion are accompanied by morbid conditions of the intestinal tract induced him to make a trial of autohemotherapy in these cases. While it cannot be said that all the syndromes of mental confusion are caused by intestinal changes, or by other known infections, it is certain that the so-called idiopathic mental confusion is becoming more rare as improved clinical and biological methods of examination reveal more and more the presence of a toxinfectious state in such patients. Zara accordingly subjected 10 cases of acute psychosis to autohemotherapy, nine of these being cases of mental confusion and one a case of schizophrenia. In four of the nine cases complete cure resulted, and there was distinct improvement in the other five. It is possible that some of these might have been wholly cured if the insistence of relatives had not caused them to leave the hospital prematurely. The case of schizophrenia was also improved in the sense that symptoms of grave agitation disappeared temporarily, so that the injections may at least be regarded as a useful sedative treatment in such conditions. The technique is simplicity itself, consisting of the reinjection into the gluteal region of whole blood taken from the elbow with a common syringe. In every case an initial injection of 2 c.c. was made to test the tolerance; this was then slowly increased to 15 cc. with careful observation of the general condition and especially that of the kidneys. No injurious effects were ever observed in these organs, nor was there any appreciable or constant modification of the differential blood count, or of the blood pressure, nor any other symptom indicative of shock or intolerance. While therapeutic effects did not appear as promptly as usually occurs in organic diseases, there was first observed an improvement in the general condition and in the state of agitation; then gradually the state of confusion wore off, complete psychic reintegration returning in some cases. The fact that autohemotherapy has been found particularly efficacious in infectious diseases offers indirect confirmation of the infectious origin of acute confusional syndromes. The innocuousness and simplicity of technique of autohemotherapy render it a useful and rational therapeutic aid in these conditions.—*Riforma medica,* March 2, 1931.

LEGAL

PRIVILEGE AGAINST SELF-INCRIMINATION—WAIVER

By LORENZ J. BROSNAN, ESQ.
Counsel, Medical Society of the State of New York

One of the fundamental principles of our legal system is that a man may not be compelled to give evidence against himself in a criminal prosecution. The Bill of Rights in the Constitution of this State (Article I, Section 6) provides in part as follows: "No person shall * * * be compelled in any criminal case to be a witness against himself." This provision is the counterpart of a like provision found in the Fifth Amendment to the United States Constitution. The privilege thus secured is purely personal to the individual, and may be waived expressly or by operation of law.

In considering this topic, it is necessary to consider the legal situation, first, where the individual is not a defendant in a criminal case but is simply a witness and, secondly, as it concerns the defendant in a criminal case.

Suppose, for example, a man who is not himself a defendant but is called as a witness in the case, answers certain questions and then refuses to answer certain others on the ground that they may tend to incriminate him. The question arises as to whether by answering certain questions he has waived the constitutional privilege as to all other questions. A learned Judge once stated the rule to be as follows:

"Where he has not actually admitted criminating facts, the witness may unquestionably stop short at any point and determine that he will go no further in that direction. * * * But the rule which allows a witness to refuse answering questions not pointing directly to guilt, rests solely on the doctrine that, as in most cases the crimination would be made out by a series of circumstances, any one of them may have such a tendency to aid in reaching the result, that an answer concerning it may supply means of conviction, by aiding the other proofs which it indicates or supplements, on behalf of the prosecution. The right to decline answering as to these minor facts is merely accessory to the right to decline answering to the entire criminating charge, and can be of no manner of use when that is once admitted, and must be regarded as waived when the objection to answering to the complete offense is waived. The law does not endeavor to preserve any vain privileges and such a privilege as would allow a witness to answer a principal criminating question and refuse to answer as to its incidents, would be worse than vain; for while it could not help the witness, it must inevitably injure the party, who is thus deprived of the power of cross-examination to test the credibility of a person who may, by avoiding it, indulge his vindictiveness or corrupt passions with impunity. * * * And the further consideration is also recognized that a witness has no right, under pretense of a claim of privilege, to prejudice a party by a one-sided or garbled narrative."

The case of an accused in a criminal trial differs, however. He has the privilege of refusing to take the stand and may be protected from answering even a single question. If he voluntarily takes the stand to testify as to any facts, he waives his privilege as to all relevant facts. He cannot be compelled to testify in the case at all, as can the ordinary witness. The privilege of the defendant is against giving any testimony, while that of the ordinary witness is to exercise his privilege later when some criminating fact is demanded. The following summary of the rule as stated in a very recent decision in this State is pertinent:

"The constitutional provision that a person shall not be compelled to be a witness against himself is as broad as the mischief against which it seeks to guard. The meaning of the constitutional provision is not merely that a person shall not be compelled to be a witness against himself in a criminal prosecution against himself, but its object is to insure that a person shall not be compelled, when acting as a witness in any investigation, to give testimony which may tend to show that he himself has committed a crime."

Certain statutes modify the general rules respecting the privilege to refuse to testify, but they do not interfere with the rights bestowed by constitutional provision for the reason that these statutes also provide for an immunity from prosecution based on testimony brought out on such compulsory examination. Examples of statutes of this sort are found in the Sections of our Penal Law relating to testimony as to bribery, corruption, gambling and conspiracy. A typical provision of this sort is Section 584, relating to the privileges of witnesses in conspiracy prosecutions, which is as follows:

"[W]itnesses' privileges: No person shall be excused from attending and testifying, or producing any books, papers or other documents before any court, magistrate, or referee, upon any investigation, proceeding or trial, for a violation of any of

the provisions of this article, upon the ground or for the reason that the testimony or evidence, documentary or otherwise, required of him may tend to convict him of a crime or to subject him to a penalty or for forfeiture; but no person shall be prosecuted or subjected to any penalty or forfeiture for or on account of any transaction, matter or thing concerning which he may so testify or produce evidence documentary or otherwise, and no testimony so given or produced shall be received against him upon any criminal investigation, proceeding or trial."

The privilege of immunity, likewise, is a privilege which may be waived, and the manner of waiver is set forth in Section 2446 of the Penal Code which provides:

"*Waiver of immunity.* If it be provided by this chapter or any other general or special law that a person shall not be prosecuted or subjected to any penalty or forfeiture for or on account of any transaction, matter or thing concerning which he may testify or produce evidence, documentary or otherwise, or that testimony so given or produced shall not be received against him upon any criminal investigation, prosecution, or proceeding, such person may execute, acknowledge and file in the office of the county clerk a statement expressly waiving such immunity or privilege in respect of any transaction, matter or thing specified in such statement and thereupon the testimony of such person or such evidence in relation to such transaction, matter or thing may be received or produced before any judge or justice, court, tribunal, grand jury or otherwise and if so received or produced such person shall not be entitled to any immunity or privilege on account of any testimony he may so give or evidence so produced."

Recent events have focused public attention upon the clause above quoted. Frequently in certain investigations that have been initiated in the past year or so, public officers have refused to sign a waiver of immunity in connection with testimony sought to be elicited from them by the investigating authorities.

At the last session of the Legislature, a bill was introduced to meet this situation. The essential part of the bill in question read as follows:

"The acceptance hereafter by any person of a public office or position shall, in any and every investigation, hearing, proceeding and trial, whether civil or criminal, constitute a waiver of his constitutional privilege against self-incrimination in relation to any act or omission as such public officer and in relation to any act or omission effecting his appointment, nomination, election or promotion to or in such public office or position. The term public officer as used in this section shall be deemed to include a deputy, clerk, assistant or other subordinate of a public officer, or any person appointed or employed by or in the office of a public officer."

While the bill failed of passage, it doubtless will be reintroduced in the next session of the Legislature. Its constitutionality has already been assailed, but the proponents of the bill contend that there is no infringement or waiver of constitutional rights for the bill does not purport to be retroactive, and that it does not infringe upon the constitutional rights of any individual since it is attached as a condition to the voluntary acceptance of a public office. Of course, the question of constitutionality of this bill will never be tested by the courts unless the bill should become a law.

ALLEGED NEGLIGENCE IN NEEDLE BREAKING

A young man employed in an automobile repair shop while working about a car received an injury above the left eye, caused by a piece of spring steel snapping back and striking him. He was sent to the office of the defendant doctor for treatment, and the defendant not being in, another doctor associated with him cleaned the wound and dressed it. The next day the patient returned and the defendant applied a clean dressing and gave him a hypodermic injection of tetanus antitoxin in the arm. While the needle was being inserted the patient jerked his arm with the result that the needle broke. The doctor tried to remove it, but failed, and when he found it could not be readily removed he gave the patient a note to take to a nearby *x*-ray specialist with instructions to have an *x*-ray taken of the arm, which was done and the plate disclosed the presence of the needle.

At this point in the matter, the insurance carrier of the plaintiff's employer requested that the case be turned over to another doctor designated by them. This was done and the said doctor removed the needle after performing two operations for that purpose.

An action was started by the patient charging the defendant with malpractice in inflicting an injury upon his arm. In addition to a denial of any negligence, the fact was pleaded as a defense on behalf of the doctor, that the plaintiff had received compensation for his injuries under the Workmen's Compensation Act. The plaintiff failed to press the matter for trial and after a considerable period of time had elapsed, a motion was made on the defendant's behalf to dismiss the case for the plaintiff's failure to prosecute the same. This motion was granted, disposing of the suit in favor of the doctor.

NEWS NOTES

LEGISLATION

BULLETIN NO. 12—APRIL 13, 1931

The legislature adjourned sine die Friday at 8:30 P. M. Nothing of interest to us happened after the bulletin was issued that day.

The amended Wicks-Hutchinson bill carrying the provision for the three tuberculosis hospitals and the other Wicks-Hutchinson bill authorizing the transfer of Ray Brook and Haverstraw Hospitals to the Department of Health, passed both houses and now rests with the Governor

In the Senate the following twelve Senators voted for the chiropractic bill:

Mr. Burchill
Mr. Campbell
Mr. Fearon
Mr. Feld
Mr. Frost
Mr. Hickey
Mr. Kirkland
Mr. McCall
Mr. McNaboe
Mr. O'Brien, H. L.
Mr. Westall
Mr. Williams

There follows a statement of the vote by which the osteopaths failed to take their bill from the table in the Assembly:

Ayes—75

Mr. Abbott
Mr. Alterman
Mr. Austin
Mr. Bernhardt
Mr. Breen
Mr. Burke
Mr. Byrnes
Mr. Cahill
Mr. Catchpole
Mr. Condon
Mr. Cuvillier
Mr. Davis
Mr. Dineen
Mr. Downs
Mr. Dunmore
Mr. Eberhard
Mr. Falk
Mr. Gamble
Mr. Garnjost
Mr. Goodrich, H.E.
Mr. Goodrich, M.E.
Mrs. Graves
Mr. Hanley
Mr. Hartshorn
Mr. Hathaway
Mr. Hayes
Mr. Hewitt
Mr. Higgins
Mr. Holley
Mr. Horn
Mr. Jenks
Mr. Kahan
Mr. Kantowski
Mr. Killgrew
Mr. Latour
Mr. Lamont
Mr. Lewis
Mr. Lynde
Mr. Mandelbaum
Mr. Marks
Mr. McKay
Mr. Merriam
Mr. Mittler
Mr. Moffat
Mr. Paris
Mr. Pease
Mr. Piper
Mr. Porter, F.L.
Mr. Porter, H.E.V.
Mr. Potter
Mr. Rice
Mr. Richtmyer
Mr. Riley
Mr. Sargent
Mr. Searle
Mr. Sheldon
Mr. Sheldrick
Mr. Smith, F.M.
Mr. Smith, R.B
Mr. Steingut
Mr. Stephens, D.M.
Mr. Stephens, J.E.
Mr. Stevenson
Mr. Stone
Mr. Story
Mr. Sullivan
Mr. Swartz
Mr. Tellier
Mr. Theodore
Mr. Thistlethwaite
Mr. Vaughan
Mr. Wallace
Mr. Wemple
Mr. Whitcomb
Mr. Whitney

Nays—58

Mr. Allen
Mr. Ambro
Mr. Bartholomew
Mr. Bentley
Mr. Breitenbach
Mr. Close
Mr. Cohen
Mr. Cooney
Mr. Devany
Mr. Dickey
Mr. Dooling
Mr. Esmond
Mr. Fake
Mr. Farrell
Mr. Fayerweather
Mr. FitzGerald
Mr. Gillen
Mr. Gimbrone
Mr. Hawkins
Mr. Hefferman
Mr. Hyman
Mr. Ives
Mr. Kelly
Mr. Kirnan
Mr. Livingston
Mr. Marcy
Mr. McCreery
Mr. McNamara
Mr. Messer
Mr. Miller, C.P.
Mr. Miller, F.A.
Mr. Miller, F.G.
Mr. Moran
Mr. Mulligan
Mr. Munsil
Mr. Nathanson
Mr. Nutt
Mr. O'Reilly
Mr. O'Rourke
Mr. Palmer
Mr. Pollard
Mr. Post
Mr. Pratt
Mr. Robinson
Mr. Roulier
Mr. Samberg
Mr. Saunders
Mr. Schanzer
Mr. Schwartz
Mr. Schwartzwald
Mr. Smith, W.F.
Mr. Streit
Mr. Taylor
Mr. Thompson
Mr. Turner
Mr. Whittaker
Mr. Winters
Mr. Zimmerman

It should be said, in explanation of this vote, that many legislators are good sportsmen and believe that every bill should have a fair chance, so when the first vote on the osteopathic bill was taken, you will recall we reported Mr. Cuvillier voted to have it recommitted but his motion was lost by a substantial majority. When the bill itself was voted upon, however, it was defeated. The same spirit prompted quite a number of Assemblymen to vote in favor of taking the bill off the table at this time. Had that motion prevailed without doubt those who had voted against the bill before would again have registered their vote in the same manner; so that it must not be concluded that all who are recorded here as having voted to take the bill from the table would have voted for its passage if they had had the opportunity.

HARRY ARANOW,
WALTER A. CALIHAN,
JOHN J. RAINEY,
Committee on Legislation.

PRIZE ESSAYS

Attention of the members is called to the Merritt H. Cash and Lucien Howe prizes of One Hundred ($100) Dollars each which will be open for competition at the coming Annual Meeting of the Medical Society of the State of New York for the best original contribution to the knowledge of surgery, preferably ophthalmology, and for the best original essay on a medical or surgical subject.

Competitors for these prizes offered through the State Medical Society must send in their essays at once to Dr. Thomas H. Curtin, Chairman of Committee on Prize Essays, 391 East 149th Street, New York City.

SECOND DISTRICT BRANCH

The twenty-fourth annual meeting of the Second District Branch was held at the Garden City Hotel on the evening of April 14th, with the President, Dr. C. H. Goodrich of Brooklyn, presiding. The meeting was preceded by a dinner of the members and their guests, who included Dr. W. H. Ross, President of the State Society; Dr. D. S. Dougherty, Secretary; Dr. John A. Card, Speaker of the House of Delegates and Chairman of the Insurance Committee; Dr. J. E. Sadlier, the Chairman of the Public Relations Committee; Dr. Charles Gordon Heyd, Treasurer; Dr. O. S. Wightman, Editor-in-Chief; and the Executive Officer, Dr. J. S. Lawrence.

Dr. Louis A. Van Kleeck, Nassau, was elected President; Dr. Thomas C. Chalmers, Queens, First Vice-President; Dr. William J. Tiffany, Suffolk, Second Vice-President; Dr. Alec N. Thomson, Kings, Secretary and Treasurer.

Dr. Chalmers introduced a resolution regarding the invasion of the rights of the State of New York to regulate the practice of medicine in its own borders through the Volstead Act, which deprives the physician of his right to the free exercise of his judgment. This resolution was passed unanimously.

Dr. Van Kleeck, the newly elected President, was introduced to those present and in a few well-chosen words stated that he hoped to be able to measure up to the remarks made by Dr. Ross in his discussion of the problems of the District Branch, its purpose and its opportunities.

The members then heard from Dr. Card with regard to insurance, and Dr. Wightman regarding the State Journal, and then listened to a brief scientific address presenting some new facts in therapeutic applications, based upon our increased knowledge in physiologic chemistry relative to the use of glucose in relation to liver disease.

Dr. Charles Gordon Heyd, President of the New York County Society, delivered an illuminating address upon the economic background of the practice of medicine.

The Presidents of the four county medical societies of the Districts, Kings, Queens, Nassau, and Suffolk, presented the following reports of their Societies' activities during the year:

THE MEDICAL SOCIETY OF THE COUNTY OF QUEENS

Our Society spent the first year enjoying the benefits of our new home, which was the seat of most of our activities in respect to meetings of the Comitia Minora, the stated meetings, and most all of the Committee work. We felt strange in such commodious appointments and even today, are not yet accustomed or acclimated to the intricacies of operation.

We enjoyed being the host on April 1st, 1930, to the 1930 District Branch Session and appreciated the attendance of those men coming out to pay their respects.

In the past year we held seven stated meetings at our building, including the annual meeting and two other outing meetings at golf clubs. In June we held a combined meeting with the Medical Association of the Greater City of New York, at the Clearview Golf Club, Bayside, and one combined with the Queensboro T.B. & Health Assn., at the Oakland Golf Club in September. Our attendance averaged 33% of our membership, which is now about 546, having increased about 50 since last year.

Our Comitia Minora met about eight times during the year and our Board of Trustees as frequently. We publish a printed monthly bulletin of twenty-four pages for announcements to the members. The problem of financing and operating our $250,000 building project occupied much of the time of the Board of Trustees and the Comitia Minora. It has been a real live problem for our busy doctors to face; this coming at a time, too, when the world faces an economic crisis is lamentable. We fell behind in the collections of loan pledges and were forced to raise the dues of the members $10 more per year. We are thankful so far, not to have been forced to raise an outside mortgage but were able to maintain a good credit by borrowing substantially from our bank.

Our meetings were usually varied and of general medical science character, but one meeting on juvenile delinquency was opened to the legal profession, the public and the membership. The Society held an exhibit of its scope of work at the recent Queensboro Chamber of Commerce Exposition. Our Post-Graduate Education Committee offered a number of Friday afternoon talks to the members on many topics and provided a series of courses in surgery, obstetrics, medical diagnosis, pediatrics and orthopedic surgery. The committee was supported actively and financially by the Queensboro T.B. and Health Assn. Last month it collaborated with the Committee to sponsor a largely attended special meeting addressed by Dr. Geschikter, assistant to Dr. J. Bloodgood of Baltimore, on the subject of cancer control.

The Queensboro T.B. and Health Assn. has again continued this year its liberal support of the other Graduate Medical Education work of

the Society and has provided the important tuberculosis and public health periodicals published throughout the world for our library. The Association also made the initial grants for proper facilities for the work of our Public Health and Public Relations Committee. During the past year it again gave its wholehearted cooperation to these committees in the promotion of the physical examination of entering school children by private physicians throughout the borough, with the result that Queens leads all the boroughs of New York City with over 54% of the 12,000 such children presenting certificates from private physicians. It has been estimated that these examinations with the corrective work that followed, brought the physicians of the borough a good income, not to mention the vast improvement in the future health progress of these children.

The Queensboro T.B. and Health Assn. also contributed $876.40 in 1930 toward securing books for our library, and also gave $150 toward a joint meeting with the Medical Society of the County of Kings and the 2nd District Branch Dental Society, which meeting was held in Brooklyn on March 10, 1930.

Our Public Health and Relations Committee formally organized and intrenched itself in a special committee room in the building and has conducted hard work along the lines of public health survey, annual health examination, examination of pre-school children, diphtheria immunization work, regulating the practice of physiotherapy, care of the T.B. patient, private hospital control, maternal and infant mortality, cancer control, and control of blood donors. The Queens County Cancer Committee, affiliated with the American Society for the Control of Cancer, now maintains an office and paid secretary in our building for the prosecution of cancer work.

Our library has not as yet been functioning, partly due to delayed equipment and furnishings and partly to lack of available funds. Our Society has requested the cooperation of the Queensboro Public Library by offering to it our library facilities, provided the City would operate the same at its expense. This question is now under consideration by the Board of Estimate and Apportionment. Our library contains at least 10,000 volumes and our magazine room has a number of current journals; but only the latter are in use by the members, the books not yet having been catalogued, lacking a librarian.

Our Legislative Committee has worked and secured passage of a bill by the New York State Legislature, both Assembly and Senate, providing a tax exemption of $150,000 for Queens, the same as enjoyed by New York and Kings Counties. This bill is now before the Governor awaiting signature.

The Society loaned and advanced the sum of $2,000 to an interlocked corporation, "The Queens Medical Society Business Bureau, Inc.," organized to do business for the Society and the members. Its principal work has been the collection of accounts of physicians, and a nurse's registry. Commissions for collections have been earned, but so far has not been profitable enough to declare dividends, but with the personal guidance of a new energetic manager we have prospects of dividends this coming year.

Other varieties of business are under consideration. One social event, a public Bridge benefit under the auspices of the Bureau was a success, netting the sum of $800, thanks to the help of the ladies of the Society.

The Society feels that it has been unusually alive to its function in the medical world in Queens and expects to enlarge its scope of work, particularly when the burden of the budget has eased up sufficiently to permit its officers to think along constructive lines rather than its financial obligations.

Respectfully submitted,
ALBERT L. VOLTZ, M.D.,
President, Medical Society, County of Queens.

THE MEDICAL SOCIETY OF THE COUNTY OF KINGS

For a number of years my predecessors in the Presidency of the Medical Society, County of Kings, have, in one phraseology or another, reported nothing markedly new—but that the year has shown progress.

We have continued to foster our relationships with the community and in this regard our activities, while about the same in principle, are becoming more and more complex in detail.

We have carried on as in the past our work in graduate education through our *Bulletin*, through our scientific papers at our stated meetings, through our graduate education courses, through our twenty Friday Afternoon Practical Clinical Lectures and through the maintenance of our Library.

Perhaps the outstanding feature of the year with regard to community relations has been the formation of a Five-County Society Conference Committee which hopes that 1931 will show real progress in the coördinating of public relations that apply to all the County Societies in the Greater City.

We in Kings and Queens have many problems that are similar. In these problems we must combine our activities more with the other three

Counties of the Greater City than with the other two Counties of the Second District Branch.

Our work in connection with the health examination, with the diphtheria program, with the examination of children entering school for the first time, with the health promotion work in Continuation Schools, with the visiting nurse organization and similar activities dealing with city-wide official and unofficial organizations requires greater and ever greater work by the coordinated Five-County Societies composing the City of New York.

Perhaps the one item of activity most outstanding has been the marked interest on the part of the profession in the activities of our Committee on Medical Economics. This has resulted in the holding, since the first of the year, of four open meetings of this Committee. These meetings have been well attended, have discussed many items and have been truly valuable in guiding the Committee in its work.

In addition to medical economics and in part a feature of the general problem is the increasing demand upon the County Society for general information. Nearly two thousand inquiries are received annually by Kings County regarding physicians, various medical procedures, charlatanism, institutions, and a miscellaneous group of inquiries from physicians and laymen.

This is a valuable service which it would seem that the County Societies must continue to provide.

W. D. LUDLUM, *President.*

THE SUFFOLK COUNTY MEDICAL SOCIETY

While the objectives of the Suffolk County Medical Society are similar to those of the other Societies of this 2nd District Branch of the State Medical Society, their methods of accomplishment must of necessity differ because of the geographical location of the Society and because of the extensive rural districts separating its various urban centers of population. The county is 75 miles long and 20 miles wide. The by-laws, for these reasons, provide for only two meetings a year, one in October and one in April, and it is therefore impossible to conduct the educational post-graduate lectures and the intensive public health programs in the meetings as is done by the other Societies of this district branch.

Under these circumstances it is felt that our two meetings should and do best serve our members and our county by formulating the policies and programs to be carried out by committees and then hearing and discussing the reports of these committees in our morning business sessions. Our meetings are always dinner meetings which afford opportunities for social intercourse and the informal discussion of various policies and programs for county cooperative medical work. The afternoon sessions are devoted to scientific programs which usually include visiting speakers on subjects of importance to our common county society interests.

The Comitia Minora has held monthly meetings throughout the winter and has invited the members of the standing committees of the Society to attend. In this way the Society functions to progress and integrate its policies and programs of Public Health, Education, Public Relations, Child Welfare, Legislation, and Medical Economics in cooperation with the State Society programs.

The monthly News Letter has been of the greatest value in communicating the activities of the Society, of the Comitia Minora and of the various committees to all of the members of the Society and to all of the various welfare and educational organizations and public officials of the county. It has also reported on the general health conditions in the county, the visits of town nurses, the activities of the Suffolk County Tuberculosis and Public Health Association, and the Child Welfare Board. In this way it is serving to orient and guide both the medical and the lay community in the furtherance of all of our public health objectives. The chairman of the Publication Committee is the County Commissioner of Health.

Our Legislative Committee has followed closely the various bills involving medical practice and social welfare introduced into the Legislature and the Chairman has made several trips to Albany to attend State Society Committee meetings. These bills have all been reported to and discussed by the Comitia Minora and approval or disapproval has been registered with the Legislative representatives.

The Public Health Committee has entered upon a program of preventive medicine along the lines of (1) measles prevention, (2) cancer elimination, especially popular instruction and (3) tuberculosis prevention, especially a continuation of the study of the incidence of tuberculosis among the families and children of patients in the infective stage of the disease. The Chairman of this Committee is Dr. Frank Overton who is the active Secretary of the Suffolk County Tuberculosis and Public Health Association and the Executive Editor of the NEW YORK STATE JOURNAL OF MEDICINE. Dr. Arthur T. Davis, County

Health Commissioner, and Dr. Edwin P. Kolb, Superintendent of the Suffolk County Tuberculosis Sanitarium and Secretary of the Suffolk County Medical Society, are also members of this committee, thus assuring the active carrying out of this ambitious program.

The work of the Medical Economics Committee is especially gratifying as it shows concrete results from its conferences with the Commissioner of Welfare of Suffolk County and the Superintendents of the various hospitals in Suffolk County. The better understanding of medical viewpoints by the Commissioner and of various welfare limitations by the physicians and superintendents has led to a cooperative arrangement regarding proper fees and necessary care which seems satisfactory to all concerned and which will certainly make available more prompt relief to individuals needing help under the new welfare laws.

The efforts of the Suffolk County Medical Society in promoting civic medicine are generally recognized by the citizens of the county who show their appreciation by their hearty cooperation and support of its health programs.

The County Health Department is an outstanding example of this support by the public. It is the first County Health Department organized as a result of action by a County Society, and has now been in operation over two years. Its satisfactory service and organization have attracted the attention of neighboring and distant states. It now has a veterinary division, the first of its kind to be established in the United States under a County Board of Health and therefore medically controlled. This division is conducting extensive investigations of diseases which can be conveyed from animals to men, such as streptococcic mastitis and contagious abortion in cows and rabies in dogs.

Our Society is especially proud of the fact that the efforts of one of its members, Dr. Wm. H. Ross, in advancing organized medical activities in our county and in our state, have been recognized by the State Medical Society in electing him to its highest office. We are heartily supporting him and his policies as President of the State Society and trust that this 2nd District Branch will join us in making his administration an outstanding one for the better organization of medicine in New York State.

WM. J. TIFFANY, *President.*

NASSAU COUNTY MEDICAL SOCIETY

During the year 1930 the Nassau County Medical Society has devoted its energies to two major problems:—the acquisition of a county hospital and the management of a diphtheria toxin-antitoxin campaign.

For several years our need for a county hospital for the care of communicable and chronic disease has become steadily more pressing. This year the County Medical Society assumed the responsibility of conducting the campaign which was successful at the November polls by a vote of eight to one. The Society devoted much time to presenting the hospital proposition to the public and was gratified by the splendid result. Not only were we successful in obtaining the necessary appropriation but we also are represented on the Board of Managers by a member elected by us. In addition to this, at the request of the Board of Supervisors a committee of three members was appointed to assist this Board in solving problems of a medical nature. The President of the Board of Managers has repeatedly requested that the Society must participate in the affairs of the hospital, which gives us a responsibility we are glad to assume.

The county diphtheria toxin-antitoxin campaign was planned and carried out by the Society and its members. The executive secretary and the Public Health Committee zoned the county and requested each physician to set aside definite hours when those unable to pay for the immunizations could receive them free of charge. Considerable publicity was given this idea and many children, otherwise excluded, were thus protected. In 1929 and 1930, 16,075 children were immunized. The infant and pre-school child —those requiring most this protection—still represent only 32% of the total number. In continuing our campaign we plan to direct more effort toward this younger group. In 1928, there were twelve deaths from diphtheria in Nassau County. In 1929, there were ten and in 1930, four. The number of cases has diminished proportionately.

The success of these two campaigns, and the numerous contacts established, have unquestionably benefited our public relations. The ready cooperation we have received from various lay groups demonstrates a fact which may prove of some importance, viz., whenever a group of physicians show their ability and willingness to handle health problems, they will unquestionably be given the opportunity to do so.

Internally, our Society has had a good year. A spirit of ethical good feeling and friendliness has been apparent. The meetings have been well attended, and the members have shown a willingness to help in the execution of Society affairs. In keeping alert to the needs and trends of the day, we have tried not to forget that medical idealism is the best antidote for medical unrest.

BENJAMIN R. ALLISON, *President.*

THE DAILY PRESS

SPRING SONGS

There is natural history, if not medicine, in the spring songs which greet the ear of the rural doctor on his evening calls; and there is, in addition, poetic literature in the following reference to those sounds made in the following editorial in the New York *Herald Tribune* of April 17:

"The pinkletinks are tinkling out on Martha's Vineyard, as is duly reported in 'The Vineyard Gazette,' whose editor knows that the doings of the piscatorial and amphibian and gallinaceous citizens of the island which Bartholomew Gosnold discovered in 1602 are as significant as those of its humans.

"But what are pinkletinks? 'The Vineyard Gazette' quite properly assumed that Vineyarders would understand. A reader in far-off Manhattan suspected that they were what superscientists call 'Hyla pickeringii' and country boys on the mainland know as 'spring peepers.' He wrote and inquired; the Vineyard editor confirmed the suspicion adding that it had been suggested that Shakespeare based 'The Tempest' upon the tales of Gosnold's men, that the song of the pinkletinks was the cue for Ariel's song, and that the goblin dances and uncanny noises of the Vineyard heath hen suggested Caliban and the grosser spirits of Shakespeare's enchanted island.

"The theory seems to us, on rereading 'The Tempest,' more than probable. Authorship of Shakespeare's plays has been ascribed to other men on far less substantial evidence than the play yields to buttress this theory. 'How lush and lusty the grass looks! How green!' says Gonzalo; Antonio replies: 'The ground indeed is tawny,' and Sebastian adds, 'With an eye of green in it.' The description of the Chilmark downs could hardly be more accurate, unless indeed one read on to the phrase describing 'bosky acres' and 'unshrubbed domes, rich scarf to the proud earth.' That 'hollow burst of bellowing, like bulls, or rather lions,' which alarmed Sebastian—does it not suggest that Gosnold's men heard the booming of a thousand love-sick heath hens? The heath hen then was nameless, and it was natural for Shakespeare to refer mistakenly to the 'peacocks' which 'fly amain.' Caliban's comment is definitely reminiscent of the notes of Vineyard pinkletinks:

'The isle is full of noises,
Sounds, and sweet airs, that give delight, and hurt not.
Sometimes a thousand twanging instruments
Will hum about mine ears, and sometimes voices
That, if I then had waked after long sleep,
Will make me sleep again.'

If Shakespeare was not inspired by stories of the Vineyard off Cape Cod, he must at least have known some island almost as lovely. Where else do people have the instinctive poetry in their souls to give such names as 'beetlebung-tree' to an ironwood and 'pinkletink' to a spring peeper?"

HAIR WAVES IN THE ORIENT

When the Oriental women go in for waving the straight black locks of hair, there is a prospect that American Medicine will be sought with equal eagerness. The New York *Times* of April 20 has the following editorial description of a rising demand for the latest American style of hair dressing:

"One might suppose that in Japan and China, where hair is allowed to grow naturally and fashionably straight, there would be no demand for a permanent waving machine. Yet an American girl, with a one-heater device and a keen desire to see the Orient, found more than enough clients who longed for curly hair to provide work and traveling expenses for herself and her mother.

"Business came so rapidly in Japan that an order was soon sent for a larger machine. Wherever the lure of unseen countries took the journeymen hair-dressers, trade followed the permanent wave. Many who asked for curly locks were the wives of European and American business men and planters stationed in far countries. But numerous Japanese and Chinese women also were delighted to submit their long, black, glossy tresses to the 'miracle' machine."

A NEW MARATHON VICTORY

Athens was saved in 490 B.C. by a Greek army entrenched at Marathon in a defile against a background of hills in which the horsemen of the Persian invaders could not maneuver; and now that defile is to save Athens from a water famine, according to the New York *Times* of April 19:

"Not far from where Miltiades overcame the Persians a reservoir has been built of such capacity as to insure an adequate supply of water for the city that has never had enough. The course of the water that will run continually from Marathon to Athens is probably a more direct and easier one than Pheidippides followed, 'over the Parnes ridge,' 'clambering gully and gap'; for it passes through a tunnel under the mountains a part of the way and then descends through many pipes to Athens and the Piraeus.

"It is pleasing to note that an American company has carried to completion this project, which is to be put to use in the coming month. To it the award was made by the Hellenic Republic, successor of Solon, who as long ago as 600 B. C. was troubled by inadequacy of the water supply and vigorously regulated its use. The modern engineering achievement deserves the meed of such praise as the old Greek poets could best have phrased. And the patriotism of Americans should 'gain force upon the plain of Marathon.' As it is, there is an appropriate architectural classical tribute in the structure that stands at the base of the dam in Marathon—a reproduction of the Athenian Treasury at Delphi. Since the original was erected from the spoils of the victory at Marathon it is poetically fit that the memory of it should be kept where glorious occasion was given for that priceless memorial—a treasury whose sole treasure is its beauty—and where new occasion is given by this fresh victory."

BROADCASTING FROM AIRPLANES

The Noise Abatement Commission of New York City has public sentiment behind it; but no sooner is one source of noise removed than another springs up. One of the worst of the new noises is described in the following editorial in the New York *Herald Tribune* of April 13:

"Gina Lombroso has just written a book called 'Tragedies of Progress.' One of the most ghastly tragedies, which Miss Lombroso failed to mention is the discovery that it is possible to pour noise out of an airplane and flood a city with it. Broadcasting from the air, it seems to us, is an unmitigated nuisance; if the police have power to stop the blare of loud-speakers which cannot be heard a block away, they surely have the right to stop a winged monster which, from a height of 2,500 feet, pours out its ugly racket.

"The manager of the corporation which exploits these noisy pests assured the police, when Dr. Christian Reisner complained of one of them, that his pilots had strict orders to avoid churches and hospitals. Nonsense! As well tell an automobile to drive through the city without passing such buildings. The city is sprinkled with them.

"A time may come when even private radios will be far more strictly policed and controlled than they are today. A single home radio blaring into a row of quiet back yards may be even more destructive to city nerves than a commercial machine competing with automobile traffic and the roar of the Elevated. Such regulation, however, may require preliminary education; there can be no dispute about the pestiferous character of noise machines pouring their ugliness out of the heavens into street and yard with utterly indiscriminate intrusion and vulgarity."

ACCURACY OF SMELL

While a dog and many other lower animals have wonderfully sensitive noses, yet human beings are easily misled in their interpretation of odors. The New York *Herald Tribune* of April 5, discussing the subject, says:

"Psychologists found long ago that not a nose in a thousand could distinguish roses from one another by scent alone: reminiscent and nostalgic as it is, the nose is a notorious liar. Every cook understands how palates can be fooled. Many a concertgoer has been shocked at himself after competing in a music identification contest. In truth, a fine ear for music is often claimed in unconscious snobbery. When Gigli, unknown, passed singing through the kitchen of the Mayflower Hotel in Washington not long since, the chef exhorted him to 'Shut-up that noise.' Last autumn Jacques Gordon, Chicago violinist, played before a lorgnetted Boston audience, which lavished applause. Next day he made himself up as an aged vagrant, took the same $40,000 three-hundred-year-old Stradivarius, and played the same selections on the street, near fashionable churches, attended by members of his audience of the night before. Nobody noticed such music. He earned $1.27 for the day."

OUR NEIGHBORS

CHIROPRACTIC BILL IN TEXAS

The official Medical Journals of several states contain racy accounts of chiropractic discussions in the State Legislatures; and the following from the March number of the Texas State Journal of Medicine is certainly interesting from both human and humorous standpoints:

"THE CHIROPRACTIC BILL. A hearing on this bill (H. B. 202) was held by the Health Committee of the House February 25. The hearing early gave promise of being of the usual hectic, knock-down, drag-out sort. The committee, because of the constantly increasing size of the crowd, changed its location three times, winding up in the main auditorium. Mr. Still, the Christian Science Committee on Publication for Texas, was a very interested spectator. Just wherein lay his interest we did not determine. He had nothing to say.

"We regret that we cannot give a full account of the very interesting discussion that ensued. We have a rather full longhand report of the discussion, from which we take the liberty of quoting the views of the proponents of the bill:

"Mr. C. E. Farmer stated that it was intended primarily to control the quacks in the profession of chiropractic and raise high the standards of that practice. The bill is bitterly opposed by the medical doctors, notwithstanding the chiropractors did not oppose the two measures intended to raise their own standards. The chiropractors have kept the faith (as if there had been any faith to keep!). The definition of the practice of medicine in the Medical Practice Act, which is a go-getter and covers anyone who tries to relieve anything by any method whatsoever and charge for it, makes it necessary that the chiropractors have a law of their own. Mr. Farmer then dilated upon his favorite subject, which is his championship of the downtrodden.

"He called attention to the large number of medical doctors present, evidence of the intentions of the medical profession to overwhelm the committee. (He did not at this time see the much larger number of chiropractors, their sympathizers and victims.) But, after all, there are thousands and thousands of people of Texas who are receiving help from the chiropractors (applause). Texas still holds the battlefields of San Jacinto and the Alamo. Forty states now recognize chiropractic, and it is a well-known fact that in Texas chiropractors cannot be convicted of the charge of practising medicine because public sentiment is with them. The few convictions that are secured could not be made to stick in the higher courts. (Applause.) The Legislature is branding chiropractors as outlaws by denying them recognition.

" 'Dr.' Dean, head of a chiropractic school, rose nobly to the occasion in rather a choleric and tiresome discussion of the merits of the bill and the needs for such legislation. He started out by saying that he was well acquainted with the bill, this being the fifth time he had had occasion to discuss the bill with the legislators. He said the chiropractors were not asking for sympathy. They were asking for and hoped to get a majority favorable report on the bill. The chiropractors are merely asking the state to give them legal recognition in order that they may practice their profession without prosecution, and charge for their services.

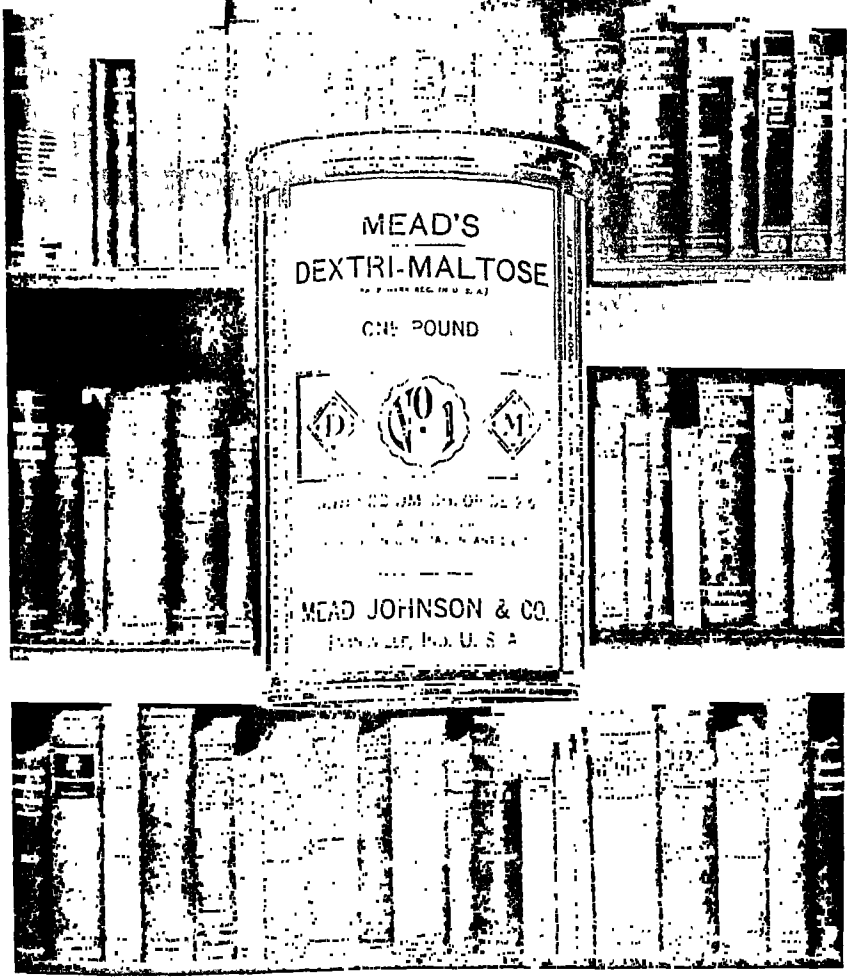
"All the chiropractors want to be allowed to do is to find the fault responsible for the illness, and then correct it. (Very simple, indeed.) Having risen to this height, the speaker did not hesitate to say that chiropractors constitute the only group in all the world of healing which does this correctly."

CHIROPRACTIC FIGHT IN COLORADO

Let no one be deceived into believing that chiropractic is dead. The passage of a model practice of medicine act is by no means a death blow to cults, as is demonstrated in New York State, where one branch of the Legislature has just passed an act legalizing the practice of chiropractic. Colorado has been through a chiropractic fight, as is shown by the following description in the April issue of Colorado Medicine:

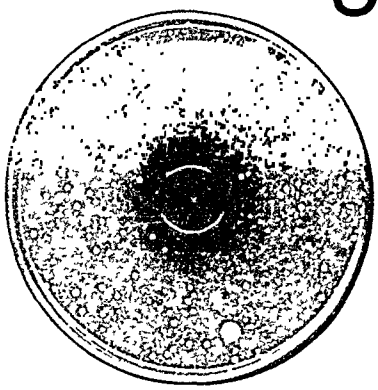
"Though the bill vitally concerned the State Board of Medical Examiners, political
resulted in its being referred to
on Education rathe to the
Medical Affairs a H.
mittee on Educa
and finally repo f
vote of s o th.

BACKGROUND



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(*Continued from page* 594)

"Numerous amendments, removing from the bill such features as were too openly vicious even for the anti-medical-minded legislators to stomach, were offered by the bill's sponsors. First was removed the clause which would have permitted chiropractors to practice minor surgery. (Just who would have drawn the line between major and minor surgery?) Then a definition of chiropractic was inserted, supposedly to pacify osteopathic opposition to the bill. Then two other amendments to pacify the osteopaths and gain their support of the measure. Then an amendment to prohibit the chiros from 'dispensing or administering' drugs. The original bill had prohibited them only from 'prescribing' drugs. Then an amendment stiffening the restrictions around granting reciprocity to chiropractors from other states. Several amendments offered by opponents of the bill were voted down. But finally an amendment by the medical side of the House was adopted (with a two-vote margin) prohibiting chiropractors from using *x*-ray or electricity. Then another by the medical side was admitted, this time eliminating the bill's proviso that chiropractors might practice 'chiropractic as taught in chiropractic schools and colleges.' Under this proviso the cult schools might have established three-month or three-week courses in fractures, for instance, and thereby have legislated for Colorado and have given all Colorado chiropractors the right to set fractures whether they had ever studied the subject or not.

"After each amendment was adopted, spokesmen for the chiropractic group approached the Executive Secretary of the State Medical Society or those legislators opposing the bill and asked if this would not now suffice to withdraw the opposition. It was evident the cultists were willing to give up much of the bill if only they could get that separate board of control, if only they could get those powers that would result in their extending their practice with no one to place a limit except their own hand-picked board of examiners.

"After all amendments were in the bill a motion from the medical side sought what should have been done by the Speaker of the House at the opening of the assembly—reference of the bill to the Committee on Medical Affairs and Public Health. The motion carried by two votes.

"Then began a two-hour parliamentary battle which newspapers characterized as the hardest fight so far in the three months of the legislative assembly. The chiropractic side many times attempted to adjourn the House until the next day, in the hope that some votes could be changed overnight. Both sides many times forced a 'call of the House,' whereby the sergeant-at-arms would send out through the cloak rooms, corridors, and even into down-town Denver, to force

(*Continued on page* 598—*Adv. xvi*)

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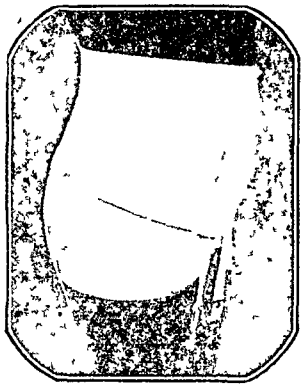
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(*Continued from page* 596—*adv. xiv*)

absent members to come back despite the waning supper hour and be present to vote on the next motion.

"The medical side finally entered a motion to kill the bill definitely and thus obviate even that slim chance that the Medical Affairs Committee might be wheedled into giving the bill another chance. The vote showed twenty-nine to twenty-nine. Under the House rules the Speaker (who favored the chiropractors) votes as does any other member and so does not have the power to break a tie. Absentee votes had to be found. Two were brought in and the vote stood thirty to thirty. Another was brought in, and sought to avoid voting. Rep. Wayne Aspinall (Mesa) threatened to prefer charges if the member did not vote. He cast a vote to kill the chiropractic bill and the fight was won."

CHIROPRACTIC IN DELAWARE

Delaware is another State in whose legislators listened to the siren voice of the chiropractor and passed the bill demanded by the cultists. The March issue of the Delaware State Medical Journal says:

"The Chiropractic Bill went through the House by a thirty-three to two vote, and through the Senate with but two negative votes. Why was such a thing done by a group of people elected to protect and serve the interests of the State? A number of explanations might be made. If they were ignorant of the subject, then it would seem, before creating such a health act, those responsible for the results would consult the State Medical Society, or the State Board of Health, which latter would conflict with the claims and practices of chiropractic, before legalizing such a practice. The opinion of many was that there was no use to try to do anything about it because of the course of actions already decided upon by a majority of the legislature. Even though we might not have made the situation as clear as we should, and important facts and circumstances were not brought out and emphasized, the truth of the matter is the action of the legislature was dangerous.

"The State has reason to be thankful that we have a Governor who has intelligence enough to understand chiropractic and courage enough to act in the interest of his fellow citizens of the commonwealth. We may not have a governor of that type at another time.

"What can be done to guard the state against dangerous inroads by cultists and faddists? It is surprising how many of the more intelligent, better educated and successful individuals know so little about such things as chiropractic—those who can see and are willing to see when shown. As for some of the others we feel sometimes, what is the use! But of course from those who

(*Continued on page* 600—*adv. xviii*)

—THAT ENDS WELL

YOUR patient begins with a tablespoonful  continues with a teaspoonful  and finally stops it altogether  Surely, there is no clearer way to demonstrate  the therapeutic value of AGAROL  in the treatment of constipation.

Besides, Agarol is so easy to take. No oiliness, no artificial flavoring to get used to. Agarol can be mixed with water, fruit juices, milk, with semi-solid food, used as a salad dressing in place of mayonnaise. Serves you better—serves your patient better.

A supply gladly sent for trial.

AGAROL is the original mineral oil and agar-agar emulsion with phenolphthalein. It softens the intestinal contents and gently stimulates peristalsis.

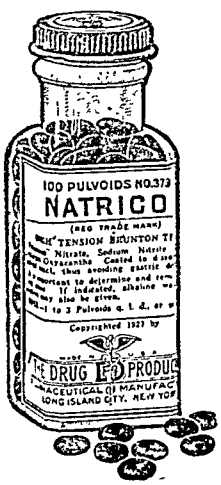
AGAROL *for Constipation*

WILLIAM R. WARNER & COMPANY, Inc. 113 West 18th Street, New York City

For Symptomatic Treatment of HYPERTENSION

Pending exact diagnosis and treatment of the underlying cause, prompt lowering of the blood pressure, unaccompanied by shock, is often necessary.

The combined formula of Sir Lauder Brunton and M. C. Thrush, M.D., Ph.M., is the result of careful study and long experience in the treatment of hypertension. This formula contains Sodium Nitrite, Potassium Nitrate and Nitroglycerin, for rapid yet prolonged vasodilatation, and Crataegus Oxyacantha, a most useful synergist to lower blood pressure.



A synergistic combination utilizing this valuable drug is supplied to the medical profession in Pulvoids Natrico. They are specially coated so as to insure passage through the stomach but to dissolve readily in the intestinal tract.

Dosage—1 to 3 Pulvoids four times daily as required.

THE DRUG PRODUCTS CO. INC.
PHARMACEUTICAL MANUFACTURERS
26 35 SKILLMAN AVE. LONG ISLAND CITY
NEW YORK

THE DRUG PRODUCTS CO., Inc.
26-35 Skillman Avenue,
Long Island City, New York

- ☐ Special one-time offer—200 Pulvoids for $1.00 cash with order.
- ☐ Send me free copy of "High Blood Pressure, Its Diagnostic Importance, Its Efficient Treatment."
- ☐ I dispense and want your free catalogue.

Name .....

Street .....

City ..... State .....

(*Continued from page 598—adv. xvi*)

have received more, more is expected. So the medical profession should see to it that the public become better informed in medical matters.

"If one cult is recognized others will appear and the best way to handle them and the best way to guard against them is for the state to have a Basic Science Law. It would perhaps be better, as Dr. Charles Mayo has suggested, if we could have 'national educational requirements for all people who are permitted to treat disease, perform operations, and protect the public health in general. In fact, there should be no examination on methods of treatment, but the examinations should be on such fundamental branches as physiology, anatomy, chemistry, and pathology; that a knowledge of disease be possible in order that it may be diagnosed, especially the contagious and infectious diseases, for the protection of the public health. This knowledge would harm no one, even if he practiced Christian Science.'"

THE CITY HOSPITAL OF PROVIDENCE, RHODE ISLAND

The Providence City Hospital is the subject of the first editorial in the April issue of the Rhode Island Medical Journal, written under the title "Our Civic Pride." The editorial says:

"The Providence City Hospital has been in existence but little more than twenty years. During that time this hospital has made such prodigious advances in the care and treatment of the sick that it exerts a world-wide influence. Many of us, particularly in Rhode Island, may not appreciate that fact.

"In addition to the visitors who come to observe, there is a larger group who come to study, for this hospital has always encouraged study. Rockefeller Foundation lends doctors and nurses to the Providence City Hospital for training. The Harvard School of Public Health also sends its students here once each year for observation, and Tufts Medical College sends two students per month for study and training. In addition twenty hospitals have affiliations whereby they are able to send their nurses through the hospital's training school for nurses.

"Only a portion of the hospital's work lies in teaching. Every week brings one or more letters from various parts of the world to the superintendent requesting advice for or criticism of plans for hospitals, administration and other matters pertaining to hospital work. Last week one came from Sao Paulo, Brazil. All these questions are answered with care. Other cities at times have called the superintendent to survey their health problems and to suggest corrective measures. This happened with two of the largest cities in America; with a man of this high executive capacity that has become nationally and interna-

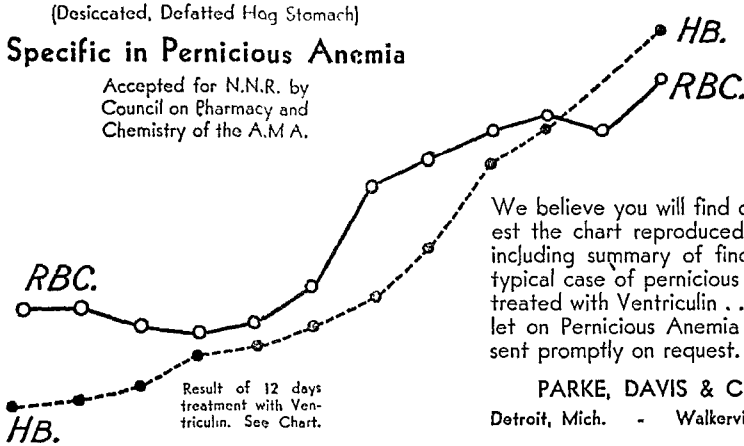
(*Continued on page 602—adv. xx*)

VENTRICULIN

(Desiccated, Defatted Hog Stomach)

Specific in Pernicious Anemia

Accepted for N.N.R. by Council on Pharmacy and Chemistry of the A.M.A.

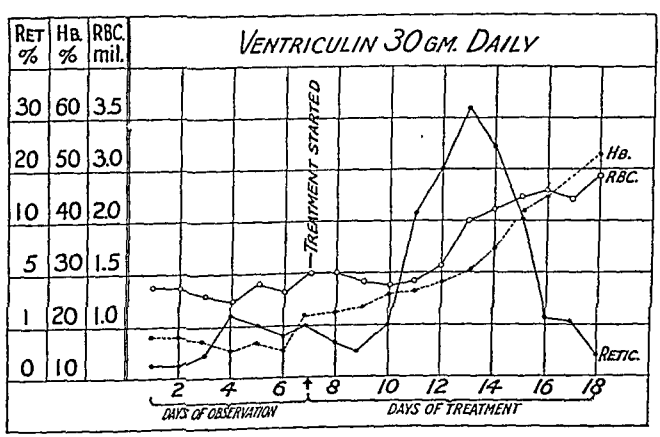


Result of 12 days treatment with Ventriculin. See Chart.

We believe you will find of interest the chart reproduced below, including summary of findings in typical case of pernicious anemia treated with Ventriculin . . . Booklet on Pernicious Anemia will be sent promptly on request.

PARKE, DAVIS & CO.

Detroit, Mich. - Walkerville, Ont.



DIAGNOSIS. Pernicious anemia.

INITIAL BLOOD COUNT: Red blood cells 1.5 million per cu. mm.; Hemoglobin (Newcomer) 21 per cent; Reticulocytes 1.0 per cent.

TREATMENT. Ventriculin 30 Gm. daily.

PHASE OF REMISSION. On sixth day of treatment: RBC 2.0 million; Hemoglobin (Newcomer) 30 per cent; Reticulocytes 32.0 per cent (calculated rise for 1.5 million red blood cells at beginning of treatment = 22.3 per cent, exceeding expected rise by 9.7 per cent).

PROGRESS REPORT. On the twelfth day after Ventriculin was begun the following blood count was recorded: RBC 2.9 million; Hemoglobin 52 per cent; Reticulocytes 0.4 per cent. (Expected weekly increase = 500,000 red blood cells per cu. mm. Actual increase in this patient = 700,000 red blood cells per cu. mm.).

(*Continued from page 600—adv. xviii*)

tionally known and recognized, the Providence City Hospital has had one great advantage from its inception. In correlation to this it has also had as directors men of rare ability. Had it not been for these men Providence would very likely have had just another hospital, that is, brick and plaster. The methods, first put into practice here, are now studied and copied all over the world. The influence on world health which this hospital will have is inestimable."

The City Hospital has about 230 beds, devoted to nearly every form of practice, including contagious diseases. The source of the pre-eminence of the hospital is the superintendent, Dr. D. L. Richardson, who not only keeps himself informed daily regarding every case, but is also the intimate friend of every member of the Medical Staff.

ANNUAL MEETINGS IN SOUTH CAROLINA

While the Medical Society of the State of New York has evolved the plan of publishing the annual reports of its officers and committees before its annual meeting, many other States defer theirs until the meeting of the House of Delegates. South Carolina has taken a step forward, as is shown by the following item in the April Journal of the South Carolina Medical Association:

"On the night of Tuesday, May 5, the House of Delegates will convene at the Poinsett Hotel. The routine work of the House consists chiefly in hearing reports of the various committees appointed by the President and action on the same. An innovation was introduced last year to attempt to shorten the sitting of the House in order that the members might have more time for rest and recreation by having the councilors submit their individual reports to the Council itself and any matters of importance so submitted be incorporated in the general report to the House by the Chairman of the Council. Again, the reports of the various committees where possible were submitted in writing to the members of the House before their arrival and the chairmen of the respective committees requested to briefly summarize the original reports before the House. This plan, if carried out again, should reduce the time of the session of the House of Delegates to about three hours instead of four, five or six as in previous years. The outlook at the present time seems to indicate that there will be no prolonged discussions over constitutional amendments or other radical changes in the usual routine of the House. The election of officers will necessarily call for the keenest interest of the entire Association and properly so. Very careful thought should always be given to this important matter. Comparatively few changes along

(*Continued on page 603—adv. xxi*)

Definite dosage
Ease of administration
Sensible economy



Each pill contains 0.1 gram (1½ grains) of physiologically tested digitalis leaves. The finished pills, too, are biologically assayed, thus giving re-assurance of their activity.

Each pill represents 15 minims of the U.S.P. tincture and permits of more accurate dosage than do liquids, as drops may vary in size.

These pills contain digitalis in its completeness and not any separated or extracted part of it, therefore present the entire therapy of this valuable drug.

Physician's trial size package and literature sent free upon request.

DAVIES, ROSE & CO., LTD.

Pharmaceutical Manufacturers, - - - - BOSTON, MASS.

(*Continued from page 602—adv. xx*)

this line may be expected as this is somewhat of an off year and the offices to be filled are not numerous. The meeting of the House of Delegates, therefore, bids fair to be efficient and harmonious."

PROGRAM OF ANNUAL MEETING IN OHIO

Since the Medical Society of the State of New York is preparing and publishing its plans for its annual meeting on June 1-3, 1931, in Syracuse, it will be interesting to note the publicity given to the Ohio Annual Meeting to be held in Toledo, May 12 and 13, 1931, as set forth in the April issue of the *Ohio Medical Journal*.

The official meeting will be preceded by a clinic day, to be held Monday, May 11, under the auspices of a committee of the Toledo Academy of Medicine and the Lucas County Medical Society. The morning will be devoted to clinics in the hospitals of Toledo, while the afternoon program will consist of a single meeting in the building of the Academy of Medicine.

A golf tournament will also be held on Monday in the Inverness Country Club, Toledo, with a banquet in the evening.

The official sessions will open on Tuesday morning, May 12, with a general session held in combination with the House of Delegates. A second session of the House of Delegates will be held on Wednesday afternoon.

The second general session will be held in the evening of Tuesday, and the program will consist of addresses by the President and the President elect, and a reception.

A third general session will begin on Wednesday afternoon at 1:30 with motion pictures furnished by the Petroalgar Laboratories, which are described as follows:

"1. EXPERIMENTAL GASTROENTEROSTOMY: Prepared at Northwestern University by Drs. W. F. Windle and H. B. Kellogg, showing posterior gastroenterostomy performed aseptically on a number of monkeys and dogs, with later photographic studies following the recovery period, with graphic illustration of significant phenomena.

"2. REPAIR OF URETHROCELE, CYSTOCELE AND LACERATIONS OF THE CERVIX: Prepared at St. Luke's Hospital, Chicago, by Dr. Harold O. Jones, Associate Professor of Gynecology, Northwestern University. The introductory discussion outlines the etiologic factors of these lesions and gives the indications for repair with complete description accompanying the operative procedure, demonstration of the pathology, dissection, tissue repair and results.

(*Continued on page 604—adv. xxii*)

THE NEW YORK POLYCLINIC
MEDICAL SCHOOL AND HOSPITAL
(Organized 1881)
(*The Pioneer Post-Graduate Medical Institution in America*)

Traumatic Surgery
including
General Surgery, Orthopedic Surgery, Physical Therapy, Anatomical Review and Operative Surgery on the Cadaver.

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MEDICAL EXECUTIVE OFFICER, 345 West 50th Street, NEW YORK CITY

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TRADE MARK

Made with boot strap at top only (full length tape, of course, if desired).

Made in colors which have been scientifically worked out so as not to show through thin silk hose.

Made with no tape on back, but woven together with a practically invisible seam.

And — Each Handwoven to measure.

Pomeroy Company

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AND

ROGERS BLDG. (Fordham Rd. at Webster Ave.) NEW YORK

BROOKLYN SPRINGFIELD DETROIT

NEWARK BOSTON WILKES-BARRE

(*Continued from page 603—adv. xxi*)

"3. REPAIRS OF SECOND AND THI DEGREE LACERATIONS OF THE PE NEUM AND RECTOCELE: Prepared at Luke's Hospital, Chicago, by Dr. Harold Jones, Associate Professor of Gynecology, Nor western University. Discussion of etiolog factors, demonstration of lesion, location and tent of incision, details of dissection, repair a end results."

The second part of the session will consist two lectures, one on the Normal Diet and other on Head Injuries.

Another general session will be held on W nesday evening and will consist of two lectur which are described as follows in the program

"1. THE DOCTOR AND IMMORTALIT by Harry M. Hall, Wheeling, West Va.—The e position of the idea that there is a reckoni somewhere just as technical, just as scientific the progress of a case of typhoid fever or t extension of a brain tumor; that an ideal is practical as a splint; that loyalty is as definite its rewards as arsenic is for syphilis; that livi for the day alone is as fallacious as a poultice i acute appendicitis.

"2. THE PRACTICE OF MEDICINE—I Starr Judd, Rochester, Minnesota. A discussio of the relationships between the general publi and the practitioner of medicine. Curren Journals and newspapers have carried many sug gestions as to what should be done to improv the practice of medicine. Attention called to th fact that the profession is making rapid progres in this direction, but that it remains for the doc tors themselves to improve their methods and their relationships with the general public in order to obtain the best care that is possible for those who are in need of attention."

There are six scientific sections, as follows:

Medicine
Surgery
Obstetrics and Pediatrics
Eye, ear, nose and throat
Nervous and mental diseases
Public Health and Industrial Medicine

Fifty-two papers are listed for these sections each of which will meet on Tuesday afternoon and Wednesday morning.

An excellent idea is that the printed program contains an outline of each paper which is supplied by the author. The scope of the outline is shown by the first two papers which are listed on the program, as follows:

"1. A CLINICAL AND PATHOLOGICAL STUDY OF SEVENTY CASES OF MITRAL STENOSIS—by I. H. Einsel, H. S. Fel— C. S. Stone, Cleveland. During the period 1928 1930, seventy cases of advanced mitral steno

(*Continued on page 606—adv. xxiv*)

Which form of S.M.A. should be used . . . ?

The Powder and Concentrated Liquid Forms of S.M.A. have the same composition when diluted according to directions, and give equally good results in practice. Infants may be changed from one form to the other whenever conditions arise which make the other form more convenient.



Powder Form

Powder Form . . This form lends itself to the preparation of a small quantity at a time as in starting feedings, or in giving supplementary feedings. It is also convenient for preparing individual feedings where cooling facilities are not available, or for use in traveling.



Concentrated Liquid Form*

Concentrated Liquid Form* . . This is the more simple form to prepare as it is already in liquid form. It is as simple as mixing two glasses of water. One container makes a liquid quart of S.M.A. ready to feed and should be used in cases where the infant is taking that amount of food in from one to two days. This form is very convenient in institutions where a large number of infants are being fed S. M. A. at one time. *Now available on the West Coast.



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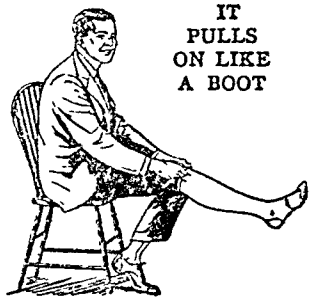
Protein S. M. A. (Acidulated) is indicated in cases of diarrhea, malnutrition, marasmus, premature infants and other infants needing a higher protein intake. It is very effective also during the course of mild infections such as pyelitis and otitis media.

Write us for samples and ask for our little tabulated information booklet No. 35, no obligation, of course.

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TRADE MARK

Made with boot strap at top only (full length tape, of course, if desired).

Made in colors which have been scientifically worked out so as not to show through thin silk hose.

Made with no tape on back, but woven together with a practically invisible seam.

And — Each Handwoven to measure.

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(*Continued from page 603—adv. xxi*)

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"2. THE PRACTICE OF MEDICINE—E. Starr Judd, Rochester, Minnesota. A discussion of the relationships between the general public and the practitioner of medicine. Current Journals and newspapers have carried many suggestions as to what should be done to improve the practice of medicine. Attention called to the fact that the profession is making rapid progress in this direction, but that it remains for the doctors themselves to improve their methods and their relationships with the general public in order to obtain the best care that is possible for those who are in need of attention."

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(*Continued on page 606—adv. xxiv*)

HAY FEVER

An Advertising Statement

HAY FEVER, as it occurs throughout the United States, is actually *perennial* rather than *seasonal*, in character.

Because in the Southwest—Bermuda grass, for instance, continues to flower until December when the mountain cedar, of many victims, starts to shed its pollen in Northern Texas and so continues into February. At that time, elsewhere in the South, the oak, birch, pecan, hickory and other trees begin to contribute their respective quotas of atmospheric pollen.

But, nevertheless, hay fever in the Northern States at least, is in fact seasonal in character and of three types, viz.:

TREE HAY FEVER—*March, April and May*
GRASS HAY FEVER—*May, June and July*
WEED HAY FEVER — *August to Frost*

And this last, the late summer type, is usually the most serious and difficult to treat as partly due to the greater diversity of late summer pollens as regionally dispersed.

With the above before us, as to the several types of regional and seasonal hay fever, it is important to emphasize that Arlco-Pollen Extracts *for diagnosis and treatment* cover adequately and accurately all sections and all seasons—North, East, South and West.

FOR DIAGNOSIS *each pollen is supplied in individual extract only.*
FOR TREATMENT *each pollen is supplied in individual treatment set.*

ALSO FOR TREATMENT we have a few logically conceived and scientifically justified mixtures of biologically related and simultaneously pollinating plants. Hence, in these mixtures the several pollens are mutually helpful in building the desired group tolerance.

IF UNAVAILABLE LOCALLY THESE EXTRACTS
WILL BE DELIVERED DIRECT POST PAID
SPECIAL DELIVERY

List and prices of food, epidermal, incidental and pollen proteins sent on request

THE ARLINGTON CHEMICAL COMPANY
YONKERS, N.Y.



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THE SPA SANATORIUM

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Founded and operated since 1902 by Dr. A. I. Thayer. Situated in the mineral belt of the lower Adirondacks, four miles from Saratoga Springs Reservation, and within walking distance of three mineral springs. Write for particulars.

MRS. A. I. THAYER

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PHILLIPS Milk of Magnesia

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The name "PHILLIPS" identifies Genuine Milk of Magnesia. It should be remembered because it symbolizes unvarying excellence and uniformity in quality.

Supplied in 4 oz., 12 oz., and 3 pt. bottles.

THE CHAS. H. PHILLIPS CHEMICAL CO.

New York and London

(*Continued from page 606—adv. xxiv*)

must keep them well. The rates are less than cost, and are based on the ability of the person to pay, as hospitalization is coming to be looked upon somewhat as a public function.

"This service is open to groups such as teachers, employees of different business houses or corporations, unions, or any logical group applying for the same where ten or more apply, at five per cent higher charge or rate than the above schedule. It is also open to individuals, but the county reserves the right during the first year to refuse hospital service for operations and treatment for very apparent chronic ailments existing at the time the individual applies. It would not be fair to the county for $1 per month to take on an individual sick person who immediately needs a very expensive operation or treatment."

The Journal comments as follows:

"The state constitution gives the county units the right to maintain county hospitals and to support the same through public funds, but it is also our impression that it is provided that such facilities shall be extended only to indigent citizens. It will be interesting to watch the outcome of the experiment in Santa Barbara County in this—what might be called an initial experiment in state medicine in California. It is true that at the present time the experiment is only a small beginning, but the legal and other principles involved are not small."

The Santa Barbara County Medical Society on January 12th took the following action:

"It was then moved, seconded and unanimously carried, that the following motion adopted by the Public Relations Committee be adopted by the Santa Barbara County Medical Society and be incorporated in the minutes of this meeting:

"1. That no member of the Santa Barbara County Medical Society enter into any such agreement with the Santa Barbara County Board of Supervisors for professional services, as proposed in the enclosed plan, without the approval of the society.

"2. That no member of the Santa Barbara County Medical Society enter into any agreement with any organization or like group for professional services without the expressed approval of the society.

"3. That any member acting contrary to these recommendations be automatically suspended from the county society."

PHYSICIANS IN TELEPHONE DIRECTORY IN TEXAS

How to list physicians in a telephone directory was the subject of debate in the Harris County Medical Society according to the following report in the February number of the Texas State Journal of Medicine:

(*Continued on page 609—adv. xxvii*)

"Harris County Medical Society met on November 26, with 36 members present. Dr. M. J. Taylor, president, presided. Dr. Ray K. Daily, chairman of the board of censors, gave the recommendations of the board concerning the classification of physicians in the Houston Telephone Directory. The board of censors presented alternative recommendations for consideration:

"(1) That advertising be left entirely to the quacks; that all members of the Society be classified under physicians and surgeons, all names to be printed with the same type.

"(2) That the classification of specialties as used in the Directory of the American Medical Association be used in the telephone directory. In the even that the latter recommendation was adopted, that each specialist file a notice of his specialty with the board of censors and confine his practice to this special field; and, further, that all names classified under the various specialties shall be printed in the same type.

"The telephone company had recommended that a line, 'Member of Harris County Medical Society' be listed after the names of members of the society. The board felt that this would merely serve to increase the telephone bill and form another entering wedge of advertising.

"Dr. J. M. O'Farrell, in discussing the report, recommended that no other classification of specialties be used than those given in the Directory of the American Medical Association. He urged the adoption of the recommendation that members of the Harris County Medical Society not subscribe to the classification as now appearing in the Houston telephone directory.

Dr. J. E. Hodges said that he believed the classification was of no value and not in good taste. The regular classification under physicians and surgeons was not objectionable.

Dr. O'Farrell suggested that no member of the society be permitted to use bold face type listings.

Dr. B. T. Vanzant stated that he had no objection to the classified directory provided that the classifications given in the Directory of the American Medical Association are used. He suggested that a standard list of specialties be prepared, and that the specialties listed appear in accordance with a classification of specialties approved by the society.

"Dr. Ray K. Daily, in discussing the use of a classification of specialties, felt that a physician should either adhere to the general classification of physicians and surgeons, or it should be required that those classified under specialties adhere strictly to the practice of that specialty.

ANATOMICAL STUDIES



SUPERFICIAL MUSCLES IN THE FEMALE
LATERAL VIEW

for the Practitioner

Sets of Anatomical Studies (in book form) furnished to physicians on request — upon receipt of 20c to cover mailing costs.

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COSTS OF PUBLIC HEALTH IN OHIO

The April number of the *Ohio Medical Journal* contains a practical editorial on the costs of public health service, which says:

"The present costs of official public health work in Ohio generally are not excessive. While some may contend that a few of the functions now being undertaken by public health departments might be dispensed with without much detriment to the public, some communities are failing to adequately finance the work of their health departments.

"So, the big question confronting those directing the public health activities of the state and local communities is to prove they have been supplying the type of service which justifies the amount of money now being expended and deserves a more generous helping from the public coffers

"Public health work is a business undertaking, and like all business projects, must be based on a well-defined program and on sound economy. An effort must be made to produce the maximum of service with the funds available. Some health departments are finding themselves hard-pressed to convince the public in these times of business depression that they deserve an increased budget.

"The point which those directing public health activities in Ohio must recognize and keep in mind at the present time is well defined in the following editorial comment made in *Health,* official publication of the Dayton Department of Health:

" 'There are certain health promotion functions the individual cannot do for himself. For children especially it is the State's first duty to see that these matters are done and done well. One writer has said: "The tragedy of this earth is a diseased child."

" 'There are other health functions which the individual should perform for himself. In this second class the State still has the duty to lead, to direct, to impart information and to stand by and give actual financial aid in cases of real indigency, emergency, etc. But for the State to do for the individual what he should do for himself puts an unnecessary burden upon the taxpayers.

" 'Many who are interested in public health in later years have failed to discriminate between these two functions. . . . . The functions of public health activities, whereby individuals are given information and assistance to do for themselves, should have special attention. If those who are interested in public health promotion do not properly plan for economy in expenditures, the toy balloons, attached to which many dreamers are now floating around in the air, are soon to be punctured by the hard-headed taxpayer. It is a splendid time to plan for thrift in public health work as in all other lines.' "

The following editorial from the March *Illinois Medical Journal* suggests that the most effective public health work is that given by practicing doctors without cost to the taxpayers:

"Statistics revealing the average reduction of the death rate in the U. S. registration area by more than 36 per cent in the last thirty years would seem to convince the most presumptuous body of lay investigators that the medical profession really does attend to its business in relation to the moot question of prophylaxis and public education.

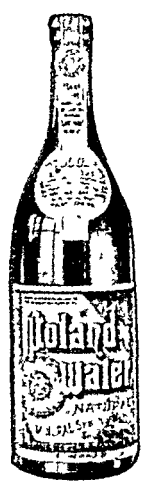
"Some ailments of the human race have experienced an even higher percentage of reduction than that. While the national death rate has been cut nearly two-thirds, there are mortality figures from some causes that show that some scourges have been practically wiped out. This results of course from scientific prophylaxis based upon scientific research and scientifically administered. Lay-dictated legislation had nothing to do with it, nor did any so-called relief measures based upon false ideas of the good arising from that socialized menace—state medicine."

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THE USE OF TRICHOPHYTIN AS A DIAGNOSTIC AND THERAPEUTIC AGENT IN MYCOTIC INFECTIONS OF THE SKIN

By LAIRD S. VAN DYCK, M.D., JEROME KINGSBURY, M.D., BINFORD THRONE, M.D., and C. N. MYERS, Ph.D., NEW YORK, N. Y.

From the New York Skin & Cancer Hospital

THE object of this study has been to find a simple method for the diagnosis and treatment of Trichophyton and Epidermophyton infections of the skin which would be available to all physicians who have to deal with these extremely prevalent conditions. The search for the organisms in scrapings and smears from the lesions and the time which is necessary for their growth on artificial culture media prove to be fruitless in many cases even with the aid of expert mycologists.

Attempts have been made by other investigators to show the specificity of individual fungi through intradermal and complement fixation tests, but this has not led to any sureness in their differentiation. Scholtz's[1] experiments showed that the allergic reactions with trichophytin from different strains of trichophyton fungi were the same. Consequently, they must be considered as group reactions. Scholtz[1] believes that on account of the great variability which the fungi show on very inconsequential changes in the culture media, the identification of the fungus is not yet sufficiently established, and from a clinical point of view is of little value. Whether this be true or not, microscopic and cultural studies should be made in all cases where the facilities are at hand and time permits.

For the past six months in our clinic, an intradermal trichophytin test has been done routinely in all cases diagnosed clinically as Tinea, including intertriginous, vesico-pustular and dyshidrosiform eruptions. The trichophytin used is a polyvalent extract of various species of trichophyton, including T. gypseum, T. cerebriforme, T. migroides, T. rosaceum, T. violaceum, and T. crateriforme. It was prepared in accordance with the method of Scholtz.[1]

The test used consists in an intradermal injection of 0.1 c.c. of a 1:10 dilution into the flexor surface of the forearm. A positive reaction is denoted after 24 hours by the appearance of an area of redness and infiltration at the site of injection. On the surface of this infiltrated area, there may be one or more vesicles surrounded by a red flare which may cover the entire surface of the forearm.

If there was no change in the skin at the site of injection after 24 hours, or if there was only a small area of redness without definite infiltration, it was considered a negative test.

The intradermal test was used rather than scratch or patch tests, on account of more accurate dosage, more uniform absorption, and the shorter time necessary to elicit a positive or negative reaction. Sulzberger and Lewis,[2] using contact tests, found that it was sometimes necessary to wait two weeks for a positive reaction. The injections were always given in the flexor surface for the following reasons; first, this region is easily accessible, and secondly, Ernst Friedrich Mueller[3] has shown that the greatest response of the vegetative system is elicited when intradermal injections are given here or in the skin on the extensor surface of the thighs. The injections are not given in the affected area as is done in sycosis vulgaris. In this condition, a general allergy exists while in sycosis as Cranston Low[4] says, there is a local cellular sensitization.

The severity of the reaction to a trichophytin test seems to depend on the degree of allergy which exists in each particular patient, and is often not in proportion to the clinical severity of the condition for which the patient had applied for treatment.

Reactions were roughly classified according to their severity as negative, one plus, two plus, three plus, and four plus. Only those

were considered positive which showed an elevated, infiltrated lesion at the site of injection, and those which showed a vesicle resulting in central necrosis were considered four plus. This necrosis sometimes leaves a small superficial scar. In cases where the first test is negative, subsequent tests after an interval of several days will often appear to be positive even in patients who have no visible sign of a mycotic infection. These "secondary" positives we believe to be of no clinical significance, but merely indicate that the original test has produced a local sensitization. This is similar to the experience of Lehner and Rajka,[5] who showed that it was possible to sensitize the skin by injections of trichophytin, tuberculin and luetin. They observed this sensitization develop first on the repeatedly used parts and in their immediate neighborhood, in one case after the fourth, and in two after the fifth depot injection. First the used parts became sensitized, then the immediately adjacent parts, and later the distant parts of the skin. As the distant parts of the skin became sensitized, the repeatedly used parts and their adjacent parts gradually became desensitized, as evidenced by milder reactions to the injections.

During our observations of patients who had received intradermal trichophytin tests, it was noted incidentally that many who gave the most strongly positive reactions showed a marked improvement in their skin condition a few days after the test was made. This led to further observation on a series of one hundred cases in which positive reactions were obtained on the first test. In order to determine whether it was possible to desensitize these patients, subsequent injections of trichophytin were given intradermally every four or five days. We used a 1:10 dilution for the preliminary test, and then followed with a 1:50, 1:10, 1:5, 1:2, and 1:1 dilutions as soon as the preceding reaction became less marked. From one to three wheals were given at each treatment except the first. Only one wheal was used for the test.

It was noted that most mild cases of Tinea limited to the toes, gave a weakly positive reaction to trichophytin injected intradermally into the forearm, while the lesions themselves became very itchy. One such case also developed a mild attack of hay fever, and the itching of the toes became very acute. Wise and Sulzberger[6] have recently reported a case in which a skin test with trichophytin elicited not only a skin reaction, but an attack of violent sneezing and edema of the eyelids and nose, which were checked only by the administration of epinephrin. An urticarial wheal appeared at the site of injection a few minutes after the test was made in several cases of our series, but no violent reactions were observed. Ramirez[7] has reported a case of asthma due to Tinea.

Blood chemistry tests were done routinely in all of our cases. A hyperglycemia was usually found. The average blood sugar for the group was 105 mgms. per 100 c.c. of blood. The Hastings-MacLean method was used, our average normal being 90 to 100 mgms. per 100 c.c. The local treatment used during our study of these one hundred cases was nothing but boric acid ointment.

In this connection, it cannot help but be striking that these organisms can only be grown on a medium which contains sugar. Usher[8] has shown the sugar content of the sweat, and Urbach[9] has

TABLE I

No.	Age	Diagnosis	Location	Description	Duration	Test	Treatments	Duration Treatments	Results
1	37	Tinea	Hands	Vesic. and scaly	5 months	++	8	6 weeks	Apparently cured
2	46	Tinea	Hands	Keratotic patch	18 months	++	12	2½ months	Apparently cured
3	35	Tinea	Feet	Vesic. and scaly	6 months	++	10	5 weeks	Apparently cured
4	12	Tinea	Hands	Vesic. and scaly	1 year	+	8	5 weeks	No improvement
5	27	Tinea	Right hand	Vesic. and scaly	3 weeks	++	9	2 months	Apparently cured
6	24	Tinea	Right hand	Vesic. and scaly	1 year	+	15	2 months	Much improved
7	22	Tinea and Trichophytid	Hands and Feet	Vesico-pustular	4 months	+++	12	2½ months	Apparently cured
			Face, arms, legs and neck	Scaly patches					
8	22	Intertrigo	Under right breast		3 months	+	2	1 week	Improved
9	37	Tinea	Feet	Vesic. and scaly	6 weeks	+	5	1 month	Improved
10	16	Tinea	Left palm	Single patch	6 months	+	7	1 month	Improved
11	45	Tinea and Trichophytid	Hands	Vesic. and scaly	2 months	++++	9	3 months	Apparently cured
			Trunk	Erythem. and scaly					
12	36	Tinea	Hands	Vesic. eruption	1 year	++	10	6 weeks	Much improved
13	47	Tinea	Hands	Vesic. eruption	4 months	++	10	2 months	Apparently cured
14	62	Tinea and Trichophytid	General	Scaly eruption	4 weeks	+	10	6 weeks	Apparently cured
15	35	Tinea	Both hands and feet	Scaly eruption	3 months	++++	10	2 months	Much improved

TABLE I—Continued

No	Age	Diagnosis	Location	Description	Duration	Test	Treatments	Duration Treatments	Results
16	27	Tinea	Hands	Vesic and scaly	4 months	++	6	1 month	Improved
17	31	Tinea	Feet	Vesic and scaly	10 years (Recurr)	+++	9	2 months	Apparently cured
18	42	Tinea	Hands	Vesic and scaly	1½ years (Recurr)	+	5	1 month	Apparently cured
19	30	Intertrigo	Breast and groin	Red, macerated epid		+++	9	2 months	Much improved
20	43	Tinea	Toes	Vesic and scaly	1 year	+++	9	2 months	Much improved
21	26	Tinea	Hands	Vesic and scaly	2½ years	++			Much improved
22	25	Tinea and Eczema	Right hand	Vesic and scaly	8 months	+++	15	3 months	Apparently cured
23	25	Tinea	Feet and hands	Vesic and scaly	5 weeks	+++	10	2 months	Apparently cured
24	39	Tinea	Feet and hands	Vesic and scaly	2 years (Recurr)	+++	5	2 months	Almost well
25	40	Tinea	Feet	Vesic and scaly	1 year	++	6	1 month	Apparently cured
26	26	Tinea	Feet and hands	Vesic and scaly	7 weeks	++	5	2 weeks	Improved
27	30	Tinea	Fingers and palms	Vesic. and scaly	2 months	+++	6	4 weeks	Much improved
28	32	Tinea	Fingers and palms	Vesic and scaly	6 months	+++	2	2 weeks	Much improved
29	40	Tinea and Eczema	Feet, legs and nails	Vesic and scaly	7 years	+	9	2 months	Improved
30	24	Tinea	Fingers, both hands	Vesic and scaly	2 months	+	4	3 weeks	No change
31	27	Tinea	Right foot	Vesic and scaly	15 years (Recurr)	++	13	2½ months	Improved
32	43	Tinea	Right foot	Vesic and scaly	1 year	++	5	2 months	Much improved
33	30	Tinea	Fingers	Vesic and scaly	3 months	+	4	3 weeks	Improved
34	50	Eczema	Hands	Dry, scaly, keratotic	3 months	++++	2	5 weeks	Much improved
35	63	Tinea	Feet	Vesic and scaly	1 year	+	4	10 days	Improved
36	32	Tinea	Hands and fingers	Vesic and scaly	6 months	++	7	2 months	Unimproved
37	53	Tinea	Feet	Vesic and scaly	6 weeks	+	7	2½ months	Much improved
38	29	Tinea	Left foot	Vesic and scaly	1 month	+	3	2 weeks	Improved
39	28	Pompholyx	Hands and arms		1 week	+	10	6 weeks	Improved
40	43	Tinea	Feet	Vesic and scaly	1 month	+++	7	5 weeks	Improved
41	55	Tinea	Feet and hands	Vesic and scaly	2 months	+	5	4 weeks	Improved
42	32	Tinea	Palms	Vesic. and scaly	3 months	++	2	2 months	Apparently cured
43	35	Tinea	Feet and hands	Vesic and scaly	2 years	++			Did not return
44	38	Tinea	Feet	Vesic and scaly	2 months	+	3	1 week	No change
45	22	Tinea	Hands	Vesic and scaly	3 months	++	9	2 months	Improved and relapsed
46	52	Tinea and Trichophytid	Palms, finger	Vesic and scaly	5 weeks	++	14	2 months	Apparently cured
			Chest and forearms	Scaly patches					
47	34	Tinea	Hands, feet, forearm and ankles	Vesic. and scaly	3 months	+++	12	6 weeks	Improved
48	12	Tinea	Feet and hands	Vesic and scaly	3 months	+++	12	2 months	
49	26	Tinea	Groin	Scaly patches	2 months	++	7	2 months	Apparently cured
50	38	Tinea	Feet	Vesic and scaly	2 months	+++	9	2 months	Improved
51	21	Tinea	Hands	Vesic. and scaly	3 months	+	12	2 months	Apparently cured
52	30	Tinea	Left hand	Vesic and scaly	3 months	+++	10	2 months	Apparently cured
53	49	Tinea	Right foot	Vesic. and scaly	3 months	+	1	2 visits	History of Asthmatic attacks for 3 or 4 years. Had injections for asthma. Attack produced by Trichoph
54	50	Tinea	Feet	Vesic. and scaly	3 months	++	2	2 visits	No record
55	35	Tinea	Feet and hands	Vesic. and scaly	6 months	++++	10	2 months	Much improved
56	44	Tinea	Feet	Vesic. and scaly	4 months	+++	2	2 weeks	Slight improvmt.
57	31	Tinea	Hands	Vesic and scaly	2 years (Recurr)	+	5	1 month	Improved, then flared up. Still under treatmt
58	16	Tinea	Hands and trunk		2 weeks	++	4	3 weeks	Slight improvmt.
59	32	Tinea Versicolor	Chest and back	Scaly patches	2 months	++			

TABLE I—Continued

No.	Age	Diagnosis	Location and Description		Duration	Test	Treatments	Duration Treatments	Results
60	38	Tinea	Right foot		2 months	+	8	6 weeks	No improvement
61	22	Tinea	Feet		4 months	++	3	10 days	Improved, then relapse
62	30	Tinea	Hands		1 month	++			Did not return
63	56	Tinea	Groins, scrotum and axillæ	Scaly patches	1 month	++	7	5 weeks	Apparently cured
64	30	Tinea	Axillæ and groins	Scaly patches	4 years (Recurr.)	++	8	6 weeks	Apparently cured
65	48	Tinea	Right palm	Vesic. and scaly	1 month	+	3	2 months	Apparently cured
66	15	Tinea (infected)	Feet	Vesic. and scaly	6 months	+	6	2 months	Apparently cured
67	59	Tinea and eczema	Feet	Vesic. and scaly	6 weeks	++	7	2 months	No improvement
			Typ. eczema on hands						
68	55	Tinea	Hands	Vesic. and scaly	1 year	+++	4	1 month	Apparently cured
69	18	Tinea	Hands	Vesic. and scaly	4 months	++	4	3 weeks	Much improved
70	28	Tinea	Feet and nails		3 weeks	++++	1	2 visits	Slight improvmt.
71	54	Tinea and eczema	Feet and elbows		1 year	++	3	4 visits	Apparently cured
72	45	Tinea	Hands		1 year	++++	6	1 month	No improvement
73	16	Tinea	Right foot		3 months	++	5	1 month	Practically cured
74	27	Tinea	Palms		2½ months	+	6	3 weeks	Much improved
75	32	Tinea	Right hand		2 months	++	8	3 months	Practically cured
76	21	Tinea	Hands, forearms and feet		5 months	+	4	3 weeks	Improved
77	28	Eczema	Hands, arms and legs		3 years	++	8	2 months	No improvement
78	38	Tinea	Toes		1 month	+	2	2 weeks	Improved
79	30	Tinea	Vulvar region		2 weeks	+	1		Cleared and Rec.
80	34	Tinea and Paronychia	Hands		4 years	++	6	1 month	Marked impvmt.
81	30	Tinea	Hands and feet		2 months	++	8	6 weeks	Much improved
82	16	Blepharitis, Marginalis	Eyelids		years	++	8	2 months	Practically cured
83	30	Pruritus	Anal and scrotal regions		6 weeks	++++	3	1 month	Apparently cured
84	38	Eczema, acute	Face, neck, ears and scalp			+++	4	5 weeks	Improved
		Tinea	Palms						
85	43	Pruritus	Scroti. Also dyshidrosiform eruption of hands and left foot		1 year	++++	13	3 months	Apparently cured
86	66	Pruritus	Arm and scroti		5 years	++++	4	5 weeks	Apparently cured
		Tinea	Toes, vesic. and scaly						
87	35	Tinea and Eczematoid, Dermatitis	Thick infiltrated, red, scaly areas on each buttock, extending into gluteal cleft; around anus and on perineum. Moist, whitish, scaling patches. Mycotic desq. between toes		3 years	++++	6	6 weeks	Practically well
88	32	Tinea	Right palm and toes		10 months	++++	4	3 weeks	Much improved
89	35	Tinea	Hands and feet		5 months	++	13	3 months	Improved
90	58	Tinea	Toes		30 years	++	5	2 months	Apparently cured
91	16	Tinea	Feet, vesic. and bullous		3 months	+	8	6 weeks	Apparently cured
92	31	Tinea	Toes		4 months	+	7	2 months	Improved
93	22	Tinea	Hands		1 year	+	5	6 weeks	Improved
94	37	Tinea	Hands		4 months	++	14	3 months	Much improved
95	25	Tinea	Hands		1 year	+++	4	2 weeks	No improvement
96	24	Tinea	Toes		6 months	++	8	1 month	Much improved
97	57	Tinea	Toes		8 months	++	5	1 month	No improvement
98	18	Tinea	Hands		7 months	+++	4	3 weeks	Improved
99	36	Tinea	Hands		1 year	++	15	2 months	Improved
100	43	Tinea	Hands and feet		3 months	++	5	1 month	Improved

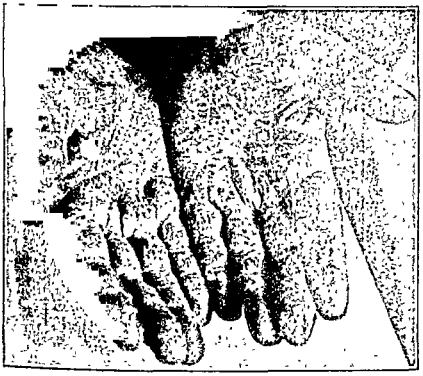
shown that the skin is a very important depot for the storage of sugar and that its sugar content is in direct ratio to that of the blood. This may have some influence in increasing susceptibility, and although we have not found that a restricted carbohydrate alone is curative, it does seem to be an important aid in the handling of these cases. As regards blood chlorides, urea nitrogen and uric acid, no marked deviation from the normal was observed.

During this investigation, it was noted that recurrences or exacerbations were uniformly seen when the curative injections were not continued until there no longer appeared any reaction at the sites of injection; or in other words, until a general desensitization had been developed. We think this is extremely important.

Table II shows the results of thirty patients used as controls in the application of the trichophytin test. Clinically these patients were free

from mycotic symptoms. The trichophytin extract used in these experiments was freshly prepared and free from bacterial contamination.

In a series of patients suffering with Pityriasis Rosea the trichophytin test was *positive* in *all* cases. This will be reported in detail in a future paper.





FIGURES 1 AND 1A. PATIENT NO. 7

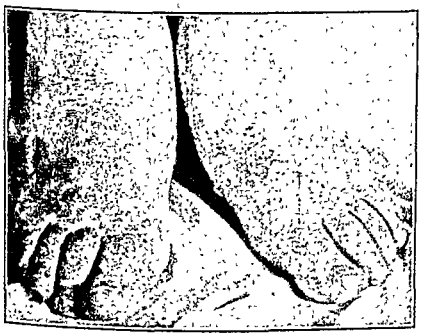
Tinea of the Hands and Feet, Vesico-pustular Type.

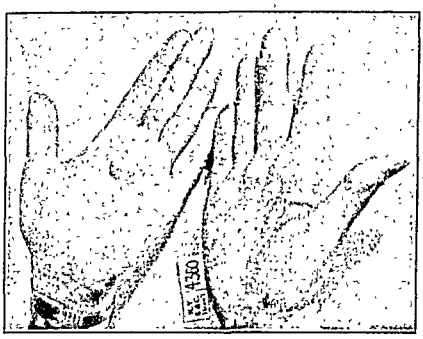
SUMMARY

One hundred cases of mycotic-like eruptions which gave a positive trichophytin test were treated with subsequent intradermal injections of trichophytin. The clinical results observed over a short period were as follows:

Apparently cured 32 per cent; greatly improved 28 per cent. Slightly improved 21 per cent; unimproved 19 per cent.

Sufficient time has not elapsed to allow any conclusions as to the duration of the immunity which this method of treatment may produce.





FIGURES 2 AND 2A. PATIENT NO. 24

Tinea, showing intertriginous lesions on the toes and dyshidrosiform eruption on the palms.

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TABLE II

CONTROLS

No.	*Age*	*Clinical Diagnosis*	*Location*	*Duration*	*Trichophytin Test*
1	11	Psoriasis	Scalp, trunk	3 months	Negative (3 tests)
2	24	Erythema Mult.	Neck	2 weeks	Negative
3	42	Eczema	Left palm	5 years	Negative
4	23	Dermatitis	Hands	1 week	Negative
5	22	Eczema	Arms, legs and neck	Life	Negative
6	14	Erythema Mult.	Hands and feet	2 weeks	Negative
7	25	Dermatitis	Hands	2 weeks	Negative
8	13	Eczematoid Dermatitis	Anal region	1 year	Negative
9	20	Eczema	Hands	1 year	Negative
10	26	Psoriasis	Scalp	5 years	Negative
11	54	Keratosis	Right foot	6 months	Negative
12	13	Seb. Dermatitis	Scalp	1 month	Negative
13	16	Lupus Erythema	Face and neck	1 year	Negative
14	28	Folliculitis	Anal region	3 months	Negative
15	39	Pruritus Ani	Anal region	9 months	Negative
16	40	Eczema	Breasts	2 years	Negative
17	12	Eczema	Neck and back	3 months	Negative
18	30	Seb. Dermatitis	Scalp	4 weeks	Negative
19	34	Eczema	Hands	2 years	Negative
20	27	Trichotillomania	Scalp	2½ years	Negative
21	28	Eczema	Neck and arms	3 months	Negative (8 tests)
22	20	Acne	Face	1 year	Negative
23	50	Eczematoid Dermatitis	Ankles and thighs	4 years	Negative
24	45	Urticaria	Generalized	6 months	Negative
25	22	Dermatitis (Bichloride)	Hands and arms	6 months	Negative
26	12	Granuloma Annulare	Hands	1 year	Negative
27	53	Dysidrosis	Hands	2 weeks	Negative
28	35	Eczema (Trade)	Hands	8 months	Negative
29	32	Eczema (Trade)	Hands	3 months	Negative
30	40	Lichen Planus	Arms and legs	2 months	Negative

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THE MANAGEMENT OF DIABETICS IN GENERAL PRACTICE*

By LEO F. SCHIFF, M.D., PLATTSBURG, N. Y.

THE discovery of insulin and the research connected with it, has vastly increased our knowledge of Diabetes Mellitus, and materially altered our conception of the disease and its treatment. We now know that the disease is a condition of lowered function of the cells of Langerhans in the pancreas resulting in deficient carbohydrate metabolism. The significance of glycosuria as a symptom and as an indication for control of treatment fails, for we may have diabetes without glycosuria and often encounter glycosuria that is not diabetic. It is upon the demonstration of hyperglycemia that the diagnosis rests; and estimations of blood sugar content are necessary from time to time to assist in regulating treatment. For those in contact with adequate laboratory facilities, this matter presents no particular difficulty, but for the practitioner in the isolated community, conditions are different. Deterioration often occurs rapidly in samples of blood sent to the laboratory for sugar estimation. Reliable results are obtained only when the test is performed soon after taking the specimen. It is, therefore, impractical to attempt to send blood to a laboratory situated at any distance. This fact together with the dietetic arithmetic involved, has deterred many from undertaking the treatment of diabetes in general practice, and led to the establishment of special diabetic clinics in many hospitals, and intense specialization along this line in the practice of medicine. Such conditions work out satisfactorily in larger communities with hospital facilities, but the diabetic is a diabetic all of the time whether he is at the hospital or at home, and this condition complicates all of the other ailments to which he may be subject and for which he may need to be treated by his family physician. Of course, there are certain phases of the disease which demand hospitalization if possible, but after the emergency is over the patient still needs the advice of a physician. It is not always easy to go a considerable distance and at considerable expense, for a consultation and check-up. It is, therefore, the obvious duty of the family physician to acquaint himself with the management of the disease, and where laboratory facilities are not readily available, to equip himself for sugar determination in his office. The extreme accuracy of a highly technical laboratory procedure is not necessary; a simple method with not too great a factor of variability will do very well. I have found the micro method of Epstein satisfactory.

The successful treatment of any condition involves an appreciation of the etiological factors, the pathology and significance of the various symptoms together with clinical and laboratory findings. The etiological factors behind the pancreatic dysfunction of diabetes are many, and it is not necessary to enter into a discussion of them here. It is well to recall, however, that this dysfunction may be due to cell changes of a temporary and remediable character, and that such cases of diabetes are really curable. In most instances there has been irreparable cell destruction, but added to this is usually a functional disturbance of the remaining cells of the pancreas from the overwork caused by the stimulation of a relatively high carbohydrate intake. I would particularly call attention to cases of diabetes in middle age and later, which are probably secondary to a general arteriosclerosis and are often progressive. A great many cases of so-called diabetic gangrene prove to be due to arteriosclerosis, and the diabetes is an associated condition. These patients require in addition to the treatment for diabetes, treatment for the arteriosclerosis.

Inasmuch as nature is most bountiful in providing us with capacity far beyond our average requirements, a moderate interference with the glycolytic function of the pancreas produces no apparent ill effects. It merely diminishes the capacity for carbohydrate utilization. When the interference is great enough to reduce the glycolytic function below the daily needs of the patient, clinical diabetes ensues. There is a rise in the blood sugar, at first only after the ingestion of food, later more or less constant. Then the kidney threshold for glucose is reached and glycosuria ensues. Eventually the body becomes unable to metabolize sufficient glucose for its daily needs and there results a marked disturbance in the metabolism with loss of weight and strength ending in ketosis. These latter manifestations together with the increased susceptibility of the glycemic patient to infection, constitute the graver aspects of the disease.

Before undertaking the treatment of a diabetic condition, one should endeavor to estimate approximately the extent of the glycolytic deficiency. If the body can still metabolize sufficient carbohydrate to maintain the patient's usual life without the danger of ketosis, it is necessary only to restrict the intake. But when sufficient carbohydrate cannot be utilized, a restriction of the intake, although it may cause the disappearance of glycosuria and of hyperglycemia, is not sufficient. The body will slowly starve, metabolic process gradually become perverted, and ketosis will ensue. It is, therefore, evident that the prime object of treatment in such a case is to see that the patient ingests *and metabolizes* (with the aid of insulin) sufficient carbohydrate to maintain himself without disturbing his acid-base balance. It is far wiser to err on the side of moderate over-

* Read before the Fourth District Branch of the Medical Society of the State of New York at Saratoga Springs, September 9, 1929.

feeding with resultant slight hyperglycemia and glycosuria and to be sure that sufficient insulin is taken to maintain proper metabolism. On the other hand, extremely high feeding and unnecessarily large amounts of insulin tend to produce increase of weight beyond the desirable.

Although glycosuria is no longer the criterion for a diagnosis of diabetes, it is still one of the earliest and most important symptoms in that it calls attention to the existence of the disease in the majority of cases. The sugar may be found in the routine examination of the urine of a patient in whom a diagnosis of diabetes was not suspected; or there may be other symptoms suggesting the diagnosis, as weakness, loss of weight, excessive thirst or appetite, polyuria, eczema particularly about the genitals, furunculosis or gangrene. The absence of sugar in the urine of a patient presenting any of these symptoms will not rule out diabetes and a blood test will be necessary. Whenever sugar is found in the urine it should also be tested for diacetic acid, with Ferric Chloride, being careful not to be deceived by the purple reaction following the ingestion of aspirin and allied drugs.

CHART I

LOW CARBOHYDRATE TEST DIET

Breakfast
1 egg
1 cracker
Tea or coffee

Lunch
1 cup clear broth
1 dish (3 oz.) green vegetables, raw or cooked
1 cracker

Dinner
1 egg
1 dish vegetables, as before
1 cracker
1 cup of tea, coffee, or broth
Use saccharin if desired to sweeten tea or coffee.
Use cream in preference to milk.

Vegetables to be taken from list below. They may be eaten raw with a little oil and vinegar, or cooked in water without any flour thickening.

Egg may be prepared in any manner desired.

A reasonable amount of butter may be used on the cracker.

The above diet contains approximately 22 grams of carbohydrate, 15 grams of proteid, and 15+ grams of fat, with a calorie value of approximately 300.

Lettuce	Dandelions	Cauliflower
Cucumbers	Swiss Chard	Egg Plant
Spinach	Celery	Cabbage
Asparagus	Mushrooms	Radishes
Rhubarb	Tomatoes	Leeks
Endive	Brussels Sprouts	String Beans, canned
Marrow	Water Cress	Broccoli
Sorrel	Sea Kale	Artichokes
Sauerkraut	Okra	
Beet Greens		

Glycosuria may be due to:

1. Excessive ingestion of carbohydrate beyond the capacity of a normal pancreas (alimentary glycosuria).

2. Deficient glycolysis (diabetes mellitus).

Both of these conditions will be accompanied by hyperglycemia.

3. Persistent excretion of sugar by the kidneys without hyperglycemia (renal glycosuria).

If the patient presents no grave symptoms and there is no more than a trace of diacetic acid in the urine, he may be given an extremely low carbohydrate diet (Chart I) for from three to five days and directed to return for further examination. His weight should be recorded. The appointment for the next examination should be at a time when a satisfactory specimen for blood examination can be taken; that is, either before breakfast or at least three hours after the meal, and the patient should bring with him a mixed specimen of urine of that morning and the night before. In most cases this will be as satisfactory as a full twenty-four hour specimen. The examination of the blood and of the specimen of urine will throw a great deal of light on the patient's condition. There are four possible combinations of results.

1. Urine free of sugar, blood approximately normal. In this case the patient should be placed on a diet sufficient to maintain energy. Roughly such a diet may be constructed by allowing 2/3 gram of carbohydrate for each pound of body weight (a little less than this if the patient is obviously overweight) and using the dietary score card (Chart II) which accounts only for carbohydrate ingested as such, and disregards the available carbohydrate in proteid and fat. Ordinarily a patient will not take an excessive amount of proteid and fat in combination, but if he is not satisfied with his diet or there is any reason to suspect that he is taking too large a proportion of proteid and fat, it is well to construct a diet list for him. There are many excellent tables readily available to assist in making out such a list. The condition of the blood and urine, and the patient's weight and general condition, determine the further regulation. Loss of weight calls for an increase in diet. A rise in blood sugar beyond 150 calls either for a decrease in the diet or the administration of insulin.

2. Urine free of sugar and the blood sugar over 150. Such a case should be considered as at least of moderate severity, the diet raised to maintenance standard and insulin administered. It is well in beginning the administration of insulin, in the absence of complications, to divide the diet so at least 40% of the carbohydrate is taken at what is usually the patient's largest meal and to give 10 units of insulin at that time. Further tests may indicate the necessity for increasing the amount of insulin. If over 10 units are needed, it is well to give at least two doses. In following the progress of a patient under this treatment it may be advisable to arrange for blood sugar tests at different times of the day so

CHART II

DIABETIC SCORE SHEET

(Each point equals approximately 1 gram of carbohydrate)

Your score is:

Breakfast .....
Dinner .....
Supper .....

1 cracker counts	5
1 tablespoonful cereal, dry	10
1 shredded wheat biscuit	20
1 medium orange or apple	10
½ medium grapefruit	10
1 dish green vegetables	5
1 dish root vegetables	10
1 glass of milk	10
½ slice of bread, ½" thick	12

Add to this, eggs, meat, fish, cheese, butter, cream (no milk), tea, coffee, broth, gelatin with fruit juice flavor and saccharin.

Do not use flour gravies or cracker crumbs to fry in (unless you count the cracker in your score) No liver or sausage.

Use saccharin to sweeten.

as to get the blood sugar level before and three hours after the administration of insulin.

3. Sugar present in urine and the blood sugar low. In this instance we have a case of renal glycosuria. The patient should be put on a maintenance diet and the test repeated after a reasonable interval, to see whether a true diabetes may exist with the renal glycosuria, a condition which often occurs. If on the second visit there is still no evidence of diabetes, the diet may be raised and a third test taken after another interval.

4. Sugar present in the urine and high in the blood. The procedure is the same as in Paragraph 2.

If at the first examination the patient shows in addition to sugar, a considerable amount of diacetic acid, it is advisable to take a blood test at once and proceed with the administration of insulin, giving more carbohydrate than necessary at first in order to minimize the danger of insulin shock and the discouragement of the patient at the outset. In cases presenting the more severe aspects of the disease or complications, immediate hospitalization is preferable, but if not practicable the patient must be given a reasonably liberal carbohydrate diet and insulin. Frequent blood tests will give the indications for changes in the diet and medication, but so long as there is any evidence of acidosis, it calls for more insulin, and this in turn for more carbohydrate if the blood sugar is low. In the absence of facilities for blood sugar tests it is safer to ply the patient liberally with carbohydrate and control insulin administration by testing the urine. As long as diacetic acid is present it calls for more insulin, and this in turn for more carbohydrate, sufficient to maintain a trace of sugar in the urine.

In all these cases, better results may be secured if one takes the time to explain to the patient the reason for doing the various things. Booklets for patients' use on this subject have been published within the last few years. In the regular management of a case, one must wait a sufficient time after making any change in diet or insulin before attempting to evaluate the results.

THE PROSTATE GLAND FROM THE VIEWPOINT OF THE INTERNIST

By JOSEPH R. WISEMAN, M.D., SYRACUSE, N. Y.

MOST of the literature on the prostate gland has come from the pen of the surgeon or the urologist. An appraisal of this important organ through the eyes of the internist has seldom been attempted. In 1915[1] I published some observations along this line of thought, and for many years have made a systematic examination of the prostate gland an integral part of the routine investigation of each male patient.

The prostate gland is both a urinary and a sexual organ. About the size of a horse-chestnut it is situated at the neck of the bladder and is penetrated by the prostatic portion of the urethra. From the capsule strands of muscular and connective tissue radiate internally to form the supporting structure of the tiny but important prostatic glands, the secreting structure of the organ. These glands resemble minute bunches of grapes whose fine ducts join with each other and finally empty by 15 or 20 openings on the floor of the prostatic urethra along the sides of the veru montanum. "The two ejaculatory ducts pass through the substance of the prostate and empty upon the summit of the veru montanum, a small but important muscular structure which forms part of the floor of the prostatic urethra.

"The prostate gland is provided with a free blood supply, and is surrounded by a plexus of veins so large and so closely interwoven as to suggest the cavernous spaces of an erectile tissue. The veins of the prostate form one of the connecting links between the portal and inferior caval systems. The nerve supply shows an extraordinary wealth of nerve fibers, ganglion cells, and nerve end-organs. It is conceivable that the unusually rich blood and nerve supply of the prostate may determine on the one hand the readiness with which the gland undergoes congestive changes, and on the other hand the numerous local and general nervous manifestations associated with prostatic inflammation.

"After studying the structure of the normal prostate it becomes easy to understand some of the changes which chronic inflammation brings about. If, for example, there is an increase of the connective tissue sufficient to compress some of the numerous tiny ducts the secretion of the tubular glands becomes dammed back, dilatation of the glands follows, and often small cysts are formed. The inflammatory changes may involve principally the stroma which increases in density, thereby producing a hard prostate, or the glandular structures may bear the brunt of the inflammatory changes and become distended with purulent secretion. In the latter instance an enlarged but soft or adenomatous prostate results. As a rule, both the glands and the interstitial tissue are involved, although often in unequal degree. Cases of long standing with much sclerosis show contraction or even obliteration of many glands."[1]

Chronic prostatitis is the most common disorder of this organ. How does infection take place? In acute gonorrhea the organisms make their way into the prostate directly from the urethra in an immense majority of patients. The gonococcus, however, usually dies out relatively soon, and is seldom demonstrated in the prostatic secretion after the lapse of 3 years. How are we to account for the numerous cases of chronic prostatitis showing evidence of infection for much longer periods of time? How can we explain the not inconsiderable proportion of cases of prostatitis in which the existence of a previous urethritis can clearly be excluded? The present day tendency is to regard blood stream infection from near or distant foci as the probable answer to these questions. Wolbarst[2] and Wohlstein[3] have called attention to the existence of a previous low grade nonvenereal prostatitis in cases of acute anterior gonorrhea which had as yet shown no evidence of posterior involvement. In 100 such cases of acute anterior gonorrhea (first infections) Wolbarst found evidence of previous prostatitis in 30 per cent. In nonvenereal prostatitis the infecting organisms probably come from common foci such as teeth, tonsils, gall-bladder or rectum. They may involve the prostate after various acute diseases. It has long been believed that such sexual practices as coitus interruptus, excessive masturbation or intercourse, and prolonged sexual excitement without gratification lead to a chronic congestion of the prostate which paves the way for infection to take place. Pelouze[4] states that an enormous percentage of males presenting infected teeth and tonsils also have infected prostates and considers the male focal infective triad to be teeth, tonsils and prostate gland. He believes that general lowered resistance is an important factor and that in many instances we are dealing with an individual, who among other difficulties has an infected prostate gland. Pelouze[4] cites the case of a man who because of slight nocturnal frequency of urination presented himself for prostatic study 6 times within a year. Each time the prostatic secretion had been absolutely normal. Some weeks later he had an acute inflammation of one tonsil. Six weeks after this event his prostatic secretion contained countless large clumps of pus while the gland had become acutely tender and decidedly enlarged.

Wildbolz[5] considers hematogenous or metastatic prostatitis a common disease. He cites the occurrence of metastatic involvement of the prostate in general infections such as pyemia, miliary tuberculosis, pneumonia, etc. He observed 36 patients with normal urinary passages in whom a metastatic prostatitis followed influenza, a slight sore throat, a gastrointestinal disturbance or showed no evidence of the original cause. Since the prostate gland furnishes a favorable site for the localization of organisms, he believes it possible that in patients in whom a few organisms circulate in the blood stream without causing symptoms, they may settle in the prostate and produce a latent prostatitis. Young,[6] however, feels that the hematogenous origin of prostatitis is not proven.

VonLackum[7] believes that 40 per cent of prostatitis is of hematogenous origin. A comparative bacteriological study of various foci of infection in the absence of any history of previous urethritis, has often shown the same strain of streptococci in periapical tooth lesions, tonsils and prostate. In 405 cases, carefully made cultures of the prostatitic secretion gave the following results; streptococcus 36 per cent, staphylococcus 22 per cent, sterile 35 per cent. Of 1,667 cases of chronic prostatitis a history of gonorrhea was obtained in 74 per cent. Young[8] found a history of gonorrhea in 73 per cent of 358 cases. VonLackum[7] cites three probable mechanisms by which the infected prostate produces general symptoms;—the infection or the focal toxins may be conveyed from the prostate by the blood stream, or the symptoms may be reflex. Among the clinical entities which he believes have been proven to be of prostatic origin he mentions arthritis, neuritis, myalgias, ocular infections, secondary anemia, several types of skin disorders, backache, abdominal pain and functional gastric complaints. He adds, however, that the focal role and scope of the prostate have not been fully determined.

The symptoms produced by chronic prostatitis are exceedingly varied. Urination may be frequent, painful or urgent. Premature ejaculations, diminished libido, imperfect erections or frequent nocturnal emissions may be present. Psychic symptoms are common with depression, insomnia, irritability and a psychoneurotic state. Referred symptoms, usually of a painful nature, are probably the most important and as Young[9] states may involve any of the regions from the diaphragm to the toes. Low back pain in the male should always direct attention to the prostate

gland. The pain may be abdominal, simulating gastrointestinal disorders, or may have the distribution of renal colic. It may affect the perineum, hips or thighs. In my experience as an internist most of the cases of chronic prostatitis have been without symptoms referable to the prostate. The affection of the gland was inadverdently discovered during the course of a general examination. In some of the patients, however, considerable relief was afforded by treatment of the prostatic condition both in those individuals presenting prostatic symptoms and in the silent cases where none were present.

The recognition of the condition of the prostate depends chiefly upon rectal touch accompanied by massage, and upon the examination of the expressed prostatic secretion. Additional information may be obtained by the urologist from the direct inspection of the prostatic urethra. The finger in the rectum may find the gland enlarged, indurated, nodular, boggy, or tender, possibly with adhesions which limit its mobility. The seminal vesicles which are situated directly above the prostate are so closely connected to it that often they cannot be distinguished as separate structures. The carcinomatus gland is usually of stony hardness and may be nodular. Tuberculous changes may be difficult to distinguish from those of chronic inflammation, but the occurrence of tuberculous disease in the epididymis or elsewhere and a suggestive history or clinical course are helpful points. Prostatic hypertrophy occurs after middle life and presents a firm elastic gland, uniformily enlarged.

Prostatic massage should be performed when the patient has a fairly full bladder, so that he may void soon afterwards and wash out the expressed secretion. The gland should be methodically stroked with the index finger from above downwards with final stroking along the course of the membranous urethra to clear out the secretion as fully as possible. The exploration should be thorough and cover all parts of the gland as only in this way can accurate knowledge of its condition be obtained. Gentleness, however, is essential. The appearance of the prostatic secretion should be noted and a drop placed upon a glass slide for direct examination. If secretion does not appear at the meatus, stroking along the perineum and urethra will usually bring it out. If no secretion whatever can be obtained the urine voided after massage should be centrifuged, and the number of pus cells present compared with another specimen of urine passed at a subsequent time. This method, however, is less satisfactory than direct examination of the secretion.

Normal prostatic secretion, which usually includes that from the seminal vesicles and vasa deferentia, is a thin milky fluid containing numerous lecithin bodies (round refractile structures the size of a red blood cell) and a few leucocytes, not more than 2 to 6 per high dry field. The appearance of pus cells in greater numbers indicates inflammation of the gland. Pus cells in clumps are pathognomonic of infection. Even though prostatitis be present pus may not appear the first time the gland is examined. It may require 2 or more massages before pus is finally obtained from an infected gland. In some instances the prostate may feel entirely normal per rectum, yet large numbers of pus cells are found in the expressed secretion. The entire diagnostic procedure can be done very quickly and the microscopic examination of the fresh secretion can be completed in a moment or two. I am convinced of the great value of the combined procedure of palpation of the prostate gland by massage together with the microscopic examination of the prostatic secretion, in order that an appraisal of the condition of this organ may be obtained. Hugh Young[8] states that if this procedure were routinely followed in physical examinations, "many a poor individual who has continued to suffer while stigmatized a neurasthenic would find relief, many a case of supposed rheumatism, sciatica, lumbago, and renal colic would be correctly diagnosed and cured."

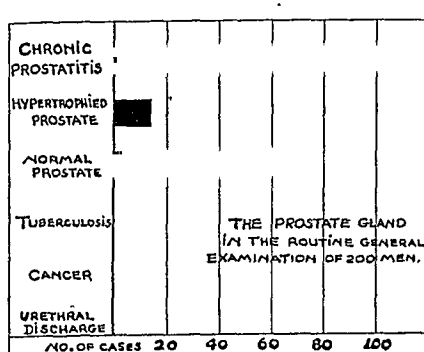


Chart No. 1

I have examined my office records of the last 200 males who received a routine general examination. They consulted me because of a wide variety of general symptoms, few of which were related to the genito-urinary tract. They formed quite a different cross section of medical practice than would 200 males seen in the office of a urologist. One hundred and eight cases, 54 per cent, showed evidence of chronic prostatitis. Fourteen cases, 7 per cent, had hypertrophied prostates. Seventy-eight were considered normal. Neither carcinoma nor tuberculosis was noted in this group. The total number of cases in the

series showing disease of the prostate, either inflammation or hypertrophy, was therefore 122 or 61 per cent, a strikingly large group which fully justifies the use of the diagnostic measures above described. Although the number of cases is not great, it seems of sufficient size to indicate a definite trend. It must further be noted that in not a single patient was any urethral discharge present. Other authors have variously estimated that from 35 to 90 per cent of all adult males have infected prostates. Wear[10] quotes Von-Lackum to the effect that in a review of 2,000 cases, 35 per cent showed some degree of prostatitis.

The age distribution (chart 2) of the prostatic cases shows a proportionate increase after the age of 50. The youngest patient was a strapping big lad of 17, referred by an ophthalmologist because of a hemorrhage into the vitreous of one eye thought to be due to tuberculosis of a blood vessel. The prostate gland was definitely wid-

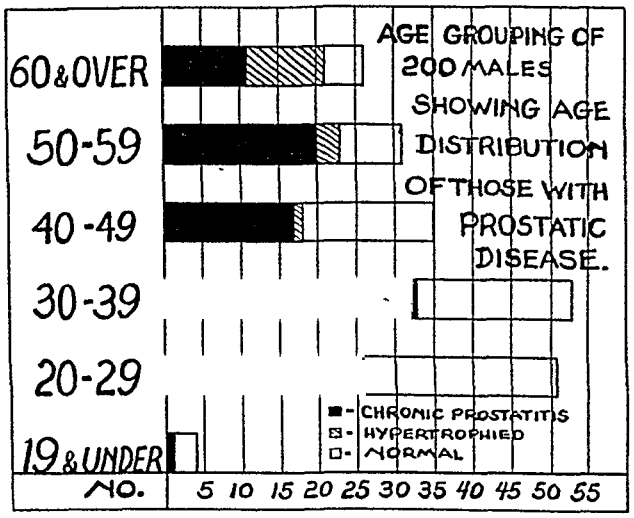


Chart No. 2

ened and somewhat indurated with 30 pus cells per high dry field in the prostatic secretion.

Chart 3 shows the most frequent collateral diagnoses in 108 males with chronic prostatitis. Two or more conditions often occurred in the same patient. The high incidence of chronic tonsillitis, 42 cases, is noteworthy.

I shall only touch upon the treatment of chronic prostatitis. The time-honored method of prostatic massage still holds first rank as the most effective method available. The beneficial effects of massage not only come from the mechanical expression of thickened or purulent secretion, and the softening of adhesions, but from the stimulation and improved circulation which follows, with absorption of inflammatory infiltrations. Inasmuch as the prostatic urethra shows varying degrees of inflammation in most cases, massage is often followed by the instillation of a mild antiseptic into the posterior urethra. The urologist frequently fills the bladder with an antiseptic solution before massage is done. Certain other urological procedures may be necessary such as dilatation, the relief of stricture, or direct application of medicaments to the urethra. Of late years physiotherapy in its various forms has received recognition in the treatment of this condition. Vignal[11] has employed the high frequency current, diathermy, and Roentgen-ray therapy. He quotes Wetherer who gives statistics covering

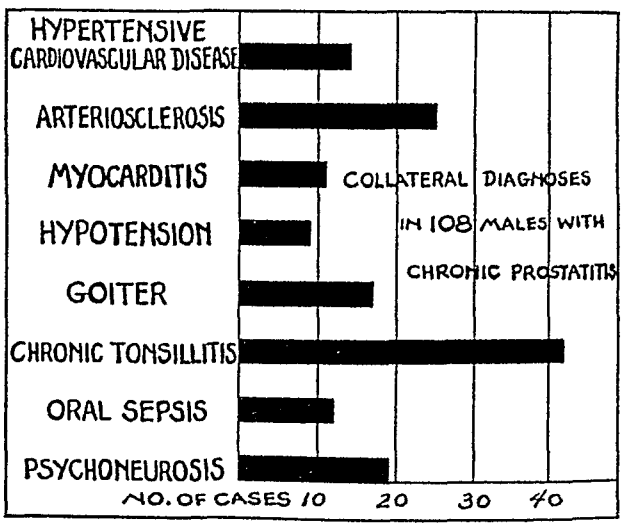


Chart No. 3

the treatment of 956 patients by means of the Roentgen-ray. Finally, a search should be made for other foci of infection which may be keeping the prostatic disease active, in order that these foci may be eradicated wherever it appears reasonable to do so.

Conclusions:

1. The routine examination of a male is incomplete unless it includes an investigation of the prostate gland by finger and microscope.
2. Chronic prostatitis is one of the commonest conditions present in adult males.

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THE RECOGNITION OF THE MORE COMMON NERVOUS AND MENTAL DISORDERS*

By CHARLES ROSENHECK, M.D., NEW YORK, N. Y.

THE vulnerability of the central nervous system to noxious influences expresses itself, figuratively speaking, from the cradle to the grave. The pediatrician in particular always works in a fertile field of rigid necks, palsies and squints, Brudzinski and Babinski phenomena, Kernig's sign, convulsive reactions and stupors, so that a discussion of nervous disorders in infancy and childhood may, I hope, serve as an introduction to the subject. It is my purpose in this manner to include the major specialties, to address each specialist in turn, and to help him interpret the language of the central nervous system.

Due to the incomplete development of the architecture of the brain in childhood, and the resultant loss of inhibition, a release phenomenon which expresses itself in convulsive movements is very common in childhood. This may be purely reflex from distant points of irritation which is not under consideration at present, or what is most likely, it may usher in an acute infectious disease of the central nervous system. I am also omitting from consideration extra-neural processes which are ushered in by convulsive manifestations. A good differential point whether the convulsion is of a benign type or is the forerunner of an inflammatory disease of the cerebrospinal axis, is the state of consciousness. If this is lost, and the loss is continuous, it speaks for inflammation. Obviouly the presence of signs such as rigid neck, Kernig's phenomena and reflex changes readily corroborate the diagnosis. The type of infection can only be determined by appropriate studies of the cerebrospinal fluid. It might be well at this point to stress the fact that lumbar puncture and the examination of the fluid contained in the subarachnoid spaces of the cord is a "veritable biopsy of the central nervous system" and should be resorted to as routinely as one makes blood counts or urine examinations. Not all of the infections of the central nervous system give clear cut clinical evidence of their presence. A lumbar puncture quite often helps in obscure or ill-defined cases which for some reason or other fail to yield neurologic signs indicative of involvement of the neural axis.

The most common infections are cerebrospinal meningitis, tuberculous meningitis, anterior poliomyelitis, and the various encephaliditis. The secondary types due to otitic disease or sinus involvement are not under consideration. These express themselves dramatically enough and are readily recognized.

Text-books are wont to stress the fact that cerebrospinal meningitis and poliomyelitis are apt to come on acutely and that tuberculous meningitis is essentially insidious in its development. Although this is true for most cases, the reverse is true in many instances. A striking instance of this was the case of a child who had an undetermined knee joint swelling, which was manipulated for some unexplained reason. Within twenty-four hours signs of an acute meningitis developed, with death in one week. The postmortem revealed a frank tuberculous meningitis.

A difficult situation arises when poliomyelitis presents itself in endemic form. It may simulate influenza, gastroenteric disease or some undetermined febrile disturbance. It is only when paralysis develops that the true nature of the disease is recognized. To recognize the malady in the preparalytic stage is at times difficult but always possible if one notes carefully the presence of root pains, meningeal phenomena and reflex abnormalities. The spinal fluid examination helps tremendously.

The various encephaliditis—epidemic and toxic—are quite common in childhood and tax the diagnostic acumen of both neurologist and pediatrician. The absence of meningeal phenomena in both is worthy of note. The cellular reaction in the spinal fluid is very often within normal limits or slightly increased. The epidemic type limits itself as a rule to midbrain, basal ganglia and brain stem. Somnolence or insomnia may be present but rarely stupor or loss of consciousness. The outlook for recovery in epidemic encephalitis is good, but conduct disorders, personality changes, or the Parkinsonian syndrome, are the inevitable sequelae. Toxic encephalitis affects the cortical elements, producing stupor, loss of consciousness and a high mortality.

A distinct type of encephalitis—the socalled infantile cerebral palsy of childhood—deserves special mention. This may be primary of obscure etiology or, as has been considered by competent authorities, a variant of poliomyelitis. Many cases however, are secondary to the acute infectious diseases of childhood. Paralysis of one-half of the body gives these cases their distinctive stamp. This remains as a residual for the rest of the patient's life, unless the attack is mild. In view of the fact that the encephalon is struck down in the developmental period of life, before the period of psychic evolution, arrest of mental development in various forms invariably occurs.

Syphilis of the central nervous system while not very common in childhood occurs often enough, and in much the same way as in the acquired forms of later life. I have seen menin-

*Read before the Clinical Society of the Jewish Memorial Hospital on March 3, 1931.

geal, vascular and myelitic forms or combinations of these. I have observed and reported cases of juvenile tabes and juvenile paresis. With certain exceptions they do not differ from cases seen in adult life in their behavior and the objective neurologic signs. The serology of the blood and spinal fluid in all forms of neurosyphilis of childhood shows a higher degree of positive reactions than in the adult types.

The diagnosis of amaurotic family idiocy, should be suspected when an infant previously in good health and mentally alert, becomes listless and apathetic, shows gradual widespread motor weakness of the extremities, is apparently insensitive to visual stimuli, and shows the characteristic cherry-red spot in the macula. The deep reflexes gradually diminish, and when the disease is fully developed, they disappear entirely. I have been impressed by the fact, that this affection is not as common as it was in years gone by.

Neoplasms of the brain are common enough in childhood and should be suspected, in the presence of unexplained continued headache, persistent vomiting without cause, motor disability and difficulty in the maintenance of posture or balance, convulsions, conduct changes, stuporous attacks, or mental deterioration. Choked discs may occur very early or very late, depending on the location of the growth and its interference with the normal flow of the fluid in the ventricular system. In contradistinction to the common event of tumors of the brain in childhood, their rarity in the cord, has been the experience of most neurologists. The only case I have ever seen (a girl of 12) is at present under my care. The pensori-motor paralysis developed within two months after the onset of insignificant pain of a root character in the upper chest. A laminectomy revealed an epidural growth which proved to be a hemangioma.

The surgeon unless he bear in mind the possibility that diseases of the brain or cord in their initial symptomatology may produce purely pseudo-visceral disturbances, will often operate in the belief that certain intra-abdominal organs are the seat of pathological changes. As illustrative examples, I may cite a case of persistent vomiting upon which a gastroenterostomy was performed, in spite of the insistence of an internist that the cause of the vomiting was not due to intra-abdominal disease. Subsequent events proved the internist's contention. A brain tumor which for the time being had failed to give cerebral signs, explained the distressing and continuous vomiting. Another recent case concerned the performance of an operation by an experienced surgeon for a supposed hernia, which was undertaken to relieve persistent pain. The continuation of the symptoms led to a more careful examination which revealed the source of the disturbance, in the spinal roots. A meningo-radicular lues revealed the etiology. The unequal patellar reflexes and the pupillary anomalies, were just as accessible to the surgeon as to the neurologist.

The tabetic and the patient with spinal cord tumor are very often subjected to useless surgery, before the true nature of the disease is recognized. The tabetic less so than the patient with tumor of the cord. It is relatively easy to recognize a tabetic. Absent patellar and achilles reflexes plus Argyle-Robertson pupillary phenomena can mean nothing else. The cord tumor case is not as easily recognized. This of course applies to the early stages when irritative phenomena limited to one or more roots are the only symptoms. It is on this stage that most operative procedures have been undertaken in the mistaken belief that a diseased gall bladder, appendix or other abdominal viscus was responsible for the painful symptoms. Obviously when cord compression has occurred and paralytic and sensory phenomena are present no such error is likely to occur. It is in the pre-paralytic stage that the surgeon should bear in mind the possibility of cord neoplasm. I know of no easy way to impart such information to the surgeon. The persistence of pain limited to the distribution of one or more root segments, with sensory disturbances either in the root area involved, or more distally if the long fibre tracts of the cord are compressed, plus reflex anomalies either deep or superficial should arouse the suspicion of cord neoplasm.

The various visceral crises that occur in tabes should always be borne in mind by the surgeon. They may antedate the development of the tabetic signs by years although this is most unusual. I have the record of a case of persistent abdominal pain and vomiting, which was attributed to a diseased abdominal viscus. It was my privilege to examine this case neurologically and found nothing indicative of central nervous system involvement. Within a few years a picture of dementia paralytica unfolded itself. In retrospect the nature of the pain and vomiting were readily explained as crisis of central origin. A very common source of root pain which mimics intra-abdominal disease so faithfully that the surgeon is often tempted to operate, is the radicular syndrome secondary to spondylitis of the vertebral bodies. The radiating character of the pain which one would expect in root irritation is not always present. The pain may be sharply localized over an abdominal viscus and tenderness may also be present upon deep pressure thus deluding even the most experienced surgeon. I have had the privilege to see several cases that had been operated upon, with negative findings. A more careful checkup after the operation revealed the true source of the disturbance. *X*-ray of the spine is as a rule negative in the early stages of spondy-

litis. A diagnostic point in obscure cases of abdominal pain is spinal muscular rigidity and limitation of spinal movements.

The internist confronted with similar material as the surgeon, is apt to make similar deductions unless he bear in mind the possibility of neural pathology. In view of his natural conservatism in the treatment of visceral disease, and his wider knowledge of neurologic signs and symptoms, he is not apt to err on the side of radical measures.

The recognition of organic nervous disorders by the internist is obviously important. The busy internist is asked to see a variety of medical conditions, embracing almost all branches of medicine. In this way, considerable neurological material comes under his observation. This ranges from a simple neurosis to an obscure disease of the brain or cord. Let him bear in mind that disturbed neural function of an organic nature always manifests itself as alterations in pupillary outline inequality and sluggishness to light stimuli, decrease or increase of deep reflexes, Babinski phenomenon or its modifications, sensory alterations, palsies, atrophies, involuntary movements of abnormal types, embracing all varieties of chorea, athetosis spasms and tremors. The development of disturbance in gait, either spastic, ataxic or combinations of both, difficulty in executing movements that are usually smoothly and coordinately performed, are signatures of organic disease of the central nervous system. The diagnosis as I have elsewhere indicated is unimportant for the time being. The significance of such signs is to be borne in mind.

On account of the frequency of brain complications in ear, nose and throat conditions, specialists in this field have widened their knowledge of neurologic conditions to an amazing degree. Meningitis either circumscribed or generalized and suppurative encephalitis are seen by the otologist and readily recognized. The association of neurologist and otologist has, I am sure, been mutually beneficial in the evaluation of disturbances in their respective fields.

The neurologist is often asked by the otologist to examine cases postoperatively in which convalescence is delayed or the development of neurologic symptoms manifest themselves concomitant with sinus or ear pathology. A careful interpretation of all factors is obviously essential particularly where a decision has to be made for or against operative intervention. The desperate and very often fatal nature of brain complications makes it imperative that a radical attitude be adopted toward most cases that present neurologic signs either of a focal or generalized nature. Thus a ptosis, ocular palsy, facial pain, neck rigidity, Kernig phenomenon, confusion, clouding of consciousness or reflex alterations are significant and must be interpreted in relation to the clinical background of the original infection.

In these situations examination of the spinal fluid is of great value when the subarachnoid spaces have been invaded by bacteria, nothing is to be expected in most instances from operative interference. When the fluid remains sterile and simply shows cellular increase, the outlook in these cases after operative interference is much brighter.

To the ophthalmologist, the presence of pupillary inactivity, oculo-motor dysfunction and, above all, swelling of the nerve head should indicate to him the neurologic background of the disturbances. This may range from a simple inflammatory condition, such as encephalitis, degenerative diseases like tabes or multiple sclerosis to neoplastic or destructive processes involving the brain parenchyma.

In a general way, the specialties which have been omitted in this discussion except in certain specific instances, are not beset by any particular neurologic difficulties. The same principles of observation and interpretation, heretofore discussed, obviously apply to those engaged in those respective fields of specialization.

Due to the complexity of modern life with its many distractions, mental disorders are on the increase. The recognition of such conditions particularly before the development of frank psychotic symptoms is of great importance. It is the pre-psychotic state that we must all strive to recognize, for at this time a good deal may be done to ward off the final psychic disorganization. Even the recognition of such pre-psychotic trends and the institution of early treatment obviously do not always prevent the development of the full psychosis but may do so in many instances.

Psychosis may be roughly divided into 2 great groups—the emotional and organic. As you have already surmised, the former are primary and purely a disturbance of the affect or emotions, and the latter are secondary to organic disease of the brain. A third group are the so-called toxic-exhaustion forms which I mention independently in view of their occurrence secondary to toxic or constitutional disease. A careful analysis of all the factors involved in a given psychosis is of importance, in determining the background of such psychotic manifestations. One may see a præcox, manic-depressive, paranoidal, or confusional reaction in frank organic brain disease, when as a rule one associates such mental alterations with the purely emotional insanities. As an illustration, I may cite, a fact familiar to all neuro-psychiatrists, i.e., the admission of cases to institutions and classified under the emotional insanities, which on postmortem reveal brain neoplasms, as the cause of the psychosis. Quite recently I was asked to see a case that seemed to me one of simple depression. This was confirmed by the Bellevue psychiatric staff, and an increasing number of neurologists who were consulted. After a few weeks the patient suddenly

became stuporous, developed choked discs, and died. No postmortem was obtained but the inference that a neoplasm was at the bottom of the so-called depression is quite plain. I cite these facts to prove that similar psychotic disturbances may be caused by such diverse situations, as an emotional upset or a more grave organic brain disease.

Here again I want to stress the fact as I did in the early part of my discussion on nervous disorders that the recognition of psychogenic symptoms is of more importance for the time being than the diagnosis.

Personality changes, delusional trends, mood swings, bizarre behavior unmotivated, emotional reactions, pre-occupation with bodily functions, morbid ideas of a subjective character or directed toward members of the immediate family, illogical reasoning, defective insight, etc., all indicate disintegration of normal psychic processes. Bleuler has aptly said that insanity is simply an exaggeration of normal human reactions. If you are able to detect that "exaggeration" and evaluate it in relation to the make-up of the individual and his previous course of conduct, you will readily recognize psychotic behavior.

The time limit imposed upon me prevents a discussion of the psycho-neurosis, the mechanisms of which have been more clearly understood since the epoch-making contributions of Freud and his followers. The English have aply called these the minor psychoses. Due to inherent defects in the make-up of the individual, mainly of a biologic nature, he is unable to adjust himself to the demands that bodily functions make upon his psyche, or to his environment. In contrast to the psychotic who is constantly at war with the world about him, and blames these forces for his failures the psycho-neurotic is in constant conflict with himself, and invariably holds himself responsible for his failures of adaptation. His sense of realization is never disturbed, although he harbors endless fears, obsessions, and compulsions. His actions are colored by an atavistic infantile behavior common in primitive man and uncivilized races. In spite of what has been said the borderline between a psycho-neurosis and a pure psychosis cannot be too sharply drawn, as one occasionally merges into the other.

That numerous psycho-neuroses are the result of somatic disease, infections, endocrine disorders, constitutional disorders, etc., should always be borne in mind and a search for such factors is always to be advised. By the same token the danger of perpetuating a psycho-neurosis should also always be borne in mind if the physician in a mistaken zeal treats pseudo-physical complaints and disregards the psychogenic origin of such disorders.

The difficulties are many in the recognition and treatment of the psycho-neurosis and the final word on the subject will not be said for a long time.

In conclusion I trust that I have imparted to you some of my experiences in the detection of nervous and mental disorders, and help you recognize such signs and symptoms whenever confronted by them.

A TYPHOID INVESTIGATION

By FRANK W. LAIDLAW, M.D., MIDDLETOWN, N. Y.

A circular letter to health officers from the office of the District State Health Officer.

IN our time we have made somewhat strenuous efforts to impart to health officers and public health nurses the fundamental principles of this subject. Our efforts have not always been "crowned with success."

It is, however, refreshing to receive occasionally a report in which the conclusion is based wholly upon assumption.

Recently we asked a nurse to investigate and report on a *single case* (always more difficult than a group.)

The data secured showed that the case had, within the period of incubation, *attended the funeral of a victim of typhoid.*

It would be interesting to know how many investigators would have *stopped at that* and considered the investigation completed and the source *satisfactorily established.*

But this nurse didn't stop there. She continued the inquiry to the point of ascertaining that the new case had partaken of a lunch served at the house of the deceased before or after the funeral.

Here was another very enticing *stopping point* and one which would have appealed with irresistible force to something like ninety-nine per cent of investigators.

In this instance, the inquiry was continued to ascertain *who had prepared that lunch, GETTING BACK TO PERSONS.* It was found that the lunch had been prepared by a person from whom a positive specimen had been obtained in a previous investigation, in which this nurse had not participated.

It's an open book when you have the facts, but you don't get the facts without going after 'em.

RESULTS OF TREATMENT OF TOXIC GOITER FROM STANDPOINT OF BASAL METABOLIC RATE

By GEORGE M. GOODWIN, M.D., and MORRIS K. SMITH, M.D., NEW YORK, N. Y.

WE purpose in this paper to review the experiences of the Thyroid Clinic at St Luke's Hospital in the treatment of toxic goiter for the three years since October 1, 1927 This period is chosen because it coincides with the organization of the clinic in its present form with membership from both the medical and surgical services.

In recent years a great improvement has occurred in the diagnosis and treatment of thyroid toxaemia brought about by the application of methods of testing the basal metabolic rate and by the administration of iodine in the form of Lugol's solution.

The determination of the basal metabolic rate has been particularly useful in separating the cases of pure nervous instability from the true case of hyperthyroidism. It is recognized that two elements compose the syndrome of exophthalmic goiter. One of these results from disturbance of the nervous system the other from disturbance of the body metabolism. These patients present the problem of differentiating between a purely functional nervous disorder and hyperthyroidism. The estimation of the basal metabolic rate has made it possible to classify these cases with a confidence previously not possible. There is of course, a question as to whether a diagnosis of hyperthyroidism is possible in the absence of definite increase in the basal metabolic rate. We cannot go into the question of whether these patients with nervous instability who resemble the true toxic thyroid patient suffer from disturbance of the thyroid of different variety from the type manifesting both nervous and metabolic disturbance. From the standpoint of diagnostic accuracy and for practical purposes of treatment the diagnosis of hyperthyroidism should not be made in the absence of increased metabolic rate. In accepting this diagnostic criterion, however, one must remember that the nervously unstable individual is the type prone to develop hyperthyroidism and that the metabolic disturbance may become engrafted later upon the nervous disorder during continued observation. It is our own feeling that a diagnosis of hyperthyroidism is not proven unless both elements are present. It has been our own experience also in cases in which we have had the opportunity to see the disease develop that in the incipient case of hyperthyroidism, even in the individual previously of stable nervous type, the nervous disorder antedates the metabolic disturbance.

The upper limit of normal for the basal metabolic rate as usually given is +10 per cent. In our experience +20 per cent is a more accurate upper level of normal and in cases with metabolic rates between +10 per cent and +20 per cent we are never sufficiently convinced of the presence of metabolic disturbance to make the diagnosis of true hyperthyroidism. In fact we feel that readings between +20 per cent and +25 per cent should be repeated once or twice since the nervous patient will often give a reading of this kind on the first test and a normal rate on repetition of the test.

The metabolic rate seems to us to form the most reliable criterion upon which to judge the progress and the efficacy of therapy in a given case. The pulse taken under the same conditions as those under which the metabolic rate is tested is a valuable index but more susceptible to fluctuations than the basal metabolic rate and quite unreliable when taken under clinic routine. The introduction of an index such as the metabolic rate by which to judge a patient's course has supplied a definite criterion for the comparison of operative and non-operative types of therapy. Part of the difference of opinion as to the relative merits of different types of therapy has arisen from the variation in severity of the toxaemia. It is futile to compare the course of a case with a metabolic rate of +25 per cent with one whose rate is as high as +50 per cent. It has been well demonstrated that mild cases often run a self-limited course with spontaneous cure. The basal metabolic rate supplies a standard by which cases may be grouped for purposes of comparison and by which therapeutic methods may be judged. The basal metabolic rate while it has established a strict requirement of surgery—prompt and permanent reduction of the rate to normal—has also provided an opportunity to convince its opponents of the efficacy of operative therapy.

Many patients a year or more after the first observation may show great improvement or restitution of health regardless of the type of therapy. There is a difference as to the efficacy of a therapy as to whether the improvement has been gradual as indicated by a gradual fall of the basal metabolic rate over a period of months or whether the therapy has resulted in an abrupt and continued reduction in rate from the institution of the therapeutic method.

A factor which has had great influence in increasing the popularity of surgical therapy has been the introduction, by Plummer, of the administration of iodine in preparation of cases for operation. He chose Lugol's solution as the vehicle for iodine administration, although this particular preparation probably has no advantage over other vehicles containing the same iodine dosage. At the Mayo Clinic the use of Lugol's solution resulted in striking reduction in opera-

tive mortality. Naturally there has been a tendency to adopt iodine as an agent for the cure of hyperthyroidism, but most authorities agree that in severe and moderately severe cases it produces a temporary not a permanent remission of symptoms and that often such a remission cannot be obtained in an individual case more than once. It is doubtful whether its administration in mild cases alters very much the spontaneous course. It is difficult to understand why an agent which has such a striking effect temporarily does not establish permanent control over the disease, but it is evident that its usefulness is in the production of a remission of symptoms during which the safety of operative procedure is considerably increased.

For a long time the fear of post-operative myxedema forced upon the surgeon a conservatism in the reduction of thyroid tissue which not infrequently defeated his purpose as regards the prompt and permanent relief of symptoms. It was recognized later that except in total ablation of the gland the thyroid has a strong inherent tendency to regenerate. The history of surgery shows in general a progression in the amount of thyroid tissue removed up to the present subtotal resection. At first the surgical procedure consisted of a lobectomy and then later sub-total thyroidectomy. The term sub-total thyroidectomy may or did have a very elastic interpretation and there is no doubt that in many so-called sub-total resections considerable amounts of thyroid tissue were left. The operation as standardized at the Mayo Clinic according to Pemberton[1] consists in leaving thyroid tissue equal in amount to 1/6 to ⅔ of a normal gland. A normal gland averages about 25 gm. in weight and leaving ⅔ of a normal gland is very different from leaving ⅔ of goiterous gland weighing 200 gm. or more. Our own experience has led us to increasing thoroughness in thyroid resections up to the conception of a sub-total as expressed above.

The patients upon whom the conservative thyroidectomies were done usually showed definite symptomatic improvement and in six months or a year often had acquired good restitution of health. But their metabolic curves during this 6-12 month interval often showed a gradual descent to the normal level indicating a gradual recession rather than abrupt termination of the toxaemia. This type of response to surgery, with its attendant risk, was not impressive when compared with the course of cases treated with *x*-ray or cases which ran a course to a spontaneous cure.

At this time, which was before the use of Lugol's solution had reduced the operative mortality so remarkably, many of our patients were offered *x*-ray therapy. We have in our own records carefully followed histories of 16 cases (Chart I, B) in which the eventual restitution of health has been equally as good as our surgically treated cases and among these cases are some who have been referred to the Radio-therapeutic Department because of a continuation of symptoms after conservative thyroidectomy. These cases with continuation of symptoms after thyroidectomy seem to respond especially well to *x*-ray therapy.

Our objection to *x*-ray, like that of others, has not been that eventual restitution of health did not occur but that too much time is consumed in obtaining the result. Indeed since it has been demonstrated that a certain number of cases of hyperthyroidism run a self-limited course to a restitution of health it is difficult, in the individual case, to prove the influence of an agent which takes as long as radio-therapy in bringing about the termination of the toxaemia. Cases of our own in which we have seen a toxaemia drag on for over two years in one instance and for 18 months in another and show marked improvement after three months of radio-therapy convince us of the efficacy of this treatment though we cannot supply statistical proof.

We believe that *x*-ray therapy has a definite place in the treatment of thyroid toxaemia parpicularly in the cases of mild type provided they show a tendency to improve under careful observation. It is difficult to set an arbitrary standard by which to classify the mild cases although we feel that cases of exophthalmic type presenting a metabolic rate below 40 may be so classified. The objections to this conservative treatment of mild cases are the loss of time if treatment is unsuccessful, the danger of precipitation of fatal thyrotoxic crises by intercurrent infection or mental shock, and of the development of permanent cardiac irregularities.

We have already mentioned the two factors which in recent years have acted to increase the popularity of surgery over other types of therapy in the treatment of toxic goiter. In the first place preoperative care and the administration of iodine have greatly reduced the special hazards of thyroid surgery. In the second place the observation of the course of the toxaemia with the metabolic rate as an index has supplied a standard for judgment of therapy. The effect of successful surgery on the metabolic course has shown advantage over the more conservative methods.

There are of course to be considered in the evaluation of surgical therapy certain disagreeable sequelae. Among these is the development of a permanent hypothyroid state. This to be sure, may be controlled by the oral administration of thyroid preparations, but the artificial supply of the thyroid secretion falls short in the maintenance of normal health as compared with the adequate supply of natural secretion. In the main the other complications of surgery are injury to the recurrent laryngeal nerves and to the parathyroid bodies. These are complications which occasionally happen in the hands of the

Toxic Adenoma - Surgically treated.

	No. of Cases	Average B.M.R.	Average Wt. Gain	Range of Individual Metabolic Rates. -10 to -20	-9 to 0	+1 to +10	+11 to +20	+21 to +30	+31 to +40	+41 to +50	+51 to +60
Adm.	17	+40						3	8	4	2
Pre-op	12	+25					3	6	3		
Post-op	14	+12			2	3	8	1			
3-4 mos.	8	-4	15 lbs.	3	2	2	1				
5-6 mos.	7	-1	19 lbs.	2	3	1	1				
7-12 mos.	7	-3	27 lbs.	1	4		2				
1-2 yrs.	4	+9	40 lbs.		1	1	2				

A

Exophthalmic Goiter - Surgically treated.

	No. of Cases	Average B.M.R.	Average Wt. Gain	Range of Individual Metabolic Rates. -10 to -20	-9 to 0	+1 to +10	+11 to +20	+21 to +30	+31 to +40	+41 to +50	+51 to +60	+61 to +70	+71 to +80	Tot
Ad M.	78	+49						7	20	19	12	12	2	2
Pre-op	78	+21			2	9	31	27	9	1				
Post-op	71	+4		9	24	21	11	5	2					
3-4 Mos.	37	+6	14 lbs.	6	7	12	7	4	1					
5-6 Mos.	25	+8	16 lbs.	5	4	7	4	2	2		1			
7-12 Mos.	30	+6	17 lbs.	3	8	13	3	3			1			
1-2 yrs.	19	+9	18 lbs.	1	5	5	5	2	1					
2-3 yrs.	6	+10	18 lbs.		2	2		1	1					

C.

Exophthalmic Goiter - Radiotherapy.

	No. of Cases	Average B.M.R.	Average Wt. Gain	Range of Individual Metabolic Rates. -10 to -20	-9 to 0	+1 to +10	+11 to +20	+21 to +30	+31 to +40	+41 to +50	+51 to +60	+61 to +70	70+
Adm.	16	+50						1	3	7	1	1	3
3-4 mos.	11	+39	(-7)				1	1	4	2	2		
4-5 mos.	11	+34	3				2	1	4	3			
6-7 mos.	10	+23	0			2	4	2	2				
10-12 mos.	11	+27	3			2	2	1	1	2			
13-16 mos.	11	+17	12			3	5	2		1			
17-24 mos.	7	+16	31			3	2	1		1			

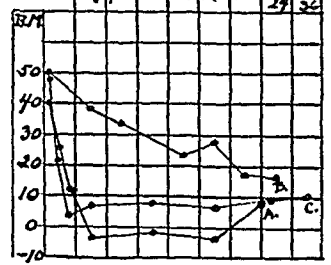
B.

Last Metabolic Rate Individual Case.

Case No.	Period	B.M.R.
1	10 Mos	+5
2	3rd yr	+3
3	2nd yr	-10
4	5th yr	+16
5	4th yr	+11
6	2nd yr	+14
7	5th yr	+10
8	3rd yr	+5
9	8th yr	+12
10	6th yr	+21
11	4th yr	+2
12	3rd yr	+14
13	5th yr	-18
14	6th yr	-16
15	6th yr	+21
16	3rd yr	+8

Chart I
A.B.+C.

Curve of Metabolic Course



A-Toxic Adenoma-Thyroidectomy.
B-X-Ray Cases. Exophthalmic
C-Exophthalmic-Thyroidectomy.

Course of 15 cases of exophthalmic goitey in which B.M.R. fell below -10 after operation.

Case No.	Adm. B.M.R.	Post-op B.M.R.	3-4 mos.	5-6 mos.	7-12 mos.	1-2 yrs.	2-3 yrs.
4.	+41	-2	-15		-8		
5.	+44	-11	+2	+5	+5		
6.	+48	+9	+1			-12	
7.	+66	-10	+10	-15	+21,+9		
10.	+35	+1	-11		+8	+7	
16.	+45	-15	-25,-15	-21	-11,-18	-8	
24.	+41	-12	-14				
29.	+40	.0	-5	-12		-10,-1	
33.	+47	-16	-10	-15	-15	0	
36.	+62	-8		-12	+8	-3,0	
41.	+70	-5	-16	-5		-2	
46.	+71	-15					
49.	+60	+20			-12		
55.	+51	-15	-2	0	0		
65.	+28	-12			+11	+5	

A

Course of 17 cases of exophthalmic goitey in which B.M.R. rose above +20 after operation.

Case No.	Adm. B.M.R.	Post-op B.M.R.	3-4 mos.	5-6 mos.	7-12 mos.	1-2 yrs.	2-3 yrs.
7.	+66	-10	+10	-15	+21,+9		
12.	+38	+30					
13a.	+70	+35		+33	+24	+16,+26	Rej. op. 13b.
13b.	+26	+26	+5		+20,+5		
14.	+35	+5	+2	+41		+40	+40 Rej Xray
19.	+53	+3			+17	+28,+37	Rej Xray
25.	+65	+2		+25			
26.	+45	+24					
32.	+32				+21	+2	+5
34.	+62	+30	+21		+19	+27,+18	
35.	+62	+26		+53	+57,+31	Xray BM. 4 mos later -10	
43.	+63	+12	+14		+30	Xray	
50.	+49	+35				+28	+24
53.	+57	+11	+28	+19	+3		
63.	+58		+21		-5	+1	-9
64.	+53	+15	+15,+9	+30	+9,-5	+11	-3
67.	+40	+8	+35	+9	0	+11	
70.	+65	+15	+28		+21,+2	+15	+36,+3

B.

Chart II.

Exophthalmic Goiter

Period of observation and condition when last seen.

Post Operative 24

Case No.	B.M.R. Adm.	B.M.R. Last	Grade Nervous Symptoms Adm.	Grade Nervous Symptoms Last
1	86	12	3	1
12	38	30	4	2
17	45	2	3	1
22	47	2	3	1
26	45	24	3	1
28	40	0	2	1
37	51	5	2	0
40	50	3	4	1
42	49	18	4	1
44	46	15	4	1
45	71	-15	4	1
46	42	-10	3	1
52	51	-5	3	1
59	38	-1	2	1
60	37	10	1	0
72	61	4	3	1
73	56	0	3	1
74	30	2	3	1
75	39	4	2	1
76	50	-4	4	2
77	88	5	3	1
78	39	-1	3	1
38	53	5	3	1
11	45	18	3	2

3-4 months 5

Case No.	B.M.R. Adm.	B.M.R. Last	Grade Nervous Symptoms Adm.	Grade Nervous Symptoms Last
2	38	-3	3	1
15	40	-1	2	2
20	65	-5	3	0
24	41	-14	3	1
61	35	15	2	1

5-6 months 8

Case No.	B.M.R. Adm.	B.M.R. Last	Grade Nervous Symptoms Adm.	Grade Nervous Symptoms Last
8	40	16	2	1
18	30	17	2	1
23	35	7	2	1
25	65	25	3	1
68	39	-5	4	1
69	60	0	2	0
71	60	8	3	1
66	49	4	3	1

7-12 months 17

Case No.	B.M.R. Adm.	B.M.R. Last	Grade Nervous Symptoms Adm.	Grade Nervous Symptoms Last
3	38	8	2	0
4	41	-8	3	1
5	44	5	3	1
7	66	9	4	2
9	66	7	3	1
13[b]	26	5	3	2
16	45	-15	3	0
21	29	7	2	0
27	21	5	1	0
35	62	51	3	2
39	58	-2	3	1
43	63	30	3	2
49	60	-12	3	0
53	57	3	2	0
55	51	0	3	0
56	75	0	3	1
62	55	3	3	1

1-2 years 14

Case No.	B.M.R. Adm.	B.M.R. Last	Grade Nervous Symptoms Adm.	Grade Nervous Symptoms Last
6	48	-12	3	0
10	35	7	3	1
13[a]	70	26	4	3
19	53	37	3	2
29	41	-1	3	2
33	48	0	2	0
34	62	18	3	1
36	62	0	4	0
41	70	-2	3	1
47	51	17	3	1
51	58	-2	3	0
54	38	6	3	1
65	28	5	2	0
67	40	11	2	1

2-3 years 6

Case No.	B.M.R. Adm.	B.M.R. Last	Grade Nervous Symptoms Adm.	Grade Nervous Symptoms Last
14	35	40	3	3
32	32	5	3	0
50	49	24	3	1
63	58	-9	4	1
64	53	-3	3	1
70	65	3	4	1

Chart III.

most skillful but are rare when the surgeon is constantly on guard against them.

There continues to be a good deal of difference in opinion as to the respective merits of the operative and non-operative treatment of exophthalmic goiter. There are some who hold that thyroidectomy is to be avoided under any circumstances, others who aim to avoid thyroidectomy if possible and to resort to it only in the presence of long continued symptoms and lastly those who recommend thyroidectomy for every case showing a definite thyrotoxic syndrome. Recently the latter method has become increasingly popular because of the impressive statistical experience of many surgical clinics, although in going over such statistics one would like to find a more detailed and continuous follow-up study than is often presented.

It has been our policy since October 1, 1927 to advise surgery in almost every case presenting a definite thyrotoxic syndrome. On October 1, 1930 we undertook to review the results of this therapeutic policy in order to determine with what success we had approached the expectation of a low operative mortality, prompt and continued reduction of the metabolic rate within normal limits, relief of nervous symptoms and the avoidance of disagreeable post-operative sequelae.

Judgment of the efficacy of a therapeutic method depends in a large part on the follow-up of cases. Complete success would consist in following every case for a period of years. Such success is difficult to even approach. After their discharge from the hospital control of the patients becomes difficult for many reasons. If dissatisfied with the result of their treatment they may go elsewhere although in our experience the cases in which poor results are obtained are more apt to continue under observation than those who are well and see no reason from their own viewpoint to return. Many patients return to their occupations and have not the time to appear at the clinic.

We shall consider the cases of exophthalmic goiter and those of adenomatous goiter with hyperthyroidism separately for whether or not the two types are pathological varieties of the same disorder we feel that in their symptomatology and response to treatment they present definite differences.

Seventy-eight cases of exophthalmic goiter have been operated upon. In five of the cases stage operations have been done. In one of these the first operation was a ligation, in the remaining four the first operation consisted in resection of one lobe with or without the isthmus. At the second operation the resection was completed. The judgment of the operator must be especially exercised in deciding whether to complete the operation at one time. It is wiser to defer the resection of the second lobe if the patient's condition is unsatisfactory. The improved condition of patients after preparation with iodine has undoubtedly led to over confidence as to what they can withstand. In the charts operations which have been done in stages have been counted as one operation. One case has had a second operation, a year and a half after the first, for continuation of symptoms (13a-b).

Mortality: In this series of 78 cases of exophthalmic goiter there have been two post-operative deaths giving an operative mortality of 2.6 per cent.

The first of these two was a woman of 36 with an admission basal metabolism rate of +42 per cent which came down to +25 per cent on iodine preparation. She was considered a moderately severe case. The operative time was one of the shortest in the series. During operation the pulse became irregular. She had a sharp but not alarming post-operative reaction. On the third day she developed embolism of the right femoral artery with subsequent gangrene and died on the fifth day.

The second fatality occurred in a woman of 59. Her history of thyroid symptoms extended back for five years. The highest basal metabolic rate while under observation was +24 per cent. There was some discussion as to whether she really had hyperthyroidism. As she had been under treatment in the hospital for some time for another condition and wished to avoid delay and as the toxicity seemed of such mild grade she was given iodine for two days only immediately preceding the operation. The resection was technically simple. The patient's pulse however became very rapid on the table. Post-operatively she developed high temperature, up to 106 F., pulse to 160 and a stuporous condition and died on the second day.

Restitution of Normal Basal Metabolic Rate:— The accompanying charts give in detail the basal metabolic records of the entire group. Chart I-C gives the number of patients, the average basal metabolism on admission and at such periods thereafter as the patients reported, the average weight gain, and the distribution of the individual rates which go to make the averages in brackets of ten. It will be seen that the average basal rate on admission was +49 per cent which after iodine preparation had fallen to +21 per cent. Almost all of the patients had post-operative tests before leaving the hospital usually between the 10th and the 14th day. The average residence in the medical wards prior to operation was two weeks so that the post-operative basal rate represents the metabolism on the average of four weeks after institution of treatment. The average of the post-operative basal rates is +4 per cent. This fulfills satisfactorily the requirement of prompt reduction of the basal metabolic rate to normal. It will be seen however that the average drop during the period of iodine prepara-

tion was 28 per cent while the drop occurring after operation amounted to 17 per cent although 42 per cent of the cases had rates above +20 before operation while only 8 per cent had a rate above +20 after operation. So far then as prompt reduction of basal metabolic rate is concerned this requirement was fulfilled in all but 8 per cent of 71 cases which had post-operative basals and this reduction occurred on the average of one month after starting treatment.

More important in judging the efficacy of operative therapy than the initial reduction of the basal rate is the permanency of this reduction. Unfortunately with the most conscientious effort at personal follow-up many cases are lost sight of and in a three year period of study a proportion of the cases are too recent to judge the permanency. In Chart II-B are listed all the cases which were found at some time subsequent to operation to have a metabolic rate above +20. Here it will be seen that 17 patients had basal rates above +20 per cent at some time subsequent to operation. This is a proportion of 23 per cent of the cases who have had post-operative basal metabolic tests. Their individual courses are given in this chart. This would indicate that in approximately one out of every four prompt and permanent restitution of normal basal metabolism was not secured. But if this standard is used as a criterion by which to judge operative and non-operative therapy it must be remembered that the restitution of normal rate in non-operative types of therapy is seldom abrupt and almost always improvement is a gradual process. This is illustrated by the slow downward metabolic course of the cases who received radiotherapy as depicted in Chart I-B. In this group of 17 cases with metabolic rates above +20 some showed normal rates on further observation while others had normal rates after operation and elevation in rate occurred later.

Grouping the cases which have been followed six months or less there are 37 of which 3 or 8 per cent have had a last basal over +20 per cent. For the period of seven months or more there are 37 cases of which 6 or 16 per cent have had a last basal over +20 per cent.

Relief of Nervous Symptoms: The relief of nervous symptoms, in which we include nervousness, emotional instability, lability of pulse, sweating and tremor, is naturally not susceptible of translation into figures as is the metabolic change. Individuals who have suffered from exophthalmic goiter are rarely free from some evidence of nervous instability. Indeed the nervous disturbance in exophthalmic goiter suggests that there may be a primary or independent pathological factor residing outside of the thyroid. In recording our results on the nervous factors we have from our knowledge of the patients estimated the grade on the basis of 1, 2, 3, 4. Individuals given grade 1 nervousness have the excitability and irritability associated with "high strung" persons and when tense may manifest instability of the vegetative nervous system in an increased pulse rate, sweating of the hands, flushing of the face or slight tremor. This degree of nervousness is not distressing, arouses no complaint, and does not interfere in the pursuit of the patient's occupation. Grade 4 indicates the degree of nervousness seen in cases which are severe but not in crisis. Between Grade 1 and 4 are the proportionate degrees of nervousness. In all the grades above Grade 1 the nervousness becomes a matter of complaint and of interference with the patient's occupation. It is exceptional for the intensity of the nervous symptoms not to vary directly in relation to increased or decreased metabolic rate.

Included in Chart III are the records of the grade of the nervous symptoms on admission and when last seen. Of the 74 cases of which we have post-operative records 17 have been graded as regards nervous instability as O. These patients have been free of the nervous symptoms enumerated. Forty-five, the great majority, have been graded as 1. These show some residual nervousness brought out by examination or inquiry but not sufficient to interfere with a sense of well-being or pursuit of occupation. Ten cases have Grade 2 nervousness, and two Grade 3 which have caused both economic incapacity and ill health. Of the twelve cases in which there has been failure to obtain relief of nervous symptoms six are recruited from the group of 17 in which the metabolic rate had not been reduced below +20. In six of them the metabolic rate was restored to normal. One of these developed a recurrence of a psychopathic state characterized by profound depression and melancholia, attacks of which she had suffered before operation. A second, four months after operation, developed a mental condition characterized by delusions and hallucinations in the presence of normal metabolic rate and a third showed marked lability of the pulse. Conversely six cases in which complete reduction of the metabolic rate was not accomplished showed a good result from the nervous standpoint.

Sequelae: Hypothyroidism—Chart II-A presents fifteen cases whose basal metabolic rate at some time has fallen below —10 per cent. Persisting hypothyroidism is a rare sequence considering the reduction of thyroid tissue in a subtotal thyroidectomy and indicates the inherent power of the thyroid to regenerate in response to the demand of the body. Many of our cases have passed through a phase of apparent hypothyroidism after thyroidectomy. Seen a month after operation they show marked weight increase and their faces are characterized by puffiness particularly of the eyelids. In the next month or two this picture disappears and their faces regain their normal appearance. In this period the hypo-

thyroidism is usually not severe enough in grade for them to have subjective complaints. Of the fifteen cases of this group with basal rate below —10 per cent there was only one to whom we found it necessary to administer thyroid and about whom we were fearful of permanent hypothyroidism. In this case (16) the rate fell to —25 per cent three months after operation. She was given thyroid medication with benefit but discontinued it of her own accord and her last basal after four months without medication was —8 per cent. This was a year and a half after operation.

Injury to laryngeal nerves: Two patients have had post-operative hoarseness beyond that due to tracheitis. Both showed cord paralysis on laryngeal examination which later cleared up. A third patient who was quite hoarse was not examined laryngoscopically but her voice also cleared.

We have had no cases of tetany.

Transient attacks of auricular filbrillation have been common after operation. Ten cases (nine in the exophthalmic group and one in the adenomatous group) with previously regular rhythm have had attacks of fibrillation lasting from a few hours to seven days. At one time these caused us some concern and we took the fibrillation as an indication for the energetic administration of digitalis. We no longer take this attitude and except in cases who have previously shown the irregularity with evidence of decompensation we find that this post-operative fibrillation terminates spontaneously in a few hours or a few days.

The group of cases of adenomatous goiter with hyperthyroidism is not large enough to deserve much discussion but our conclusions concerning them agree with reports of others dealing with larger numbers. Seventeen cases of this type have had thyroidectomy (Chart I-A). In toxic adenoma subtotal resection has been done as a rule. However in a number of our patients, who have had the disease on one side only while the other appeared normal, we have left the normal appearing lobe and have obtained satisfactory results. It will be noted from the chart that the average admission metabolism was lower in this group than in the exophthalmic group and that the average reduction in rate on iodine was only 15 per cent as compared with 28 per cent in the latter. There have been no post-operative deaths in this group but the series is too small to draw conclusions from this. One has the definite impression that these patients are more apt to be free of any nervous residua than the exophthalmic group. Only one of them is clinically unsatisfactory because of continued nervous instability and this was a patient with cerebrospinal lues.

The operative treatment of the toxic goiter case involves more than the administration of iodine and the performance of thyroidectomy. Our cases enter the medical wards on admission for observation and treatment. Here associated visceral lesions especially those of the heart are evaluated if present, and an effort is made to establish in the patients a spirit of confidence and to relieve them of the dread of the ordeal of an operation. After operation we insist on a convalescent care for them at the country branch for just as long as their circumstances permit. This amounts on the average to three weeks after discharge from the hospital. For two months after operation each patient is instructed to take ten drops of Lugol's solution a day.

Summary: In this series of 95 cases of toxic goiter treated by thyroidectomy there have been two deaths giving an operative mortality of 2.1 per cent. Both of these fatalities occurred in the exophthalmic group making its mortality 2.6 per cent.

Reduction of the metabolic rate below the level of +20 per cent has been accomplished in all but 17 cases of the exophthalmic group. The permanency of this reduction cannot be judged by a three year study. Of 37 cases followed for six months or less the last metabolic rate was found above +20 in 8 per cent and of 37 cases followed for seven months to three years it was found above +20 per cent in 16 per cent.

Of 72 cases of exophthalmic goiter of which we have a record of the nervous condition after operation 17 are free from nervous instability, 45 have residual mild nervous instability not sufficient in degree to interfere with a sense of well-being or pursuit of regular occupation and 10 have persistent nervous instability which results in ill health and economic incapacitation, of varying degree.

Fifteen cases of the exophthalmic group have shown metabolic rates below —10 subsequent to thyroidectomy but in only one of these was it necessary to administer thyroid for the relief of symptoms of hypothyroidism and in this case the rate returned within normal limits without continuance of the thyroid medication.

In the group of 17 patients with toxic adenoma the immediate reduction of metabolism has not been as striking as in the exophthalmic group but the late results have been very satisfactory. The gain in weight has been notably greater.

Conclusions: At present the basal metabolic rate furnishes the best criterion as to the progress of cases of thyroid toxaemia. An objective criterion of this kind forms a standard by which therapeutic methods can be judged and compared.

[1] Pemberton, J. deJ. Recurring Exophthalmic Goiter, *J.A.M.A.*, 94, 1483-9, May 10, 1930.

We wish to thank the members of the Surgical Staff of the Hospital whose cases we have included in this study and particularly Dr. Frank Mathews and Dr. John Douglas who have operated on many of the patients and have also contributed by encouragement and suggestion to the work of the Thyroid Clinic, and to Dr. W. B. Long, who has treated the cases with *x-ray*.

AN OVAL TROCAR AS AN AID IN CLOSED THORACOSTOMY FOR EMPYEMA

By JACOB SARNOFF, M.D., BROOKLYN, N. Y.

THE purpose of this brief article is to point out the great aid that may be derived by the use of the writer's new oval empyema trocar. (Fig. 1.)* The ordinary round trocar used in the closed method of empyema operations is at times too large to pass through a narrow intercostal space, especially in the very young. To obviate this difficulty, the writer has designed for that purpose an oval trocar and cannula which has the following advantages:

One can introduce an oval trocar having the same circumference as the round one in almost half the width of the intercostal space, thus enabling one to pass a No. 24 French catheter slightly flattened, through a space much smaller than required by a round trocar. Once this tube is passed, it will conform to the shape of the intercostal space irrespective of the shape of the trocar used. An oval catheter which may be procured** to fit the oval trocar is desirable however. By using an oval trocar, one is less apt to injure the intercostal vessels and nerves which lie in a groove on the inner aspect at the lower border

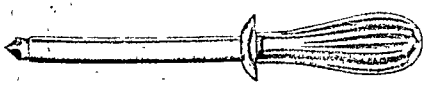


FIGURE 1
Author's oval empyema trocar.

of the rib, their relation being vein, artery and nerve, from above down. The writer has used this closed method with the improvements above mentioned with a much lower mortality and morbidity.

A few illustrations will enable one to visualize this simple technique of closed thoracostomy: The site selected is generally the seventh interspace in the posterior axillary line (Fig. 2). The empyema rubber shield is threaded over the trocar and cannula for a distance of an inch or two, depending upon the thickness of the chest wall. The trocar is then introduced into the chest cavity through a small skin incision about one-eighth of an inch in length, with its greater diameter in the direction parallel to the ribs. (Fig. 3.)

The trocar is then removed, leaving in the cannula. One should then get an escape of pus. A proper size catheter, preferably oval and bent at a right angle two inches from the tip, with a few perforations at its end, is introduced through the cannula into the chest cavity for a short distance. The cannula is then removed while the catheter

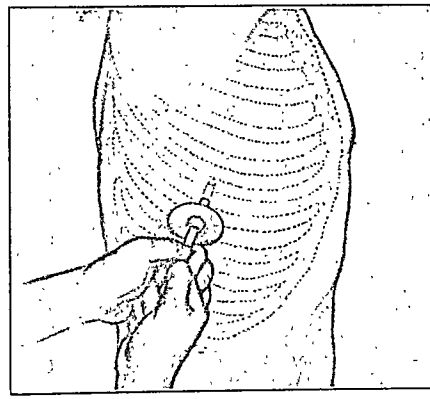


FIGURE 2
Trocar being introduced into chest cavity.

is being held in place. (Fig. 4.) The circular rubber shield is then sealed air tight to the skin with Johnson and Johnson rubber cement. One thus gets an air-tight fitting of the tube and a satisfactory drainage of the empyema through a good size opening.

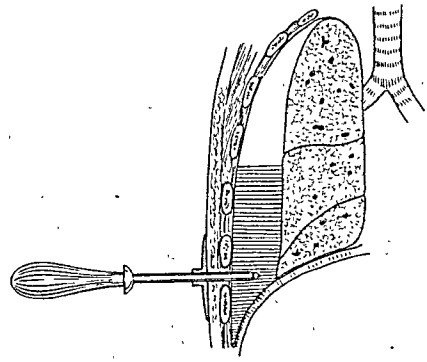


FIGURE 3
Trocar and cannula introduced into chest cavity. Rubber shield lies flat against chest wall. Trocar is above costophrenic sinus and below fluid level.

* Geo. Tiemann & Co., N. Y. C.
** C. R. Bard, Inc., N. Y. C.

The catheter is then connected to a longer tube which is placed in a bottle for drainage. This drainage may be in the form of negative pressure (Fig. 5) or subaqueous siphonage. The drainage is thus maintained for eight or ten days when leakage around the catheter generally occurs. At this time the suction or siphonage becomes ineffective and is no longer necessary. The

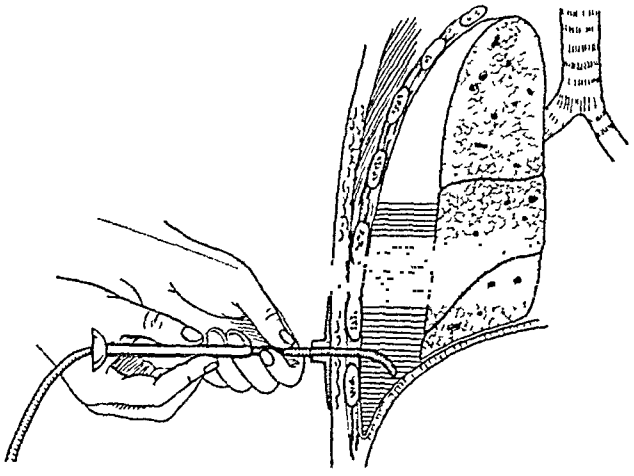


FIGURE 4

Catheter introduced into chest cavity and cannula being pulled out.

connecting tube may then be removed leaving in the catheter as a drain. During the course of about two weeks, the tube may be removed, depending upon the clinical course, X-Ray findings and the amount of discharge present.

The advantages of this closed method as compared to rib resection are:

1. It can be done in the most desperate cases and at an earlier stage with less shock.
2. It is a procedure requiring much less technical skill and less post operative dressings of the wound.
3. It is especially advantageous in double empyema where one may deal with both sides almost at the same time.
4. The oval trocar enables one to pass a good size catheter in all cases and thus obtain ample and satisfactory drainage.

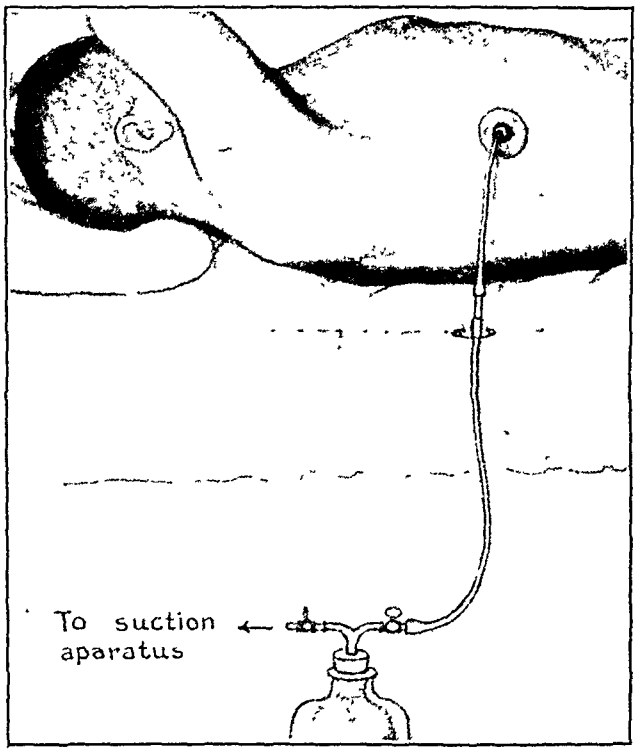


FIGURE 5

Operation completed, drainage established, apparatus in situ.

THE PERIODIC HEALTH EXAMINATION—THE KEYSTONE OF PREVENTIVE MEDICINE*

By DONALD B. ARMSTRONG, M.D., ScD., NEW YORK, N. Y.
Fourth Vice President, Metropolitan Life Insurance Company

WHAT values does the periodic health examination hold for the individual lay citizen? That is the angle your chairman has asked this speaker to stress in this symposium. The health examination movement is not new. Increasing thousands are taking advantage of it and to a greater or lesser degree benefiting by it. Numerous arguments in its favor have been presented to professional and lay groups for many years. Of late, certain arguments in opposition to the health examination idea have appeared in the professional and lay press. In the opinion of the speaker the proponents of the idea still seem to hold the more attractive side of the discussion. Nevertheless, in a program where three speakers are to present the advantages of the periodic health examination, it is in itself a distinct advantage to come first. I am a little uncertain whether there are enough favorable arguments to go round, and consider it a fortunate privilege to have first choice, so to speak.

It would of course be more entertaining and exciting, if not informative, if this were a debate, covering the advantages as well as the alleged disadvantages of health examinations, but I fear that to stage such a debate under the auspices of a County Medical Society, committed to the promotion of the idea, would scarcely be seemly or appropriate! In any case the speaker is thoroughly convinced of the value of periodic health examinations. They are not of course, a panacea for all ills, nor will they detect or insure the prevention or cure of all ills. Yet the health examination is, potentially at least, the keystone of modern preventive medicine, and the nucleus around which the more important personal hygiene activities are likely to be developed.

I do not want to bore you with figures and statistics, yet there are a few statistical data that indicate in cold figures the value of periodic health examinations. I would like to refer first to the experience of the Metropolitan Life Insurance Company with the examinations offered to certain classes of policyholders. This medical service is, of course, purely diagnostic in character, the individuals being referred for further observation, diagnostic confirmation, and of course for advice and treatment, to their own private physicians. Such examinations have now been given to several hundred thousand policyholders, and it is significant to note that according to the reports of our actuaries, a specially studied group of those examined and presumably following their doctors' advice, has experienced a mortality which is 18 per cent better than the mortality among unexamined groups of legitimately comparable policyholders. For some age groups this mortality improvement is much greater than the average figure quoted, for the age group fifty to sixty years, for instance, the improvement being 53 per cent as compared with the general mass of comparable policyholders. Now, of course, the Company pays for these examinations and it is estimated that the return on the investment as measured in deferred death claims represents a saving of something like 200 per cent. This is a rather effective, though an impersonal, mass argument in favor of periodic health examinations.

Another experience of the Metropolitan Life Insurance Company may also be cited. Each year the Company requires all employees to have a thorough medical examination. Several years ago such a group of examinations was given to 7,530 employees, and the conditions found were carefully studied. In this group we discovered that 1,880 individuals had more or less serious defects or diseases. Each one was given what was considered to be the proper advice and urged to secure private medical treatment. A year later this same group was carefully reviewed and it was found that more than 50 per cent of the defects originally discovered had been corrected or overcome. The significance of this not only to the individuals concerned, but to industrial and commercial concerns who are desirous of conserving their human resources, must be evident.

One other statistical observation and then we will be through with figures. During the last twenty years or so there have been added about five years to the average expectancy of life at birth. This is largely the result of the control of certain of the major infectious causes of death, such as diarrhea and enteritis and other previously great factors in infant mortality; typhoid fever, tuberculosis, diphtheria, etc. Yet not only is it true that this improvement has been entirely confined to younger age groups, but it is even a fact that at the older ages the expectation of life has not only not increased, but during the last few years has actually decreased. For instance, at age thirty-seven, in 1921 the average individual in the United States might have expected to live 32.86 years. By 1927 his expectancy at that age had decreased to 31.47 years, or a decrease in six years of almost a year and a half! Various causes have been assigned to this phenomenon, but it seems to be a safe assumption that the experience is in large part

* Presented before a public meeting of the Philadelphia County Medical Society, March 25, 1931.

due to an increase in certain of the so-called degenerative diseases, such as heart disease, the kidney affections, cancer, diabetes, etc. It is true that the saving of life in the younger periods has pushed forward a larger fraction of the population into the older age groups, and of course we must eventually die of something. Nevertheless, there seems to be a real increase in certain degenerative diseases, and the significant thing is that most of these affections have small and apparently insignificant beginnings. In other words they have incipient symptoms that might in many instances be detected by a competent physician. Such early detection can in many cases lead to advice and treatment that may cure the condition, or may arrest its progress—thereby either saving and prolonging life, or deferring the date of demise. That this can be the case seems well supported by the previous health examination experience, largely among adults, cited from the records of the Metropolitan Life Insurance Company.

The health examination, in the opinion of its advocates, is applicable to all ages, and to all families. Its universal practice seems a preliminary requisite if we are ever to realize such desirable objectives as are embodied in the slogans "Every home a health center," and "Every doctor a health officer." Let us look for a minute at the composition and at the health and hygienic needs of the average family. In such a family there may be an infant of, let us say, three months of age. Even under the best of hygienic conditions, even when breast fed, such an infant may have beginning signs and symptoms of rickets, which the parents may not recognize. A visit to the doctor or the pediatrician at two or three months' intervals during the first year of life will serve to detect and check such symptoms and to insure the child's future freedom from the more serious symptoms or sequela of such a disease.

In such a home there may be a pre-school child, in whose case an examination at, let us say, intervals of six months, would detect enlarged and infected tonsils, the correction or removal of which might help to protect the child from future serious if not fatal attacks of acute rheumatic fever. The detection and correction of other physical defects should enhance the health and growth of the child and send him into the beginning years of his school life free to progress and to learn. In the same way an annual examination of the school child, either by the school physician or by the private family doctor, has many times indicated its worth. Let us not forget that here in Philadelphia and elsewhere the careful examination of groups of school children has disclosed not only a wide variety of serious physical defects, but a surprisingly high incidence of possibly latent but threatening signs of tuberculosis, thus bringing under clinical and hygienic supervision a group of children for whose future health and welfare such supervision is essential.

We have already said enough about the general advantages of the health examination to indicate what its importance may be for the adults in the family, both men and women. After all, a careful examination, followed by sane advice as to living habits, ought not only to prolong life—a thing in which most of us have only an abstract theoretical interest anyway, but should also materially enhance the joy of living, and should insure that our body mechanism would have a better chance to run smoothly and quietly for the remainder of our years.

Many analogies have been drawn indicating the significance of a physical examination in the light of other life experience. We are reminded that the average business man would not expect his business to operate indefinitely without an inventory or a stock taking. Presumably, it is legitimate to remind the business man that such an appraisal of his own body mechanism may be equally vital to its continued operation. We are reminded that no one would start on a long automobile trip without having the machine overhauled. Of course, we should not forget that each of us is always starting on what we hope to be a long journey and that it is precarious to start such a journey with the human steering gear out of order, or an improperly functioning carburetor, or unreliable brake bands. I might raise the question as to how many of us may have sand in our bearings or a knock in our engine, or possibly even a leaking radiator! Of course, the analogy of the human body to the machine is not a complete one, for in the case of the human body there are few if any spare parts. We cannot replace a permanently damaged heart. It is perhaps possible to buy "store teeth," but one could never purchase "store kidneys." We have to make the most of the equipment with which we are originally launched in life.

It becomes evident, therefore, that certain of the principal objects of the health examination might be itemized as follows:

1. The detection of defects such as those of the teeth, the nose, the throat, posture, etc.

2. The detection of incipient disease, such as cancer, and other diseases already mentioned. In the case of cancer let us not forget that at the start it is not a systemic disease. It is not, as claimed by the quacks, a "blood disease." Cancer always starts locally, and if that initial spot or initial growth can be detected before it metastasizes or spreads to other parts, its treatment or removal, with cure, is almost certain. Unfortunately beginning cancer rarely hurts and consequently the patient infrequently goes to the doctor early enough; but a regular checking over

by a physician will detect many cancerous conditions in time.

3. The establishment of health habits, as a result of the health educational opportunity which the periodic health examination offers the doctor He may find no defect and he may find no disease, but he may find undesirable habits of working, of exercise, of recreation, of eating, etc He may be able more advantageously to adjust the "fuel mixture" for the human carburetor, and he may aid in the establishment of good health habits that will not only prolong the life of the patient but increase his comfort and pleasure of living, even admitting that there is still much that we do not know about the physiological "rules of health."

4. The determination of our margins of safety is another vital consideration. May we remind you that the average normal infant starts life with a considerable excess of vital tissue He has, for instance, about seven-eights more kidney tissue than he really needs to perform the functions of the kidneys at that time. In the same way he has certain reserves of other vital organs Yet inevitably, these reserves are gradually cut into by various attacks and invasions, such as diphtheria, tuberculosis, or the stress and strain of ordinary living. Gradually, therefore, the individual uses up his margins of safety, and in one direction or another invades certain of his danger zones. Now, of course, what the health examination should do, is to point out these limitations. The role of the doctor is to be that of another Benjamin Franklin, who will seize this opportunity to teach Americans physiological thrift. He will point out to them their physiological limitations. To some he may say that the margin of safety in certain vital directions is still ample for full and reasonably unrestricted living. To others he may say that the limitations are narrow, that they must be recognized, and that we must step rather softly for the rest of our days.

5. And then finally, when the doctor finds no disease or defect, when his health advice is trivial, when the margins of safety are discovered to be great, and he is able to slap the patient on the back and tell him that he is "O. K." for another year, is there anything quite to equal the "grand and glorious feeling" which only this assurance from the physician can give!

On the other hand, as we said in the beginning, there are certain criticisms of the health examination movement, and certain criticisms of the way in which the medical profession is handling or mishandling this movement. One of these criticisms is that the health examination places too much emphasis upon physical welfare and physical symptoms; that it excites too much curiosity, fright, and introspection; that it results in worry, neurasthenia, and hysteria; that it is, in other words injuriously and often disastrously suggestive. It is no doubt true that most of us are open to influence by suggestion. Even doctors have imaginary diseases. I heard of one recently who was congratulating himself, saying that he did not know when he had felt so well, because he "had not had an attack of cancer for at least three months." You probably also have heard of the layman who had read all of the medical literature he could get hold of, and who admitted that he "had every disease in the list except house maid's knee."

It is true that we are all suggestible but the principal question seems to be: where shall we get our suggestions? Shall they come from a scientific source through the physician, on a basis of knowledge, and backed up by sound advice, or shall they come through quackery, through back fence gossip, through patent medicine advertisements, and through the ignorant imaginings of uninformed minds? It would seem that the former alternative were preferable. After all, we should not be afraid of facts. They should in fact relieve us from unfounded fears and afford us an opportunity to face real dangers intelligently. There is after all an application here of one of the world's greatest sayings: "Ye shall know the truth and the truth shall make you free."

The other principal point of criticism is aimed at the physicians who participate or should participate in health examination work, and in that connection I would like to conclude with a word or two addressed to the doctors who may be present. During the last few years I have seen a great deal of correspondence concerning health examinations, including masses of communications from laymen in which they are decidedly critical of the doctors to whom they have gone to have a periodic inspection. It appears to be true that the medical profession has not been overly alert in seizing this opportunity. It appears to be necessary not only to urge the public to go to the doctor for an examination, but it is also necessary to encourage the doctor to prepare himself to meet this public demand, to make a reasonably uniform and thorough health examination, to utilize the diagnostic services for the patient which his community affords, and to teach the patient such personal hygiene as the situation may indicate to be necessary. In other words the doctor must learn to practice preventive medicine.

There is, of course, another great medical need, that applies to medicine as an organization rather than to individual physicians, and that is the establishment of authoritatively controlled machinery for the direction of people into sound and reliable medical channels. Families move about a great deal these days. Fewer and fewer of them have long standing medical contacts. The family physician is relatively a rarity. Many of them want to know how to find a doctor, how to select a specialist, where to go for certain types of treatment, where to get a competent diagnosis,

where to secure a thorough health examination. Who is going to tell the layman who seeks this service where he can find it? This I believe is not the job of the private health organization, nor of the Health Department. It is to my mind a job of organized medicine, and particularly of the County Medical Society. Machinery should be set up to this end, and is now being experimented with in the Information Bureau and Medical Guidance Services of such county societies as those in New York, Brooklyn, and a few other places.

Let the doctor bear in mind that this field of preventive medicine is really enormous. It not only includes the health examination movement, but it covers the whole range of personal hygiene and pre-clinical medicine. It has to do with the physiological welfare of the patient, as well as his pathological manifestations. It may be concerned with occupational guidance. It must involve pre-natal advice, child hygiene, maternal hygiene, etc. It will even be concerned with mental health. It of course will cover the wide range of immunization activities, such as protection against diphtheria, typhoid fever and smallpox.

Previously and traditionally the doctor has been concerned with the layman only when he is sick. Increasingly in the future he will have to be concerned with him while he is well, and he will have to be interested in keeping him well. The kind of organization devices which we need at present are, first, those which will educate the public as to the value of the periodic health examination and will urge them to seek competent regular medical guidance; second, those which will advise the doctor as to the importance of this field, and point to the necessity for his preparation to meet the demands of the lay public for personal health inspection and instruction; and finally, those that will furnish for medicine in general the necessary organization for the fostering of the whole range of preventive medicine. There is not the slightest doubt but that the future is going to require of medicine a considerably higher and more complicated degree of organization, not only to meet the demands of preventive medicine, but to provide the needs of medical therapy. Medicine has social as well as individual obligations. To meet those obligations more organization of some kind is inevitable, and this organization will either gradually be developed by a socially conscious medical profession, alert enough to face the situation and to seize the initiative, or it may be carried out for the medical profession, perhaps beyond its control, by lay or state forces.

Medicine is criticized today because its services are costly, because they are unevenly provided, because no devices have as yet been worked out to insure the wide application of the instruments and methods of precision in diagnosis and treatment, and because its knowledge of prevention is ineffectively applied. The extension of the practice of health examination work by physicians, and their more generous participation in preventive work, will in part meet these criticisms. As a matter of fact if preventive work is sound it has a very direct bearing on the greatly agitated problem of the cost of medical care. After all it is cheaper to prevent than to cure, and the public is rapidly finding that this applies to medicine as to other things. On the other hand should the whole range of preventive medical activities be even partially developed, there would probably not be by any means enough medical men to meet the popular needs and demands. It seems very likely that the development of a reasonable amount of remunerative work in the preventive field would more than offset the inevitable financial loss to the medical profession that would follow an extensive application of preventive effort. A large part of the current criticism of medicine can be refuted if leadership can be found in the profession to open the doors into this great new field.

The periodic health examination is therefore not only the keystone of personal hygiene. It is also a vital anchorage for the current private practice of medicine. Finally, it is the entering wedge both for the doctor and the layman into the field of the private practice of preventive medicine, and organization for its adequate promotion might even point the way to at least a partial solution of certain of the very grave social and economic organization problems with which medicine is faced today.

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CHARLES H GOODRICH, M D, *Chairman*, Brooklyn CHARLES GORDON HEYD, M D. ... ...New York
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For list of officers of County Medical Societies, see this issue, advertising page xvi.
Next Annual Meeting, Hotel Syracuse, Syracuse, N. Y., June 1, 2, 3, 1931.

ANNUAL MEETINGS

May is a month of annual meetings of State Medical Societies, those of eight States being listed in the Journal of the American Medical Association. The programs of these meetings as announced in the State Journals disclose a uniformity of plan and organization throughout the States. Physicians observe what their colleagues are doing in medical administration as well as private practice; and from among the varied experiments that are tried in the several States, they choose the best and make those procedures their standards of organization and action. A physician from California or Maine would feel entirely at home in the House of Delegates of the Medical Society of the State of New York.

PRESIDENTIAL COMMENTS ON CURRENT EVENTS—NO. 22

The Bassett Hospital Guild in Cooperstown, New York has aroused medical interest throughout the State, as well as the interest of the physicians and hospitals beyond the State. The outcome of the experiment is awaited to see what constructive information may be brought to the surface regarding the problem of the availability of modern medical care for those whose financial resources are not far enough above the necessities of life to pay for modern medical care and medical service themselves.

On Page 37 of the January 1, 1931, issue of the NEW YORK STATE JOURNAL OF MEDICINE there is a report of the proposed plan of the Basset Hospital Guild. On Page 96 of the January 15, 1931 issue of the Journal under "Presidential Comments on Current Events—No. 14," there is a discussion of the purpose of the Guild. Since the class of two hundred was only started on January 15, 1931, this comment, therefore, continues the discussion. (See page 653.)

Resolutions from the Otsego County Medical Society criticizing the Guild as unethical, as contract practice, and as unfair competition were considered by the Executive Committee of the State Society on December 11, 1930, and a resolution adopted that the Secretary of the State Society be authorized to write to the Secretary of the Otsego County Medical Society reaffirming the attitude of the State Society as opposed to contract practice and referring the rest of the communication to the Public Relations Committee for study and suggestions. During an informal discussion the counsel of the State Society stated that in his opinion nothing could be done in the matter by the State Society. A sub-committee was appointed by the Chairman of the Public Relations Committee to study the matter further.

On April 21 the committee attended a special meeting of the Otsego County Medical Society and heard a discussion of the Guild, taken part in by several members of the Society and one member of the staff of the Bassett Hospital. No important objection was expressed at this meeting. The Guild, as it has been conducted, has not interfered with the private practice of medicine. It was found that there were two physicians in the territory of this experiment. One lives in Cooperstown. He is said not to be unfriendly to the scheme. The other lives outside of Cooperstown and has two former patients in the Guild, but the matter was of little importance to him.

On April 22 the committee spent five hours at the Bassett Hospital in conference with the staff. The Guild has two hundred members. The hospital has agreed to give them medical care and medical service in the hospital or medical service in their homes, as the hospital decides, for twenty-five dollars for a year for individuals and one hundred dollars for a family, excluding chronic illness and obstetrics. The class was closed on January 15 so as to carry the study through one year with the same number.

While the Guild stated in its original circular that any individual under certain conditions might join the Guild, the membership is mainly made up of working men; and many of them, though they could pay a small fee to a private physician, would ordinarily go into the wards of a hospital. Some of them might pay the three or four dollars a day for ward service but could not without great hardship pay the usual charges for x-rays, surgical operations, laboratory examinations, electrocardiographs, etc. There are some people in the membership who would feel that they could not go into the ward and who would be financially embarrassed if they had to pay regular private patient rates. There are a few members of the Guild who could pay the regular rate for private patients. The group, as a whole, is not hemogeneous enough to make a general statement about their capacity to pay.

Approximately twenty-five per cent of the membership have been paid for in full or in part by well-to-do people taking out memberships for the very poor or by employers taking out memberships wholly or in part for employees.

It is not known what this experiment in social medical service will prove. The cost for the first two months of the period of observation has not exceeded the proportionate amount of the yearly fee. The period is, of course, too short for real information as to the cost of illness for a year.

The population of Cooperstown is three thousand and the area surrounding which might be considered as reasonably included is one thousand more, or four thousand in all. The Guild, with its membership of two hundred, represents five per cent of the population.

In organizing the group an effort was made to admit no one to the class able to meet without financial hardships the unknown hazards of illness. A few people financially able to pay for what medical service they get were so insistent that they were taken into the Guild with the understanding that if admitted to the hospital, they would pay the full private patient charges minus a daily deduction of the rate charged for ward service. Most of the Guild members were patients of the hospital previous to the organization of the Guild. It does not appear that the Guild, therefore, is in competition with the private practice of medicine. No one taken into the Guild admitted when questioned that he had been a regular patient of any other physician.

A contribution may be made to the cost of medical care for acute illness in a group of people who largely could not procure this for themselves except by an insurance method of distributing the cost of illness in the same way that the

cost of automobile or other commercial insurance is distributed.

This is the study of the sub-committee up to the present time. It was reported on April 23 to the Public Relations Committee who made the following suggestions.

Since the experiment points the way toward a method of making modern medical care available for those who might not otherwise have it, and at the same time provides for payment of the cost of technical instruments for diagnosis and treatment and the cost of medical service, it may be a contribution to the study of how these two things may be brought about.

It is desirable for the profession of medicine to know the results of this experiment. If it shows that the cost of acute illness can be distributed by a method that will provide modern diagnosis and treatment and compensation for professional work, it may be the beginning of a solution of one of the problems of medical service. It may have an influence in averting some other solution not as free from objection.

It is not probable that the class who are unable to pay for medical service will long be left to shift for themselves before some official agency undertakes to meet the problem.

The Public Relations Committee makes this interval report of its study and suggestions. At the end of the year's experiment it will report the results as they exist at that time.

The Public Relations Committee recommends that the profession await the results of this study to see if there is any light on the solution of one of the great problems of medicine.

WILLIAM H. ROSS.

LOOKING BACKWARD

This Journal Twenty-five Years Ago

Preventing Typhoid.—This Journal of May, 1906 contains the following editorial on the prevention of disease, especially typhoid fever:

"It is in the study of prevention of disease that medicine has no rivals and is the least apt to be misunderstood. This realm is not invaded by the charlatan or the pseudo-scientific sect. The "schools" of medicine have not to do with prophylaxis. They are not interested here. Intelligent and scientific effort in the prevention of disease is tangible and can be measured, and is free from confusion than is therapeusis.

"What has been done with cholera can be done with typhoid fever. The fifteen hundred persons who died of this latter disease in this State during the past year are a needless sacrifice, for medicine has developed the knowledge which, if applied, would make typhoid fever an obsolete disease. Politics alone stands in the way. If the medical profession were given *carte blanc* power to eliminate typhoid, it would be done. Medicine has perfected the knowledge of this disease and the means for its prevention, and the people want the disease stopped, but the legislative representatives of the people are busy with mergers and tariffs and appropriations and jobs while the pale faces of those fifteen hundred, dying of a preventable disease, are seen only by the profession of medicine. When some community is awakened by an awful epidemic, it arouses itself, and some petty local measures are applied, always successfully, to prevent the disease; but what is done for a country village should be done for the State, for the country and ultimately for the world—and the disease would end.

"This will be done—it should be done now, but it will not—and then typhoid will pass into history, a conquered disease. In the meantime, your son, on the threshold of life's work; and your daughter, with the roses of health in her cheeks; and your wife, the mother of the laughing babe; and you, to whom these observations are addressed, shall return in the autumn, and lie down on your bed and die, for the mergers must be put through, and the tariff must be tinkered, and the appropriations must be passed round."

MEDICAL PROGRESS

Treatment of Tetanus, Diphtheria, and Neurotropic Diseases by the Phylactic Method.—According to René Cruchet, if a guinea-pig is injected with a quantity of tetanus virus ordinarily fatal, this will produce no action provided that 12 to 15 minutes previously the animal has been under chloroform anesthesia for about 3 minutes. The chloroform impregnates the lipoids of the nervous system in such a manner that the toxins cannot become fixed in their turn. But if instead, the same injection is followed in 10 or 15 minutes by chloroform anesthesia, the guinea-pig dies more rapidly than after the injection alone, for the chloroform precipitates the toxicity of the serum. If, however, at the same time with or immediately after the injection of virus one of antitetanus serum is given (0.5 c.c. per 100 gm. body weight) the animal lives, since the injection renders the primary intoxication inoperative. Chloroform thus represents an agent of protection or phylaxis. This protective power does not exist to the same extent when the neurotropic toxins are already fixed in the nerve centers. Chloroform does, to be sure, take their place, but the organism, already considerably enfeebled, no longer has power, alone, to make the necessary antibodies for its defense. For clinical use, strong doses (50, 80, or 100 c.c.) of antidiphtheritic or antitetanus serum should be administered immediately before or during the chloroform anesthesia, using both subcutaneous and intraspinal injections, the former first. In the hypertoxic form of the disease one should not hesitate to give intramuscular and even intravenous injections, ending up with a subarachnoid injection of 10 to 30 c.c. It may be necessary to give the treatment twice in the first 24 hours, but generally once a day will suffice. The injections should be used as early as possible, before the nerve centers are too severely attacked, and while the organism can still fight. They may also be employed suit-
-ly in poliomyelitis and encephalomyelitis.
the latter, in the absence of serum, uro-
acts much the same as chloroform, but
are different, and might be fought
used through the organism by
if they remained fixed in the
substances that might re-
are sparteine sulphate and
. The purpose of the
it is a general concep-
re considerable ap-
de Médecine,

An Unusual Type of Diphtheria Carrier.—A. Victor Neale, writing in the *British Medical Journal,* February 28, 1931, i, 3660, makes the observation that by means of the Schick test it has been learned that the proportion of immunes among persons who have never had clinical diphtheria, living in different localities and belonging to different levels of society, has been determined. Broadly speaking, a much higher rate of immunity has been found among inhabitants of the poorer and more crowded districts. This may be attributed to greater exposure to subminimal infections with the disease virus through which immunity has been acquired. The possibility of such acquired immunity would be much less in people living in country districts where, although the incidence of the disease may be low, the chances of contact are much less. In support of this contention cases are cited which indicate incidentally that the immunization of persons living in country districts is as important as the immunization of town dwellers. In October, 1929, a boy aged 12 years had a mild conjunctivitis, with no general symptoms. During the period December 26, 1929, to January 26, 1930, one sister and four brothers developed very severe faucial and tonsillar diphtheria. The detection of a carrier in the household followed a casual remark concerning the previous eye condition in the boy with conjuctivitis. Careful examination of his left conjunctival sac showed a few fragments of membrano-purulent exudate, which on bacterial examination gave a pure growth of diphtheria bacilli. The child had never had any clinical diphtheria infection before. It would seem that he had obtained general immunity from the local conjunctival lesion, which had shown occasional recrudescences.

Treatment of Severe Acute Cholera Morbus in Adults.—Ludwig Veilchenblau states that in the course of his practice he has had six cases in which adults seemingly in good health were suddenly attacked with uncontrollable vomiting, abdominal pains and diarrhea, accompanied by weak, rapid pulse and threatened collapse, all supervening within a few minutes. He was able to recognize the alarming possibilities in these cases the more clearly through having chanced to attend a postmortem demonstration in just such a case. In these fulminant attacks there is no time for the customary opium drops or for the clearing out of the intestinal tract by calomel or castor

oil. In addition to cardiac weakness and gastroenteric symptoms, the loss of fluid leads rapidly to the familiar picture of cramps in the muscles of the calf. The physician is called upon for quick action to put a stop to the exudation in the stomach and intestinal tract. In his first case Veilchenblau apparently hit upon the right treatment when without loss of time he gave a morphine injection combined with digipurin, for the exudation stopped promptly and the vomiting and purging ceased. In another case where after brief relief the vomiting began again, he replaced the morphine with pantopon in the second injection, after which there was a cessation of all gastroenteric symptoms. In some patients there was a rise of temperature of 38°-39.4° C. In all there was extreme prostration and cardiac weakness, from which recovery was slow, requiring 8 to 14 days. These happy results are reported because in an unusual crisis of this kind, where prompt action is needed, the very simplicity of the remedy might cause it to be overlooked.—*Munchener medizinische Wochenschrift*, February 13, 1931

Minor Maladies.—Among minor maladies which are easily overlooked Charles Hunter mentions *hernia of the linea alba.* The possibility of this type of hernia should be kept in mind in all doubtful cases of epigastric pain of irregular character. The mere presence of such a tumor, however, does not mean that the symptoms are due to this. *Kinking of the splenic flexure,* being intermittent, frequently gives no hint of its presence. The diagnosis must be made from the history and the result of treatment. An ounce to an ounce and a half of castor oil is the best aperient. To prevent recurrence, flaxseed or psyllium seeds, two teaspoonfuls after meals, may be administered, with liquid paraffin at night. Worry, hurry, or indiscretion at meals, or insufficient sleep often precipitates an attack. *Cramping of the calf muscles,* which usually occurs in the morning when one is half awake and stretches himself, may be avoided by deliberately not stretching the foot on awaking—by avoiding the inclination to bring the toes down and the heel up. In obstinate cases a special shoe has been made for night wear to prevent dorsal extension of the ankle. Possibly the tight tucking in of the bed clothes may have something to do with this tendency. A little heeded, though not uncommon, ailment is *myalgia of the abdominal muscles* or fibrositis. Such cases are usually mistaken for chronic appendicitis, and operated upon, though a diagnosis of ovarian lesion, chronic gastric ulcer, or gall-bladder disease may be made. In these cases the pain usually centers in one small area. Aspirin and similar drugs are valuable in some cases. When the pain is severe, injection at the sensitive spot of a drachm to a half ounce of physiological saline solution, with 0.5 per cent novocaine added, gives satisfactory and permanent results. *Gluteal myalgia* may be treated in the same way when the tender areas are small and readily accessible, or massage may be employed. *Left inframammary pain* is a common condition, especially in women from 25 to 45 years of age. It is most important that the patient be reassured concerning her heart. In patients whose outstanding complaint is *chronic fatigue,* and in whom a searching physical examination reveals nothing to account for the condition, it is advisable to give a test breakfast to determine whether hydrochloric acid is absent. If so, 80 drops or more of dilute hydrochloric acid taken before meals may relieve the fatigue. The basal metabolism test may prove valuable in revealing an overlooked myxedema in which fatigue is the outstanding symptom. In these cases thyroid feeding is, of course, indicated.—*Canadian Medical Association Journal,* March, 1931, xxiv, 3.

The Relations of the Bile to the Total Metabolism.—R. Seyderhelm, writing in the *Deutsche medizinische Wochenschrift* of February 27, 1931, says that the bile is a peculiar mixture consisting on the one hand of metabolic refuse and on the other of building substances important for life. While the refuse leaves the body definitively, other ingredients are resorbed. By feeding the various ingredients separately to dogs that had been subjected to biliary fistula, Seyderhelm undertook to determine which of these substances would cure the consequent anemia. It was proved conclusively that it was not the bilirubin, the lecithin, or the cholesterin. The only active substances were found to be the bile-acids. The astonishing discovery was also made that the administration of light-activated ergosterin, *i.e.,* antirachitic vitamin D, in minute quantities cures not only the biliary fistula disease but also the osteoporosis and epithelial degeneration. The question arose whether ergosterin in light-activated form is also subject physiologically to a hepato-enteric circulation in the organism. Since the red corpuscles are known to contain ergosterin, it was conjectured that this ingredient, becoming free by autolysis, reaches the intestine with the bile, in association with the bilirubin and cholesterin of the red cells, undergoes resorption here, and then returns anew to the liver, together with the bile-acids, and into the general circulation. That this is actually the case was demonstrated when an alcoholic extract of oxgall failed to cure the fistula anemia, whereas an extract of bile that had been acti-

vated with ultraviolet rays succeeded in doing so. These results have been confirmed by Japanese workers. The hepato-enteric circulation of the bile-acids and ergosterin exerts a favorable influence both upon hematopoiesis and upon calcium metabolism. It is not yet known whether in addition to bile-acids and ergosterin other important stearins follow the same circulation. It is probable that still unknown important relations exist between the bile and other organs. Seyderhelm has lately demonstrated that the removal of the ovaries in the young dog with a biliary fistula results in disturbance of hemoglobin formation and in a chlorotic blood picture. In the complicated structure of the bile composition and in the utterly different fate of its individual components is seen a complexity of physiological processes which it is almost impossible to disentangle.

Mean Pressure and Arterial Hypertension.—Writing in the *Bulletin de l'Académie de Médecine* of February 17, 1931, H. Vaquez and D. M. Gomez point out that the diagnosis of arterial hypertension is today based on the measure of the extreme pressures, an arbitrary measure which cannot give any precise indication of the mode of evolution of the affection. The maximal pressure is an unsatisfactory criterion because it can represent only one brief moment of a vascular régime. Nor does the minimal pressure, being only the expression of the initial effort of the heart at the beginning of ventricular emptying, indicate in any way the work which the heart must do during this act. The force by virtue of which the blood circulates through the organs being the sum of these successive pressures, it is their mean which it is important to know, for it alone furnishes an idea of the work the heart accomplishes in the arterial system. The true mean pressure is that which a constant arterial régime would have in order to secure during a given time a given flow of blood. In a normal subject whose maximum is 150 mm. Hg. and whose minimum pressure is 60 mm., the mean pressure is about 90 mm., 100 at most, at the age of 40-50. Pachon observed in 1921 that the greatest oscillation in the manometer, which he calls the manometric index, coincides with the mean pressure. It is certain that there are numbers of subjects whose affection is revealed only by their mean pressure. Thus, in an illustrative case in a young man whose heart was greatly hypertrophied radioscopically, the extremes of pressure were normal, while the mean was 130 mm. Hg., 40 mm. higher than it should have been. Theoretically there is no comparison between the current method and the method of the mean arterial pressure. The former represents only a fleeting moment, the latter is the expression of the continuous effort imposed upon the heart. A moderate but permanent [illegible]n of the mean pressure will more easily provoke hypertrophy of the heart than will a systolic hypertension. It is probable that the elevation of the mean pressure is the initial stage of hypertension. We scarcely know hypertrophy today until it has become a confirmed and permanent disease. The idea of the mean pressure will permit an early diagnosis of the disease before its objective and subjective signs are visible. While its measurement is delicate, it is easy and can be made accessible to all.

The Medical Treatment of Chronic Arthritis.—In an article in the *British Medical Journal,* March 7, 1931, i, 3661, N. Mutch endeavors to provide a guide to the formidable array of drugs (more than 100 substances and preparations of published composition) employed to combat chronic arthritis. He first considers the treatment of rheumatism under four headings: (1) The removal of foci of infection and the intelligent use of antiseptics, such as ichthyol, salicylates, salol, or guaiacol carbonate, and toxin fixation by the use of an insoluble absorbent—kaolin or charcoal. (2) The local treatment, apart from orthopedic methods, which attempts to improve the circulation of the affected parts by the use of radiant heat, steam, hot wax, and medical diathermy, which are invaluable when correctly applied. (3) Raising the general resistance by healthy surroundings, ultraviolet light, a richly vitaminous diet (vitamins A and D being particularly important), and non-specific reactive therapy. (4) Raising the specific resistance by the use of autogenous vaccines. Mutch then tabulates the various groups of drugs, giving the numerous members of each. (1) The aspirin group. The sale of 1,000 tons of this drug annually in England bears remarkable testimony to its utility. Its power of relieving pain seems almost specific, being far greater than that of sodium salicylate. (2) The antipyrine group. These are simple analgesis drugs with an admittedly central action. (3) Sulphur. This substance has received wide sanction over a long number of years. It is a detoxicating agent with no systemic effects thus far observed. (4) The iodine group, the clinical value of which is undoubtedly limited in scope. It may help the rheumatic patient by stimulating a defective thyroid gland and normalizing its secretion. By the local accumulation of iodine near a focus of infection, the drug may exert a uniform action the whole day through. (5) Radioactive substances. Radium chloride may be safely given by mouth in doses of 1/100,000 mg. several times daily for a number of weeks. It is absorbed rapidly, permeates the tissues freely, and after storage in the liver is eliminated through the bowel wall. Other radioactive substances also available are thorium and mesothorium. (6) Thiosinamine, which it would appear rash to use unless the patient can be kept under close observation. (7) Cinchophen, which has little justification for use if pain can be con-

trolled in other ways. (8) The hexamine group. The clinical effects of these preparations are quite imperceptible. In making a therapeutic plan, a critical survey of every organ and system in the body is essential. It is well to keep in mind the scheme of treatment outlined in the early part of the paper and to decide where the chief effort should be centered and then medicinal agents can be selected with confidence.

Acidosis from the Clinician's Point of View.—Leonard Findlay is of the opinion that there has been much loose thinking and talking on the subject of acidosis. To raise this condition to the position of a clinical entity is as much a retrograde step as it would be to classify diseases according to the presence or absence of fever It must be recognized at the start that the circulation of free acids in the blood is impossible in life, with the exception of carbon dioxide, which is the only free acid found in the blood What we understand as acidosis is a metabolic disturbance with the tendency to the production of an acid state of the blood if matters were allowed to go on uncontrolled. However, a low carbon dioxide blood content does not always indicate a tendency to the production of a more acid state of the blood. It depends entirely on how the diminished carbon dioxide content is produced. If it is the result of forced respiration, either voluntary or due to high altitude, the primary change is a loss of normal acid with a tendency to the production of alkalosis. In this type of alkalosis as well as in that found in pyloric stenosis, acetonuria occurs. This should give the death blow to the current opinion that the presence of acetonuria always indicates acidosis. The complex mechanism of the body which regulates the acid-base balance involves not only the so-called "buffer" action of the blood, but also the excretory functions of the lungs and kidneys. Hence the importance of the health of these organs. An example of acidosis in disease is that found in fatal cases of gastroenteritis; it is due to the loss of fluid by vomiting and diarrhea. The rational treatment is to replace the fluids and to hinder the formation of acetone bodies by the administration of water, salts, and glucose, and this should be done at all costs. Another example of acidosis is that of diabetes, which is due to the incomplete burning of fats with the production of ketones, and also to the washing out of fixed alkalies in consequence of diuresis. In acidosis artificially produced by the administration of calcium chloride or ammonium chloride, or in that produced by starvation, or by disturbing the balance of fat and carbohydrate in the diet, no symptoms are apparent, and within a day or two the blood becomes modified. This demonstrates the remarkable power of the body to accommodate itself to new conditions as long as the tissues are healthy, and also that the symptoms of acidosis are not so much due to any peculiar pathological process as to the inability of the tissues to exert their inherent regulating mechanism.—*British Medical Journal*, March 14, 1931, i, 3662.

The Etiology and Therapy of Gastric Ulcer.—According to Paul Siebert, the question of the treatment of gastric ulcer stands or falls in the last analysis with our view of its genesis. After reviewing the various theories of its origin, the author takes his stand with Büchner and Knotzke that the earliest stage of the ulcer consists of a superficial fibrous eschar of the upper layers of the mucous membrane. It has been demonstrated that the necrosis of the mucosa comes about independently of the stoppage of vessels, and that vascular changes are of a secondary nature. It is of special significance for the etiology that the secretion of acid gastric juice belongs exclusively to the glands of the corpus, whereas the site of ulcers is almost exclusively in sections that have nothing to do with secretion, namely the cardiac portion, the main part of the lesser curvature with the portions of the anterior and posterior walls immediately adjoining it, and the pyloric canal. Büchner has shown that ulcer formation is limited to zones of the mucous membrane that lie in the region of the action of the gastric juice but do not participate in its formation. This raises the question whether an organ such as the stomach can be digested by its own secretion. In health this can surely not occur, but it is conceivable that in the correlation of gastric juice to gastric wall the juice may under pathologic conditions exert an increased activity against the wall, either from increased secretion of a highly concentrated juice or from failure of defenses in the wall. By administering histamine to rats the author and his associates have demonstrated a parallelism between the resultant ulcers and the strength of secretion of gastric juice. The greater the possibility of the action of acid juice on the gastric mucosa, the larger was the number of ulcers produced. They developed in the region of such action, but not in the zone of its formation. These new discoveries must be taken into account in determining the treatment. A diet should be chosen which does not irritate the stomach in either its secretions or its mechanics. It matters little which of the many ulcer diets is given, provided this condition is fulfilled. Atropine or belladonna seems indispensable. Siphonage is likewise an essential part of treatment, having a marked effect upon the fasting gastric secretion. After meals the acid may be neutralized by administration of telluric alkalies (magnesia usta, calcium carbonate, or magnesia perhydrolate. Sodium bicarbonate should be discarded unconditionally from treatment of ulcer, since its secondary effect of increasing acid has been established beyond a doubt.—*Deutsche medizinische Wochenschrift*, March 6, 1931.

LEGAL

LIBEL—PUBLICATION ESTABLISHED BY DICTATION TO STENOGRAPHER

By LORENZ J. BROSNAN, ESQ.
Counsel, Medical Society of the State of New York

Our Court of Appeals recently had occasion to consider a very interesting question involved in an action for libel. The case came before the Court of Appeals purely as a question of law upon the following state of facts:

The plaintiff brought an action against the defendant in which it was alleged that the defendant composed a libelous letter wherein he stated: "If you (referring to plaintiff) do not appear in this office Monday with the money and notes, my attorney will be instructed to go to the District Attorney's office to procure a warrant for your arrest and X will be notified that this money and notes were given you upon false representation." The plaintiff alleged that the defendant thereby intended to charge the plaintiff with larceny; that he intentionally and maliciously published such matter by dictating it and by causing it to be read and transcribed by a stenographer. It was further alleged that the defendant mailed the letter to the plaintiff and that the statements were malicious, libelous and untrue.

The defendant then made a motion to dismiss the complaint upon the ground that the dictation of this letter by the defendant to his stenographer was not a publication of the letter and, hence, one of the necessary elements in a libel case was lacking.

The case in this State presented a novel question. Although the question had been before the Courts of England and in various States in this country, the higher Courts of our State had never passed upon this question as affecting an individual defendant. Over forty years ago in England it was held that the dictation of a letter to a stenographer does constitute a publication so as to render the dictator of such letter answerable in money damages to the addressee, provided, of course, that the letter is of a defamatory nature. In the English case the Court said:

"Certainly it is shewing it to a third person; . . . I cannot, therefore, feel any doubt that, if the writer of a letter shews it to any person other than the person to whom it is written, he publishes it. If he wishes not to publish it, he must, so far as he possibly can, keep it to himself, or he must send it himself straight to the person to whom it is written. There was, therefore, in this case a publication to the type-writer."

Further on, the Court took occasion to say:

"I do not think that the necessities or the luxuries of business can alter the law of England. If a merchant wishes to write a letter containing defamatory matter, and to keep a copy of the letter, he had better make the copy himself."

One of the Justices concurring stated:

"It is said that our decision will cause great inconvenience in merchants' offices and will work great hardship. . . . I think the answer to this is very simple. I have never yet heard that it is in the usual course of a merchant's business to write letters containing defamatory statements. If a merchant has occasion to write such a letter he must write it himself, and make a copy of it himself, or he must take the consequences."

The Court of Appeals held on the facts here recited that the English rule should be followed, and that the complaint sufficiently charged publication. The decision of the Court of Appeals was non-unanimous, four judges holding that publication was established and three judges holding that upon the facts the libel action cold not be sustained since, in the opinion of the dissenting minority, there was no publication of the libel. In the majority opinion the Court said:

"In the law of defamation, publication is a term of art. A defamatory writing is not published if it is read by no one but the one defamed. Published it is, however, as soon as read by any one else. The reader may be a telegraph operator, or the compositor in a printing house, or the copyist who reproduces a longhand draft. The legal consequence is not altered where the symbols reproduced or interpreted are the notes of a stenographer. Publication there still is as a result of the dictation, at least where the notes have been examined or transcribed. Enough that a writing defamatory in content has been read and understood at the behest of the defamer.

"The argument is made that the wrong in such a case of slander and not libel. 'It is difficult to see how A can publish to B a document which is written by B himself' (citing from textbook). The criticism would be just if B were the author of the document, or wrote it of his own motion. The point is dulled when we remember that in noting and transcribing he does the bidding of the defamer, who has used him as an instrument to give existence to the writing. Very often a stenographer does not grasp the meaning of dictated words till the dictation is over and the symbols have been read. This is particularly

likely to be the case where a defamatory charge is made equivocally or with evasive innuendoes. The author who directs his copyist to read, has displayed the writing to the reader as truly and effectively as if he had copied it himself . . .

"The soundness of a conclusion may not infrequently be tested by its consequences. Let us assume a case where words, unaccompanied by special damage, are libelous if written, but are not slanderous per se. Let us assume that the defamer has a grudge that will be served by defaming his victim in the thought of a particular person. Let us assume that this person is also his stenographer. With that mind he dictates the defamatory words and instructs the stenographer to preserve and read what has been written. By hypothesis, the one defamed is without a remedy for slander. By hypothesis, too, a writing has been created at the instance of the defamer and lodged in the custody of the very person whose mind was to be poisoned. The outrage is without redress if the libel is not published when written out and read."

On principle, it would seem that the majority opinion is correct, and indeed it represents the great weight of authority in those Courts where the question has already been presented for decision.

CLAIMED NEGLIGENT TREATMENT OF OSTEOMYELITIS

In this case the plaintiff was a physician and surgeon who specialized in oral surgery and in addition does general dental work. A patient called at his office complaining of pain in his jaw stating that while at work in his office a fellow-employee had in some way bumped his head against his (the patient's) jaw.

The doctor suspected osteomyelitis of the mandible and so took a test of his blood and urine. The laboratory reports were negative. *X*-rays taken of the teeth and jaws showed no fracture and no diseased condition. The patient returned to the doctor on several successive occasions, each time complaining of pain. The doctor decided that a condition of osteomyelitis was probably present and placed him in a hospital under observation, and as the symptoms observed there confirmed the tentative diagnosis, he decided to operate. Under ether anesthesia an incision was made along the lower border of the left mandible to the left of the median line down to the periosteum. The doctor found an area of osteomyelitis about 1½ c m. in diameter which he carefully removed. He then put in one catgut suture and inserted an iodoform gauze drain. The doctor then made another incision on the other side of the mandible down to the bone, but could not definitely locate any pus. This was similarly dressed but not sutured. The patient's condition improved and he left the hospital in a few days, shortly after which the second bicuspid tooth on the upper right side was removed by an assistant of the plaintiff doctor. Two days later the doctor saw the man and this was the last time. At that time there was a swollen area of the mandible and the wounds were not healed completely, but needed further dressings. The patient was told to return but failed to.

Subsequently the doctor sued for his bill and the patient interposed a counterclaim of malpractice claiming that the treatments had been negligent and unskillful throughout. The case was duly brought on for trial. The defendant was unable to support his charges of malpractice and the doctor obtained a judgment for his bill and a dismissal of the counterclaim for damages.

CLAIMED NEGLIGENT OPERATION ON EYE, CAUSING BLINDNESS

The defendant in this case was a physician, specializing in eye cases. The plaintiff, an elderly colored lady, called at his office complaining that she could not see with her right eye, and blamed this defect of vision on an operation performed by the doctor several years before. That operation had been for the removal of the right lachrymal gland, and at that time the patient's recovery had been uneventful.

The doctor examined the patient's eyes and found no condition which could be traceable to the earlier operation. He found the right [illegible] be completely blind, but healthy, the [illegible] ing due to a cataract. He also observed a [illegible] forming near the left eye. The only treatment performed by the doctor for the patient at this time was to prescribe for a pair of glasses for her.

The doctor heard nothing more from this woman, until some time later a summons was served upon him. The attorney for this woman did not serve a complaint, but attempted to negotiate a settlement with your counsel. The circumstances, of course, indicated that the suit was a mere strike, and your counsel refused to countenance any negotiations for settlement, and obtained a dismissal of the entire matter by rea[illegible] the failure of plaintiff's attorney to [illegible] plaint within the time prescribed [illegible]

CLAIMED NEGLIGENT TREATMENT OF INFECTED FINGER

In this case a young woman called at the office of a general medical practitioner complaining of an injury to the end of her finger, caused by the puncture of a pin. The doctor examined it and found a slight infection but decided it was not ready to open, so advised her to apply wet dressings of hot boric acid solution and to return to him in twenty-four hours. The patient, however, waited for a week before returning, when she told the doctor that during the intervening time she had used an ointment, hoping that the abscess would open spontaneously, but instead it had become progressively worse. Therefore, she had returned to the doctor to have him open it. The doctor discovered the finger to have become extremely swollen and tender, with evidence of osteomyelitis of the distal phalanx. He made a semicircular incision of the tip of the distal phalanx under local anaesthesia of novocaine, released the pus and inserted a drain. He advised continuous wet dressings of hot boric acid solution. He treated the patient daily for about a month and then on alternate days for two weeks additional. Each time he changed the dressings, he removed whatever necrotic tissue and pus were present, and bathed it with peroxide or Dobel's solution. He also administered Sunray treatments on the last few occasions. The wound improved considerably and when he last treated her, it was clear from pus and the finger was normal in size and free from pain. The edges of the wound did not unite, and the doctor advised the patient on her last visit that he would have to scrape the edges in order that the wound might close. The patient never appeared at the doctor's office for that purpose. The doctor sent his bill some time later, which was not paid. Thereafter the doctor instituted suit, through his attorneys, for the collection of this bill. A counterclaim was interposed by the defendant, setting up that the plaintiff doctor was guilty of malpractice.

Your society's counsel became associated in the case to defend the doctor against the counterclaim. The defendant specified the claim of malpractice to be that the doctor's improper treatment failed to cure her condition, left her with a disfigurement, and subjected her to the necessity of a skin graft operation.

The defendant's attorney attempted to delay the suit wherever possible, but the case was brought on to trial and the counterclaim of malpractice dismissed at the same time that judgment was rendered in favor of the doctor for his bill.

ALLEGED NEGLIGENCE IN BREAKING OF NEEDLE AND NOT REMOVING SAME

The defendant doctor in this case was called to treat a four-year-old boy for whooping cough. As part of his treatment the doctor gave two injections of pertussin vaccine into the arm of the patient. He carefully instructed the mother to hold the child firmly. The first injection was uneventful, but during the second injection, the mother failed to hold the boy securely, according to instructions, and the child, while the needle was being inserted into his arm in a slanting position, swung around suddenly causing the needle to break.

The doctor immediately attempted to remove the broken portion of the needle and succeeded in grasping the needle, but the child became extremely unruly, and could not be governed sufficiently to allow the doctor to remove the needle, and it slipped under the skin.

The doctor then decided that the broken needle could not be removed without anesthesia, and instructed the child's mother to take him immediately to a hospital, giving her a letter arranging for the removal of this needle. The doctor was informed that the child was placed in the hospital and remained there a few days while *x*-rays were being taken. At the end of that time the woman took the child home from the hospital against instructions. The needle apparently was never removed by anyone, but caused the child no discomfort.

Suit was instituted against the doctor charging him with malpractice in his treatment of this child. The case was noticed for trial and when it was reached for trial the plaintiff's attorney failed to appear to try the same. Upon motion of the defendant's attorney the complaint was dismissed. The default of the plaintiff, however, was opened by a court order and the action was then tried before a Judge and Jury. The plaintiff contended that the defendant was negligent in permitting the needle to break and that he was negligent in failing to appear at the hospital to attend the child. At the close of all the evidence the defendant's attorney moved for a dismissal of the complaint which was granted.

NEWS NOTES

REPORT OF THE COUNCILOR OF THE SECOND DISTRICT BRANCH

To the House of Delegates:

During the past year the Second District Branch has grown in numbers and activities. The membership now totals 3,079. In Suffolk County the activities of the Public Health Committee has upon its program 1. Measles prevention, 2. Cancer elimination, 3. Tuberculosis prevention, especially a continuation of the study of the incidence of Tuberculosis among the families and children of patients in the infective stage of the disease. The Medical Economics Committee has shown concrete results from conferences with the Commissioner of Welfare and the Superintendents of the Hospitals in the County. The County Health Department, (now over two years old) was the first organized by the action of a County Medical Society. Its satisfactory service and organization have attracted the attention of neighboring and distant States. It now has a veterinary division, the first of its kind to be established in the United States under a County Board of Health and therefore medically controlled. Investigations of diseases of animals which can be conveyed to man are being conducted, notably streptococcus mastitis, contagious abortion of cattle, and rabies in dogs. The Monthly News Letter is of great value in communicating to physicians and the public the activities of the Society, health conditions in the County, and all types of welfare work. Suffolk is proud to have furnished President Ross to the State Society and they are even more gratified to learn how widely he has reached the various County Societies in their meetings, how his counsels have been sought by the Governor, the Health Commissioner, the Commissioner of Labor and various Welfare organizations, and how he has advanced the cordiality of the relations of our Profession with the Public.

In Nassau County the outstanding accomplishment of the year has been the voter's authorization of a County Hospital, for which the County Medical Society worked with vigor and devotion rare in Medical Society history. Plans for the Hospital are drawn, and its completion will be a great and much needed addition to the medical facilities of this attractive thriving section. The work in Diphtheria prevention has advanced this year even farther than before and the latest reports of incidence of the disease show definitely the magnificent accomplishment of Nassau County Society. The meetings this year have presented programs of extraordinary interest and the attendance averages over sixty per cent. We wonder how many County Societies having monthly meetings can show this?

In Queens County the new Society Building has helped to promote activities and to evolve new responsibilities. Necessarily dues were increased. Books in the Library are accumulating. There are now over ten thousand volumes. However, the library is not yet functioning due to delayed equipment and lack of necessary funds. The Committees have been very active, notably Public Health and Public Relations, and Graduate Education (lectures, exhibitions, and special public meetings). The Queensboro Tuberculosis and Health Association have given financial and other cooperation in these activities. Altogether Queens is in a busy, earnest, constructive stage of its existence and will win a high place among the County Societies of the Nation.

In Kings County the works started in previous years have been continued with growth and increase in detail. Graduate Education courses have been given as before and twenty Friday afternoon lectures have been given. The programs in Diphtheria Prevention, examinations of children entering school for the first time, and the Health Promotion work in Continuation Schools have been carried forward. Under the auspices of the Committee on Medical Economics four well attended open meetings or forums have been held and many items have been discussed in such a manner as to aid the Committee in its work. Two thousand inquiries regarding physicians, medical procedures, institutions, charlatanism and other things have been received from laymen and physicians and have been answered.

One of the outstanding features of the year in Kings and Queens Counties has been the formation of the Five-County Society Coordinating Committee of the Counties (or Boroughs) making up the City of New York. Public relations and other matters which can best be forwarded by co-ordinated action of all the County Societies in the City will be considered and the Committee reports will be submitted to the various Societies for ratification or modification. It is hoped that in some manner it can be represented on the State Society Committee on Public Relations, so that its activities may add to the accomplishments of the State Committee and that it may look for corroborative helpful action by the State Committee.

Kings, Queens, Nassau, and Suffolk publish monthly Bulletins which every Doctor in the State can read with profit.

CHARLES H. GOODRICH, *Councilor*

May 1, 1931.

COMMITTEE ON PUBLIC RELATIONS

A meeting of the Committee on Public Relations was held in the Albany office on Thursday, April 23, 1931. Those present were Drs. Sadlier, Johnson, Mitchell, Hambrook, Ross and Lawrence.

In the absence of Dr. Ross, Dr. Sadlier reported that during the month he had sat with the Five-County Coordinating Committee of Greater New York, and read certain interesting excerpts from the minutes of that meeting; among them the steps the committee has taken to inform itself and its counties upon the city's program for the erection of eight health centers. One of these centers has been completed and is in operation in the Bronx. Sites for others have been chosen and are to be erected as promptly as possible. They will cost about $250,000.00 apiece and will be developed as the headquarters for all public health activities in their communities. Second, that a program for the May-day round-up was discussed and adopted. Kings and Queens Counties have been taking part in this May-day round-up for the last several years and have been following it up by stimulating the examination of school children by the individual physicians. Last year it was reported that about 47% of the children entering school in Kings County were examined by private physicians and 54% in Queens County. The Coordinating Committee meets monthly and is finding a great deal of work to do. Much of it is along the lines of public relations.

It was proposed that a sub-committee, including Dr. Sadlier as chairman of the State Committee on Public Relations, should wait upon Mayor Walker, seeking a change in the policy of the city hospitals with regard to compensating physicians for the work they do on city patients. Dr. Mitchell suggested that this committee give to the Five-County Coordinating Committee such information as we have gathered through our investigation of the practice of hospitals up-State in relation to physicians and surgeons engaging in compensation work.

The discussion having drifted toward the difficulties that attend the physician in developing a practice, brought from Dr. Hambrook the remark that recently he had been invited by the principal of the Troy Day School to address the boys on the general subject of "Medicine as a Profession." The school has had representatives of several professions address the boys. At the close of Dr. Hambrook's address, one boy asked how much the physicians are paid for their work in the hospitals.

Dr. Ross, having come in at this point, reported upon the first meetings of the Governor's Special Committee to investigate medical and hospital problems in connection with the Workmen's Compensation Law's operation. The workmen were heard and they made it clear in all of their testimony that they have no grievance against the medical profession as such; that while there might be particular instances where they may have felt they did not receive proper care, such instances were few and isolated. On the other hand, they indicated that they have a serious grievance with the carriers and with representatives of the State Department of Labor. They gave numerous instances, citing exact data, where they consider themselves unjustly treated. Dr. Ross feels that the investigations of the committee are going to be highly worth while and their reports very illuminating and instructive. He recommends that the Public Relations Committee make an effort to keep in touch with the work of the Investigating Committee and, when possible, attend hearings. Governor Roosevelt, in announcing the committee, said that the investigation he had in mind related rather to "adequacy of the medical treatment of injured workmen" than to the adjustment of claims. The committee will take up these subjects: (1) The payment of adequate rates to the hospitals for bed and clinic care when handling workmen's compensation cases; (2) Suggestions as to the elimination of causes for delay in payment of hospital bills; (3) The subject of hospital record keeping in workmen's compensation cases; (4) Study of medical and hospital treatment and payment therefor in certain cases which have regularly eluded payment of medical and hospital costs in the past, such as third-party actions, non-insured employer cases and injuries reported to the Department of Labor either by employer or employee; (5) Standards of medical and hospital treatment in workmen's compensation cases.

The personnel of the committee follows:

Miss Frances Perkins.....Industrial Commissioner
Dr. Charles H. Johnson.Commissioner of Social Welfare
Dr. Frederick W. Parsons,
Commissioner of Mental Hygiene
Hon. George S. Van Schaick.....Rochester
Howard S. Gans, Lawyer.....New York City
Henry Fisher.....United Hospital Fund
Vincent Astor .....New York City
Dr. William H. Ross.....State Medical Society
Max Meyer.....Member Industrial Council
Dr. Adrian VanS. Lambert.....New York City
Dr. James Alexander Miller.....New York City
Marshall Field .....New York City
James Speyer .....New York City
Charles Deckleman.....Travelers Insurance Co.
Maxwell Wheeler.....President, Associated Industries

Hon. Howard S. Cullman.....New York City
Thomas J. Curtis.....N. Y. State Federation of Labor
Dr. S. S. Goldwater.....New York City
Dr. Edward A. King.....New York City
O. G. Browne.....New York City
Dr. Geo. F. Chandler.....State Medical Society

Dr. Ross next reported on his visit to Otsego County and Cooperstown. He visited with the Otsego County Society on Tuesday evening and made inquiry concerning the reaction to the Cooperstown program. He was surprised to find that there is practically no opposition to it; in fact, few seemed to have any interest whatever in it. After the adjournment of the meeting he went to the Cooperstown Hospital as a guest of some of the doctors who were in attendance at the meeting. The guild which they created had two hundred members on January 15th, and on March 15th the cost of conducting the guild was only about two-thirds of the share of the five thousand dollars that would be allotted to that period of time. These two hundred members are mostly from that group of people who would be able to pay $25.00 a year, but would find it difficult to pay the regular hospital charges in case they were ill. Some few of the members are having their dues paid by persons outside the guild who are interested in their welfare. There are several of the members in the hospital now. Cooperation between the hospital physicians and the one physician residing in Cooperstown who is not a member of the hospital staff, seems free and cordial. The school work of the city is done by a member of the staff and his compensation is collected by the hospital. A member of the staff is also the health officer and his compensation, likewise, is collected by the hospital. It seemed to appear from the report that the hospital authorities had changed their plans somewhat with regard to the membership, and it was suggested that the president write to the hospital, asking whether they had deliberately changed their program so as to admit to membership only those persons who might be considered self supporting and, yet, not able to pay the regular hospital rates in the event that they were ill. (See page 642.)

Dr. Hambrook pointed out that if people were permitted to pay the membership fees of others unable to support themselves, the city welfare departments might use a similar plan in caring for their wards at a great saving to the city.

Dr. Mitchell stated that he felt it would be much wiser to attempt to discuss with the County Society officers the desirability of exercising great care in selecting committees, rather than to write a letter. The committee concurred.

Dr. Sadlier read a proposed letter to be written to the deans of the medical schools, asking that a greater interest be taken in acquainting the medical students with our new public welfare law. The letter was approved. The committee also instructed the chairman to prepare and write a letter to the chairmen of the County Society Public Relations Committees, urging their interest in developing public sentiment against the recognition by the legislature of various cults.

It was also decided that the chairmen of the Public Relations Committees of the counties from which surveys have been received, should be asked to report upon the activities of their committees since submitting the surveys, and that all of the committees should be urged to participate in the May-day round-up exercises in a manner similar to that found so advantageous and profitable by the counties in Greater New York.

The committee then adjourned to luncheon, where they had invited as guest Mr. O'Hanlon, secretary of the New York State Federation of Labor. They conferred with him upon the subjects in which our organizations might be expected to have a mutual interest. They touched upon a number of subjects and it was quite apparent that another conference should be arranged to which Mr. O'Hanlon would invite members of his organization. He stated that at their next annual conference, which will be held in August in Syracuse, he will ask the society to appoint a live committee on medical relations, and it was then decided that we would arrange for a joint meeting some time in October or November.

The committee adjourned to meet again on Thursday, May 21st, in Albany.

J. S. LAWRENCE,
Executive Officer.

ALBANY COUNTY

The March meeting of the Medical Society of the County of Albany was held at our regularly appointed meeting place, the Aditorium of the Albany College of Pharmacy, on March 30, 1931. There were present about 150, including physicians from Schenectady, Troy and adjoining counties.

The meeting was opened by the President, Dr. Charles K. Winne, Jr. Following the reading of the minutes of the previous meeting, Dr. Arthur J. Bedell, Chairman of the Program Committee, announced that the next regular meeting would be held at the Memorial Hospital, and that the Scientific Program would be arranged by the Hospital Staff.

Dr. James F. Rooney, Chairman of a Special Committee, discussed the present bills pending before the State Legislature.

Dr. Henry L. K. Shaw, Chairman of a Special Committee, read resolutions on the death of our late member, Dr. James P. Boyd, a former President of this Society, and at one time Professor of Obstetrics, Gynecology and Diseases of Children at the Albany Medical College. It was pointed out that Dr. Boyd's father was a physician who began the practice of medicine in Albany in 1825 and continued to practice medicine for some fifty-five years. Dr. James P. Boyd, Jr., became a member of our Society in 1873. In this connection it is an interesting fact that a Dr. James Peter Boyd has been on the medical roster of Albany from 1825 until 1931, a period of more than one hundred years.

The applications of F. Constance Stewart and James L. Spencer were presented and both unanimously elected to membership.

A communication was received from the Fort Orange Council, Boy Scouts of America, acknowledging receipt of our check for the first aid medal provided by the County Society. This medal is awarded each year to the winner of the First Aid Contest conducted by a special committee appointed by the Society.

The Scientific Program consisted of a very scholarly and interesting address by Dr. F. d'Herelle, Professor of Bacteriology, Yale University School of Medicine, who spoke on the subject of Bacteriophage and Recovery from Infectious Diseases.

The discussion was opened by Dr. Augustus Wadsworth, Director of Laboratories, New York State Department of Health and contined by Dr. Arthur W. Wright, Director of the Bender Laboratory of Albany. Further discussion was continued by Doctors Rooney, Neuman and Corning.

Following a rising vote of thanks to Dr. d'Herelle, the meeting adjourned at 10:55 P.M.

HOMER L. NELMS, *Secretary.*

The April meeting of the Medical Society of the County of Albany was held at the Memorial Hospital, Albany, N. Y., on Tuesday evening, April 14, 1931. The President, Dr. Charles K. Winne, Jr., presided.

Dr. Arthur J. Bedell, Chairman of the Program Committee, announced that the May meeting would be held at the Laboratory of the New York State Department of Health, and that the program would be furnished by the Laboratory Staff.

Dr. A. C. Worth presented resolutions on the death of our late member, Dr. Harold Duncan Cochrane, who died in Albany, April 7, 1931. By direction of the Society these resolutions were accepted and ordered spread upon our minutes and a copy sent to the family of the deceased.

The Transfer of Dr. Frederick L. Parry from the Oneida County Society to the Albany County Society was announced.

The Scientific Program consisted of the following interesting papers and case histories presented by members of the Staff of the Memorial Hospital:

Recurrent Dislocation of the Shoulder—Operative Treatment. Dr. Philip L. Forster, Albany, N. Y.

The Aschheim-Zondek Test for Pregnancy—Preliminary Report. Dr. Harold A Peck and Dr. Arthur W. Wright.

Pneumo-peritoneum—Case Report. Dr. Edgar A. Vander Veer.

Through the courtesy of Mr. T. T. Murray, Superintendent of the Hospital, a luncheon was served following the meeting.

HOMER L. NELMS, *Secretary.*

THE DAILY PRESS

BIRTH CONTROL

The *New York Herald Tribune* of April 22, contains the following editorial on the relation of physicians to birth control:

"The action of the New York Academy of Medicine indorsing birth-control clinics, urging education of the public in sex matters by the medical profession, and suggesting modification of existing state and Federal legislation on birth control has only just been made public, but in fact it antedates the similar statements made by the Lambeth Conference of Anglican Bishops and the Federal Council of the Churches of Christ in America.

"The academy is an old and respected institution devoted largely to medical research; its conclusions are the fruit of long and mature study, and will carry weight with the medical profession throughout the country and with laymen. The recommendation that the law be modified dates back ten years; the other proposals, first made by a subcommittee of the important Public Health Relations Committee, were indorsed by the council of the academy more than a year ago. But the medical profession is notoriously conservative and fearful of publicity; it acts slowly, and it is still more slow to take the public into its confidence.

"However, that is one of the reasons why the public has faith to follow when such a body as the academy takes the lead. When the academy says that recent research in technique demands recognition by the profession, the public will believe it, and will not understand it if individual members of the profession fail to accept the responsibility for educating the public which the academy assigns it. The action of the academy should go far to fortify individual physicians in a position which some have been hesitant to assume; and it should go far to encourage the efforts to modify the medieval legislation, both state and Federal, which still lingers on the statute books."

HE'S A TOUCH OLD BIRD AND HAS WEATHERED A LOT OF DEPRESSIONS



From the New York Herald-Tribune, April 23, 1931.

THE SCIENTIFIC HUNCH

The word "hunch," used in the sense of premonition, is classed as a colloquialism by some lexicographers, and ignored by others; but it fills a real want in the English language. The New York *Herald Tribune* of March 30, discusses the scientific value of the hunch as follows:

"How 200 scientists, dealers in the mathematical, the exact and the absolute, had employed the layman's lowly hunch to awaken their inventiveness was revealed today.

"The findings were made public in a questionnaire released by the American Chemical Society, which begins its eighty-first annual meeting here tomorrow. The canvass was conducted by Professor R. A. Baker, of the College of the City of New York, and Dr. Washington Platt, of Syracuse. It was made for the department of chemical education.

"The hunch," says the report, "follows a long period of study, 'but comes into consciousness when we are not consciously working on the problem. It is a process of creative thought.'

"Such a hunch came to one scientist 'while dodging automobiles across Park Row and across Broadway in New York.' Another, an improvement in oil pipeline coils, was discovered one Sunday in church. 'The correct principle,' says this scientist, 'came like a flash as the preacher was announcing the text. Strange to say, I have always remembered the text and the sermon.' But it was not learned what the text was.

"After the hunch, scientists cash in by painstaking tests. Many report that they try to create hunch conditions, some even in dreams. One of these keeps a handkerchief at hand to tie around his arm so as to remind him in the morning of his dream."

APHORISMS FOR DOCTORS

Physicians may often use selected aphorisms in their writings in order to enhance the appearance of erudition on part of the authors, and to afford breathing spells on part of the readers. During the past year or two the NEW YORK STATE JOURNAL OF MEDICINE has used nearly every one of the following aphorisms compiled by Glenn Compton, and printed in the *New York Herald Tribune* of May first, and will probably use them over again next year:

"The rolling stone collects no moss;
Gambling throws you for a loss;
Nor borrower nor lender be;
A stitch in time saves two or three,
Or six or eight or maybe nine;
In bottles old put no new wine;
Play not with fire, for it will burn;
The road is long that does not turn;
Handsome is as handsome does;
There's nothing new, there never was;
Cross no bridges in advance;
The highest bliss is ignorance;
Put something by for rainy days;
Let not thy head be turned by praise;
The child is father to the man;
It can be done, you know it can;
Burn not the candle at both ends;
For all your sins make full amends;
Spare the rod and spoil the child;
Be not by siren's lures beguiled;
Great oaks from little acorns grow;
Man wants but little here below;
A barking canine never bites;
A brave man down gets up and fights;
The dead goose lays no golden egg;
A hole that's round fits no square peg;
As you sow so shall you reap;
Always look before you leap;
A friend in need's a friend indeed;
Of the morrow take no heed;
'Tis an ill wind blows no good;
Great men are misunderstood;
Rome was built not in a day;
While the sun shines make thee hay;
Enchantment is by distance lent;
Rich men seldom are content;
To thy proper self be true;
Credit give where it is due;
For no man wait the tide and time,
And here's the reason for my rhyme:
A little nonsense now and then
Is relished by the best of men."

TRAINING DELINQUENT YOUTHS

The *New York Times* of April 22 contains the following editorial account of modern methods of training delinquent youth:

"In the annual report of the Society for the Reformation of Juvenile Delinquents, just published, is an account of the four methods of training used for all boys at Randall's Island. The House of Refuge there is not a place of punishment, but a school where instruction and practice bring the boys into wholesome relation with each other and with the adults in charge of them.

"Religious and common school instruction are given very much as if the boys were not committed to an institution. This is supplemented by military training, which gives the boys exercise, a smart carriage, habits of neatness and, above all, respect for discipline and an esprit de corps.

"The fourth kind of training has been found most useful to the boys in fitting them for work in the world on parole. They are taught many trades, and are permitted to use the knowledge acquired in the vocational classes when work is to be done about the buildings and grounds. Boys from the tailoring classes make the clothes of the institution. Farming and gardening students contribute to the table. The steam tug is manned by another group. Repair of paint, plaster, plumbing, steam pipes and all necessary carpentry are done by the boys. No outside mechanic has been employed for some time.

"This work is valuable, not only as it supplements class instruction, but because it gives the boys the feeling of doing something of importance for their small community."

BOOKS RECEIVED

Acknowledgment of all books received will be made in this column and this will be deemed by us a full equivalent to those sending them. A selection from this column will be made for review, as dictated by their merits, or in the interests of our readers.

A HANDBOOK ON DISEASES OF CHILDREN: including Dietetics and the Common Fevers. By BRUCE WILLIAMSON, M.D., M.R.C.P. 12mo of 290 pages, illustrated. New York, William Wood & Company, 1931. Cloth, $3.50.

AN INTRODUCTION TO PRACTICAL BACTERIOLOGY: A Guide to Bacteriological Laboratory Work. By T. J. MACKIE, M.D., D.P.H. and J. E. MCCARTNEY, M.D., D.Sc. Third edition. 12mo of 421 pages, illustrated. New York, William Wood & Company, 1931. Cloth, $3.50.

MODERN METHODS OF TREATMENT. By LOGAN CLENDENING, M.D. Fourth edition. Octavo of 819 pages, illustrated. St. Louis, The C. V. Mosby Company, 1931. Cloth, $10.00.

CANCER: Its Origin, Its Development and Its Self-Perpetuation. The therapy of operable and inoperable cancer in the light of a systemic conception of malignancy. A research. By WILLY MEYER, M.D. Octavo of 427 pages, illustrated. New York, Paul B. Hoeber, Inc., 1931. Cloth, $7.50.

CHININ IN DER ALLGEMEINPRAXIS Unter Berücksichtigung Pharmakologischer Befunde. By DR. FRITZ JOHANNESSOHN. Octavo of 232 pages, illustrated. Amsterdam, Bureau Tot Bevordering Van Het Kinine-Gebruik, 1930. Paper. (On demand, copies will be sent to medical men free of charge.)

A TEXTBOOK OF LABORATORY DIAGNOSIS with Clinical Applications for Practitioners and Students. By EDWIN E. OSGOOD, M.A., M.D., and HOWARD D. HASKINS, M.D. Octavo of 475 pages, illustrated. Philadelphia, P. Blakiston's Son & Co., Inc., 1931. Cloth, $5.00.

SURGICAL CLINICS OF NORTH AMERICA. Vol. 11, No. 1. February, 1931. (Chicago Number.) Published every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues). Cloth, $16.00 net; paper, $12.00 net.

SELECTIONS FROM THE PAPERS AND SPEECHES OF JOHN CHALMERS DACOSTA, M.D., LL.D. Octavo of 440 pages, illustrated. Philadelphia and London, W. B. Saunders Company, 1931. Cloth, $6.50.

ROENTGEN INTERPRETATION: A Manual for Students and Practitioners By GEORGE W. HOLMES, M.D., and HOWARD E. RUGGLES, M.D. Fourth edition. Octavo of 339 pages, illustrated. Philadelphia, Lea & Febiger, 1931. Cloth, $5.00.

QUANTITATIVE CLINICAL CHEMISTRY. By JOHN P. PETERS, M.D., M.A., and DONALD D. VAN SLYKE, Ph.D., Sc.D. Volume 1, Interpretations. Octavo of 1264 pages, illustrated Baltimore, The Williams & Wilkins Company, 1931. Cloth, $12.00.

A HANDBOOK FOR SENIOR NURSES AND MIDWIVES. By J. K. WATSON, M.D. Second edition. 12mo of 676 pages, illustrated. New York and London, Oxford University Press, 1931. Cloth, $4.00. (Oxford Medical Publications.)

PRIMARY SYPHILIS IN THE FEMALE. By THOMAS ANWYL DAVIES, M.D. Octavo of 111 pages, illustrated. New York and London, Oxford University Press, 1931. Cloth, $4.00. (Oxford Medical Publications.)

THE DIET BOOK FOR DOCTOR, PATIENT AND HOUSEWIFE with specimen menus for one week and recipes. By MARGUERITE REQUA REA. 12mo of 197 pages. New York and London, Oxford University Press, 1931. Cloth, $2.75.

COAL-MINERS' NYSTAGMUS. By G. F. HAYCRAFT, M.R.C.S., L.R.C.P. 12mo of 15 pages. New York and London, Oxford University Press, 1931. Paper, 30c. (Oxford Medical Publications.)

MEDICAL CLINICS OF NORTH AMERICA. Vol. 14, No. 5 March, 1931. (Chicago Number.) Published every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues) Cloth, $16.00 net; paper, $12.00 net.

AIDS TO BACTERIOLOGY. By WILLIAM PARTRIDGE, F.I.C. Fifth edition. 16mo of 311 pages. New York, William Wood & Company, 1931. Cloth, $1.75. (Students' Aids Series.)

THE THEORY OF OBSTETRICS: A functional study of child-bearing based on a new definition of normal labor and on a new theory of uterine inertia. . . . By M. C. DE GARIS, M.D. Octavo of 272 pages. New York, William Wood and Company, 1931. Cloth, $5.00.

AN INTRODUCTION TO HUMAN EXPERIMENTAL PHYSIOLOGY. By F. W. LAMB, M.D. Octavo of 335 pages, illustrated. New York, Longmans, Green & Company, 1930. Cloth, $4.00.

THE LETTERS OF DR. BETTERMAN. By CHARLES ELTON BLANCHARD, M.D. Octavo of 157 pages, illustrated. Youngstown, Ohio, Medical Success Press, 1931. Paper, $1.00.

TEXTBOOK OF HUMAN EMBRYOLOGY. By CLEVELAND SYLVESTER SIMKINS, Ph.D. Octavo of 469 pages, illustrated. Philadelphia, F. A. Davis Company, 1931. Cloth, $4.50.

EASIER MOTHERHOOD: A discussion of the abolition of needless pain. By CONSTANCE L. TODD. 12mo of 199 pages. New York, The John Day Company, 1931. Cloth, $2.00.

DEEP X-RAY THERAPY IN MALIGNANT DISEASE: A report of an investigation carried out from 1924-1929 under the direction of the St. Bartholomew's Hospital Cancer Research Committee. By WALTER M. LEVITT, M.B., D.M.R.E. Octavo of 128 pages, illustrated. London, John Murray (c. 1930). Cloth, 10/6.

FACTS AND FIGURES ABOUT TUBERCULOSIS. By JESSAMINE S. WHITNEY. Quarto of 63 pages, illustrated. New York, National Tuberculosis Association, 1931. Paper, 75c; Fabrikoid, $1.00.

A SYSTEM OF BACTERIOLOGY IN RELATION TO MEDICINE. By Various Authors. (Prepared under the direction of the Medical Research Council.) Volume VI. Octavo of 538 pages. London, His Majesty's Stationery Office. 1931. Cloth, £8-8-0 a set; £1-1-0 each.

BOOK REVIEWS

A System of Clinical Medicine. Dealing with the Diagnosis, Prognosis, and Treatment of Disease for Students and Practitioners. By Thomas D. Savill, M.D. Eighth Edition. Octavo of 1019 pages, illustrated. New York, William Wood and Company, 1930. Cloth, $10.00.

This well-known and valued edition consists of approximately one thousand pages of subject matter with many and excellent illustrations.

In the plan and arrangement of this work, the author has approached the subject from the standpoint of symptomatology. He traces the symptoms and thus arrives at the cause. The order of sequence is that which is adopted in the examination of the patient. Thus, the first chapter gives the general scheme for the examination of a case; the second describes the physiognomy of disease; and the succeeding chapters deal seriatim with the symptoms and signs referable to the body and the disease which may cause those symptoms. Each chapter is divided into three unequal parts, of which Part A treats of symptoms, Part B of the physical signs, and Part C which is prefaced with a clinical classification gives a summary of the routine procedure to be adopted.

Apart from the general plan and arrangement, there are two special features. The first part of each chapter includes a complete list of symptoms and their causes. This ought to be of great benefit in helping to obtain clues to a diagnosis. The second feature consists of the italicized paragraphs in Part C, standing at the head of each section, which deal with a separate malady. They are brief clinical definitions and form "sign-posts" or guides in the process of diagnosis.

The author has adverted to certain advantages associated with the method he has adopted of approaching clinical medicine. He states that this method of diagnosis is not what is called a process of exclusion, and that it is a positive rather than a negative process. The advantages of passing in rapid review all the possible diseases which may give rise to a patient's leading symptoms are very obvious to those actively engaged in clinical work. The recognition of a clinical likeness between diseases has often led to the erection of a working hypothesis, which by subsequent research has been found to be correct. There is still another advantage which accrues, especially to the young observer, by the process of balancing evidence and comparing diseases. It not only impresses important facts upon his memory, but it constitutes one of the best possible means of training him in the habits of accurate and complete observation and of systematic and productive thought.

The medical practitioner will find this volume clear, concise, and most practical as a daily book of reference.

Henry M. Feinblatt.

Ephedrine and Related Substances. By K. K. Chen and Carl F. Schmidt. Octavo of 121 pages. Baltimore, Williams & Wilkins Company, 1930. Cloth, $2.50. (Medicine Monographs Vol. 17.)

This monograph is a review of the literature on Ephedrine and Related Substances. The authors present the subject in a concise form giving a very interesting account of this newly acquired addition to our materia medica.

The chapters on pharmacognosy and chemistry, pharmacological action, clinical applications and therapeutic uses give practically all that recent investigations have added to our knowledge of this valuable drug. F. S.

The Principles and Practice of Medicine. Originally written by the late Sir William Osler, B.T., M.D. Eleventh Edition revised by Thomas McCrae, M.D. Octavo of 1237 pages. New York and London, D. Appleton and Company, 1930. Cloth, $8.50.

This old friend of the student-days of so many of us has now reached its 11th edition (first edition 1892), and at the hands of an Osler-trained clinician, Thomas McCrae, has been continued in accustomed form and arrangement, as the Old Master would have wished.

It is not easily possible to review a practice of medicine of 1175 pages of textual matter, but as the pages turn the reviewer's attention falls on many paragraphs and items of outstanding clinical interest. Such a wealth of fact and observation! Is it to be wondered at that a copy of Osler is in the medical ward libraries of nearly every hospital!

There are new articles on Melioidosis of the Far East, Subacute Leukemia, Asbestosis, Osteitis Fibrosa Cystica, Albers-Schönberg disease, Chronic Hypoglycemia and Poisoning from Radio-active Substances. There are many alterations and additions throughout the work.

Undulant Fever is clearly presented in the light of recent studies and the *abortus* form as seen in the United States carefully described. Thrombosis of the coronary arteries is succinctly described in one paragraph on page 810; the importance of this lesion would seem to deserve extended account and a more complete discussion.

Obviously there must be omissions in a one-volume practice. The amazing thing is the amount of clinical material included between the covers of this work. Several subjects that might be added in brief are cancer of the caecum, syphilis of the adrenals, types of cardiac dyspnea, non-diabetic acidotic dyspnea of cardiac disease, paradox embolism, and the occasionally observed epidemic streptococcus sore-throat.

Frank Bethel Cross.

Diet and Disease. By George A. Harrop, Jr., M.D. Octavo of 404 pages with 80 tables. Philadelphia, P. Blakiston's Son & Co., Inc., 1930. Cloth, $4.00.

This book comprises the collected lectures to third and fourth year students on diet in disease. The first part of the book is devoted to simple introductory remarks on the principles of nutrition with a discussion of the energy requirements of the body and the physiology of the various constituents in metabolism. The author presents the dietetic portion of the book in a very interesting fashion, with a description of the ingredients of the common foodstuffs, and their place in the diet. He makes this section particularly readable by continuous reference to racial food habits. The bulk of the book is concerned with the dietetic management of the following diseases: vitamin deficiency, food allergy, undernutrition and hyperthyroidism, obesity, fever and infections, anemia, nephritis, heart disease, diabetes, epilepsy and the gastro-intestinal diseases. There is a chapter on special feeding methods, such as tube feeding, nutrient enemas and post-operative feeding. The book finally contains an appendix with a list of common foods and their food values obtained from the most recent analyses of McCance and Lawrence. The book is well written and very practical.

William S. Collens.

A MANUAL OF THE COMMON CONTAGIOUS DISEASES. By PHILIP MOEN STIMSON, A.B., M.D. Octavo of 351 pages, illustrated. Philadelphia, Lea & Febiger, 1931. Cloth, $3.75.

This handbook deals with the common contagious diseases in a clear, concise, systematic fashion. The index is excellently arranged with a view toward helping one who has little spare time to obtain precise information on any matter of practical importance in handling a case or school epidemic of any of these diseases.

The author has definitely had in mind three groups of prospective readers: medical students, physicians caring for the students in private day-schools and boarding schools, and nurses. The medical student will find here a text-book giving the most modern views of etiology, pathology, diagnosis and differential diagnosis and treatment. The second group will find very helpful the rules of quarantine for aborting epidemics in schools with a minimum loss of schooling time to the pupil. For the instruction of nurses, the Isolation Technic of Willard Parker Hospital, New York City, is given in sufficient detail for either class or private instruction.

More prominence than it really deserves is given to the author's so-called Eye-sign in Measles. The majority of the physicians attached to the staffs of contagious disease hospitals knows that it is not important and is found in every disease in which there is a conjunctivitis.

KENNETH G. JENNINGS.

CLINICAL ALLERGY particularly ASTHMA AND HAY FEVER: Mechanism and Treatment. By FRANCIS M. RACKEMANN, M.D. Octavo of 617 pages, illustrated. New York, The Macmillan Company, 1931. Cloth, $10.50.

This book fulfills admirably the purpose for which it was written: to digest the mass of literature and so correlate the new observations, but primarily to define the present day conception of the mechanism of asthma, hay fever and allied disorders, and then discuss the methods of diagnosis and treatment with the results obtained.

The first third of the book is a technical discussion of the Phenomenon of Hypersensitiveness from the physical-chemical and experimental phases. The material is not too detailed and yet includes all the important experiments. In the chapter on the "Nature and Origin of Allergy," are discussed the many problems resulting from clinical experience as well as animal experimentation.

Every phase of hay fever is clearly discussed. The charts and tracings from skin tests are interesting.

The chapters on "Asthma" are excellent. The physiology and pathology are extensively treated. The various clinical types of asthmatics with their characteristic histories are described with some differential diagnoses. The chapter on "Treatment" covers the specific and non-specific therapy.

Realizing that the entire field of allergy is still in the experimental stage, Dr. Rackemann has done much to clarify and crystallize our knowledge on the subject in this very readable and interesting book.

DOROTHEA E. CURNOW.

TEXT-BOOK FOR NURSES: Anatomy, Physiology, Surgery and Medicine. By E. W. Hey Groves, M.D., and the late J. M. Fortescue-Brickdale, M.D. Fourth Edition. Octavo of 641 pages, illustrated. London and New York, Oxford University Press, 1930. Cloth, $6.50. (Oxford Medical Publications.)

As intended to be this is a comprehensive text-book presenting the principles underlying medical and surgical treatment. The essential facts are thoroughly presented by a well written text and over two hundred illustrations, many of them in color. In this edition, a considerable number of alterations and additions have been made.

It is an excellent volume in every respect, suitable for nursing schools of the highest type.

W. E. MCCOLLOM.

THE CLINICAL INTERPRETATION OF BLOOD EXAMINATIONS. By ROBERT A. KILDUFFE, A.B., M.D. Octavo of 629 pages, illustrated. Philadelphia, Lea & Febiger, 1931. Cloth, $6.50.

Clinical examination of the blood is dealt with in this volume in thirteen chapters, including physical properties of blood, blood formation, cytology, bacteriological, serological and chemical examination of the blood. Special chapters are devoted to the various methods for the determination of changes in the behavior of red blood cells, the changes in number and type of leucocytes and to the various complement fixation tests.

An enormous amount of knowledge has been accumulated in this book, which seems to offer much needed help to those who are desirous of obtaining information without going to the original sources. It has taken considerable painstaking labor to accumulate such a vast collection of data. Although not an inspiring book to read, it will be a valuable guide for the average laboratory worker.

M. A. GOLDZIEHER.

OUTLINE IN OBSTETRICS FOR NURSES. By F. W. RICE, M.D. Octavo of 228 pages, illustrated. St. Louis, The C. V. Mosby Company, 1930. Cloth, $2.00.

The author states that this volume is not intended as a text-book. It is the accumulation of notes used in lecturing to nurses over a period of years. As an outline for a course of lectures to nurses on obstetrics the book is valuable. The students may give their entire attention to the lecture, and no time need be wasted in note taking. The illustrations are schematic, rather than exact, in order that the student may more easily grasp the principle intended to be portrayed.

The author covers obstetrics very thoroughly, and adds many things that nurses should know about the care of mother and baby. This outline, together with a standard text-book for study will give any class of nurses an excellent grasp of the subject. The book will be valuable to those who wish to give a course of lectures on this subject, and it will be an easy way to outline the course but it may not be the best plan for the lecturer. As the title indicates the field for the book is rather limited.

W. S. S.

A PRIMER FOR DIABETIC PATIENTS. By RUSSELL M. WILDER, M.D. 4th Edition. 12mo of 138 pages, illustrated. Philadelphia and London, W. B. Saunders Company, 1930. Cloth, $1.50.

This edition is of about the same size as the preceding ones and is meant for the use of the physician and of the patient who is under the care of a physician. In planning the diet prescriptions the scale of Boothby and Sandiford is used.

The author believes that high carbohydrate diets increase the difficulty of treatment and uses smaller amounts than those generally advised by Joslin. Wilder believes that with the higher carbohydrate diets a wider fluctuation of the blood sugar occurs and that it is almost impossible to keep the urine sugar free. Diets are planned with strictly limited amounts of carbohydrate and protein, it being thought that 50 grams of protein per day will cover the needs of practically every patient providing not less than 2/3 of a gram for each kilogram of body weight. An example of a 2000 calorie diet used by the author consists of carbohydrate 73, protein 50 and fat 167 grams, glucose value 120.

Whether one adopts the author's diet or follows the plan of Joslin with generally one gram of protein per kilogram of body weight and usually about 100 grams of carbohydrate per day is perhaps a matter of individual preference as good results may be obtained either way, when the patient is carefully observed.

W. E. MCCOLLOM.

PHYSIOLOGICAL CHEMISTRY. A Text-Book and Manual for Students. By Albert P. Mathews, Ph.D. Fifth Edition. Octavo of 1233 pages. New York, William Wood & Company, 1930. Cloth, $7.00.

Mathews has now gone into the fifth edition. It is readable and up-to-date, containing the most recent advances in the biochemistry of metabolism and nutrition. In addition to a very exhaustive text, it contains in the last part of the book, a 300 page manual describing all the biochemical methods employed in clinical medicine. The bibliography is quite complete. It is recommended as an authoritative text and reference source for the student of biochemistry and metabolism.

W. S. COLLENS.

RECENT ADVANCES IN BIOCHEMISTRY. By JOHN PRYDE, B.Sc., M.Sc. Third edition. Octavo of 393 pages, illustrated. Philadelphia, P. Blakiston's Son & Co., Inc., 1931. Cloth, $3.50.

The first edition of this valuable work appeared in 1926; it was stated at that time that "Biochemistry is a science of such recent development and active progress that the whole of our subject might well be embraced by the title of this little volume. My chief problem has therefore been the choice of material. It has been my aim to include as diverse as possible a selection of topics, in which the recent advances have been most striking, and in which the trend of modern biochemical research is well indicated."

In the third edition, two chapters of the previous edition have been omitted: "Colloids and the Physical Chemistry of Proteins" and "Chemotherapy." Two new chapters have been added: "Protein Structure and Proteolytic Enzymes" and "Cholane Series." A list of references to recent literature is given at the end of each chapter.

As far as the reviewer's own interests are concerned, a useful summary of the recent work of Robison and his collaborators is given under the titles "The Role of Organic Phosphates in Ossification" and "The Problem of Rickets in Relation to the Bone Enzyme." The review of "The Chemistry of Ossification" is very brief; no mention is made of many recent contributions of note.

The number of original papers in biochemistry published each year is enormous. and the number increases year by year. The only practical way for the medical man interested in biochemistry to keep abreast of the times is by the reading of reviews such as this. This applies equally to the biochemist as far as the subject as a whole, apart from his particular specialty, is concerned.

M. J. SHEAR.

A TEXT-BOOK OF MEDICINE. By American Authors. Edited by RUSSELL L. CECIL, A.B., M.D., Sc.D. Second Edition Revised. Octavo of 1592 pages, illustrated. Philadelphia & London, W. B. Saunders Company, 1930. Cloth, $9.00.

This edition appears four years after the first and is the work of 135 authors. Many changes have been made and among the new chapters are those on tularemia, snake venom poisoning, atelectasis of the lungs, brucella abortus infections and agranulocytic angina.

In covering so large a field there are many advantages in the co-operation of numerous writers. The editor states that "it is doubtful whether any author of the future will have the temerity to write a complete textbook of medicine without considerable collaboration." It is true that a book of this kind lacks something of the charm of Osler's Practice but the editor's statement can not be refuted.

The plan followed of having references at the end of each principal chapter and the full index are valuable features of the book which is unquestionably one of the best in the field of internal medicine.

W. E. MCCOLLOM.

PRACTICAL TREATISE ON DISEASES OF THE DIGESTIVE SYSTEM. By L. WINFIELD KOHN, M.D. 2 volumes. Octavo of 1125 pages, illustrated. Philadelphia, F. A, Davis Company, 1930. Cloth, $12.00.

This two-volume treatise on digestive disorders should serve as a supplementary reference book. While it does not depart essentially from other reference books on the subject there are a few points which may win the appeal of the physician.

First, the salient facts are always italicized, and second, there are many well-chosen diagrammatic illustrations to support the detailed text. If one be interested in such an unusual disorder as Tuberculosis of the Stomach he will find it well discussed in this work.

Gastric photography is clearly described and will no doubt instill hope in the reader that some day natural color photography of the stomach lining may be a practical realization.

Treatment is discussed in a conservative fashion. Operation is advised only when medicine does not help. Even in such surgical conditions as fistula or acute appendicitis expectant medical treatment is advanced with the hope of offsetting surgery.

EMANUEL KRIMSKY.

A SYNOPSIS OF MEDICINE. By HENRY LETHEBY TIDY, M.A. Fifth edition, revised and enlarged. 12mo of 1032 pages. New York, William Wood & Company, 1930. Cloth, $6.00.

As in the previous editions the book supplies a quick reference volume in the field of medicine, the general arrangement following that of Osler's Practice of Medicine. While not intended as a full text-book it is more than a brief synopsis, and a satisfactory description of each disease is given.

In this edition there are many new articles and revisions bringing the text thoroughly up-to-date. The book shows much evidence of careful work and will be found very valuable for reference.

W. E. MCCOLLOM.

BURNS—TYPES, PATHOLOGY AND MANAGEMENT. By George T. Pack, B.S., M.D. and A. Hobson Davis, B.S., M.D. Octavo of 364 pages, illustrated. Philadelphia and London, J. B. Lippincott Company, 1930. Cloth, $6.00.

This single volume of 364 pages and 60 illustrations is well bound and clearly written. There is no other surgical accident which requires greater judgment and more careful attention in the wards of our large hospitals than the one under consideration. The pain suffered by a patient having a severe burn is the most agonizing in character. The usual convalescence and morbidity is usually greatly prolonged, and the cicatricial contractures and deformities are of the most serious nature. Because of the conditions mentioned above, the author has made an intensive study of this accidental calamity. He very justly states that a severe burn requires not only proper and immediate aid but also requires, too, much plastic and orthopedic surgery because of the frequent early neglect. Wherever possible, the severe burn cases should be under the immediate control of a surgeon who has had special training in its care and treatment. The chapter on scalds and burns in children is especially interesting. The subject of skin grafting occupies an important place in the book. Complete outlines of treatment are given in detail both from the medical and surgical standpoint.

This book is highly recommended for the interne staff and the attending surgeon, and equally for the general practitioner who is often first called and who equally often mistreats the burn case because of his lack of intimate knowledge of the subject.

MERRILL N. FOOTE.

RESEARCH AND MEDICAL PROGRESS AND OTHER ADDRESSES. By J. SHELTON HORSLEY, M.D. 12mo of 208 pages. St. Louis, The C. V. Mosby Company, 1929. Cloth, $2.00.

The book has fifteen interesting chapters, and following the title in each chapter he has discussed the history of many operative and clinical procedures, also the benefits or complications likely to arise as a result of treatment, both medical and surgical. Most of these chapters are reproductions of addresses given before state medical societies. They are instructive and interesting.

RALPH F. HARLOE.

THE PATHOLOGY OF INTERNAL DISEASES. By WILLIAM BOYD, M.D., M.R.C.P. Octavo of 888 pages, illustrated. Philadelphia, Lea & Febiger, 1931. Cloth, $10.00.

The trend in medicine now-a-days seems to cherish chemical and physical, bacteriological and serological methods, while morbid anatomy is looked down upon as something almost obsolete and ranking in usefulness next to normal descriptive anatomy. In other words it seems that no more progress is expected from the careful study of morphological changes occurring in disease. The average medical student does not like to study pathological anatomy and the average physician, as Boyd says in his preface, "turns to the text-books of medicine if he wishes to study the pathology of the disease." Obviously this cannot be the fault of the students and physicians only and it seems that there is a need for a different type of text-book on Pathology than most of the books published heretofore in English and German.

Pathological anatomy should be discussed with an eye as to the needs of the practicing physician, who is not interested in the minuteness of the details or in accurate classification of the various conditions. He is concerned more with the relationship of pathological processes to clinical manifestations and with the development of the pathological processes from their onset to the fatal outcome.

Boyd has tried to write a text with aims in mind similar to those outlined above. His description is vivid and always interesting. His attempt to discuss the changes in function which are either consequences or concomitant features of the anatomical changes is of great value for the better understanding of the pathological processes. His book really deserves to be read by the practicing physician and not only looked up incidentally as a source of special information.

The critical reviewer, however, will successfully try to find fault, even with such an excellent piece of work as Dr. Boyd's book. Some of his ideas, such as the relationship of angina pectoris to syphilis, are at variance with the more widely accepted opinion. His statement "That a clinical picture of coronary obstruction is comparable, but different from angina pectoris," is open to challenge. It is regrettable that Dr. Boyd takes so little cognizance of foreign, and particularly of German literature, and thus foregoes the opportunity to discuss some of the most fruitful advances in pathology, such as for instance, Ranke's conception of the three stages in the development of pulmonary tuberculosis. No mention is made either of what the German authors call "Fruhinfiltrat" or of the epituberculous lesions. In discussing congenital abnormalities of the heart, Spitzer's conception should not be omitted. Other rather important questions, such as malignant nephrosclerosis, are handled in too sketchy a manner, and the same criticism applies to the chapter on arteriosclerosis.

The pathologist will not fail to discover these and similar other shortcomings. The practicing physician, however, will read this book with pleasure and will obtain both enlightenment and stimulation.

M. A. GOLDZIEHER.

EMERGENCY SURGERY. By HAMILTON BAILEY, F.R.C.S. Volume I Abdomen and Pelvis. Octavo of 380 pages, illustrated. New York, William Wood & Company, 1930. Cloth, $8.00.

The impression gained from a careful perusal of this volume is one of unmixed disappointment. The opening chapters seem to be written for the tyro in surgery, giving descriptions of commonplace tools and elementary principles of surgery, whereas the clinical chapters encompass some of the most complicated surgical procedures which, of course, never can or should be attempted by the occasional operator. Some of the measures advocated by the author will sound heretical to most American surgeons, for instance the advice to use gauze moistened in turpentine for hemostatic purposes or employing mercurochrome intravenously as a routine procedure in cases of appendicitis with generalized peritonitis. The apparent disregard for spinal anesthesia is very disappointing in view of its enormous advantages in most types of emergency as well as elective surgery. Again why the avoidance of such an acknowledgedly noxious anesthetic as chloroform should be emphasized nowadays is likewise a puzzle.

In view of the excellent volumes on surgery, both general and regional, which have lately appeared in this country as well as in Europe, we regret we cannot recommend this work.

GEO. WEBB.

THE BEHAVIOR OF THE NEWBORN INFANT. By KARL CHAPMAN PRATT, Ph.D. and others. Octavo of 237 pages. Columbus, The Ohio State University Press, 1930. Paper, $3.00. (Ohio State University Studies, Contributions in Psychology, No. 10.)

The Ohio University psychologists have made a very detailed study of the reactions of newborn infants to certain stimuli. The investigations involve a detailed description of the reactions which infants show during the neonatal period to light, sound, taste, smell, temperature, restraint and plantar stimulation. Observations of the sucking reflex have also been included.

The methods employed and the results obtained have been clearly shown by adequate diagrams and tables. The work is purely investigative and should be consulted by those interested in infant behavior. A quite complete bibliography has been included.

LEWIS A. KOCH.

CANCER OF THE LUNG and other Intrathoracic Tumors. By MAURICE DAVIDSON, M.A., M.D. Octavo of 173 pages, illustrated. New York, William Wood & Company, 1930. Cloth, $5.50.

This is a carefully written, well presented work on the subject, which shows the study and experience of the author. We find the pathological and clinical conditions clearly treated and the histories of twenty-two patients discussed. From these the author has drawn his conclusions. Excellent roentgenograms are shown of many of the cases and a discussion of the pictures is given. While the reports of the cases are excellent for physical and gross postmortem findings, there is evidently no examination of these specimens with the microscope as no histological findings are given in the reports. The use of the Roentgen ray as an aid in diagnosis cannot be so general in England as in the United States, for the author writes "It is regrettable that in this country there is not more of that co-operation between the clinician and the radiologist which appears to be an outstanding feature in the leading clinics in the Unitel States."

The author states also in regard to bronchoscopy "The use of the bronchoscope as an aid to the diagnosis of various intrathoracic diseases, though it has been employed with regularity and considerable success in most of the best known American clinics, has unfortunately been a good deal neglected in this country (England)."

HENRY M. MOSES.

OUR NEIGHBORS

EDUCATION BY THE STATE SOCIETY OF VIRGINIA

The April number of the *Virginia Medical Monthly* has a "President's Message," by Dr. J. Allison Hodges, in which he discusses the various phases of medical education conducted by Virginia, as follows:

"Formerly, our State Society has exercised only two functions, scientific and business. Latterly, to these has been added another, which is educational in character, and is administered through The Department of Clinical Education, the Society's principal educational agency.

"More recently, following the original plan outlined for this Department at its initiation in 1928, two other subsidiary educational methods, which will be put into operation gradually, have been arranged for enlarging and enforcing this educational work.

"The circle of education, as arranged by the Society, and as now completed, embraces, then, the continuing education of the practitioners in their own communities under the direction of The Department of Clinical Education; the education of special groups under the guidance of the Joint Committee on Prenatal and Postnatal Instruction; and the education of the public through The Joint Committee on Public Health Education, thus contemporaneously teaching medicine to its members and health to the people.

"In presenting the resolutions to the Council for the appointment and future work of this latter committee, the President of the Society spoke in part as follows:

"'Finally, our State Society, if it would attain the summit of its usefulness, must logically benefit not only its own members, but also correctly educate the people at large. Hitherto, we have not influenced public opinion by participation in cooperative contact with lay organizations, and now, our profession, through organized medicine, must seek leadership, and by correctly educating the public in personal and public health measures, earn its cooperation.

"'Education of the people, plus continued education of the doctors, equals State Health, the surest guarantee for the future against socialized medicine, Federal methods, or rank charlatanism. We, as a profession, must face this issue in time; either we can help, or we can unworthily dodge the responsibility.

"'It is easy enough to broadcast health knowledge, but it is difficult to arouse an interest that will apply this knowledge to personal use.

"'With this new concept of an old subject, it should be an inspiring task for us to direct and enforce this knowledge, for doctors can no longer afford to stand idle on the sidelines of progressive science.

"'As a profession, we need a shift in medical thinking in order to meet properly many of the problems in this changing and challenging era. We must no longer simply coddle our fears, but be ready to present factual conclusions. We must be prepared.'"

PUBLIC RELATIONS IN VIRGINIA

The civic relations of the medical profession to other civic groups has received more attention in New York State than in probably any other State, as will be seen by the records of the committee on Public Relations published in the Journal. Now Virginia, too, is taking up the project, as is shown in the following editorial in the Virginia Medical Monthly for April:

"It is becoming increasingly apparent that the government, both Federal and State, is gradually assuming certain prerogatives, responsibilities, and functions, which have been vested in the medical profession for many years. The federalization of medicine has already, either partially or completely, become effective in twenty-eight countries of the world.

"Dr. Southgate Leigh, in his report of the proceedings of the A. M. A. at the Norfolk meeting of the Medical Society of Virginia, October 21-23, 1930, urged the immediate appointment of a Public Relations Committee to investigate this problem and make recommendations, this action being advocated by the A. M. A., at the Detroit meeting. The House of Delegates voted to adopt the recommendations of Dr. Leigh, and a committee was appointed by the President.

"The Committee met in Richmond, January 15th, for the purpose of organizing and formulating a plan of action. At the suggestion of the Chairman, Dr. W. O. Bailey, of Leesburg, Va., was made secretary of the committee.

"The committee agreed that urgent necessity does exist to take immediate cognizance of Fed-

(*Continued on page 664—adv. xiv*)

How MEAD'S CEREAL Compares with Five Principal Foodstuffs Now Fed to Infants and Children in Food Value and in Essential Minerals and Vitamins

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Protein	15.00	15.2	11.0	9.2	3.3	13.4
Fat	3.00	7.3	1.4	1.3	4.0	10.5
Carbohydrate	71.80	66.2	76.3	53.1	5.0	—
Calories per oz.	109	110	103	74	20	42
Calcium	0.780	0.069	0.021	0.027	0.120	0.067
Iron	0.024	0.0038	0.0008	0.0009	0.00024	0.003
Phosphorus	0.620	0.392	0.125	0.093	0.093	0.180
Copper	0.0013	0.0005	0.00017	0.00034	0.000015	0.00023
Vitamin A	+	— to +	—	— to +	+ + +	+ +
Vitamin B (B_1)	+ + +	+ +	+	+	+	+
Vitamin C	—*	—*	—*	—*	—*	—*
Vitamin D	—**	—**	—**	—**	—**	—**
Vitamin E	+ + +	+ +	—	—	— to +	+
Vitamin G	+ + +	+	— to +	+	+ +	+

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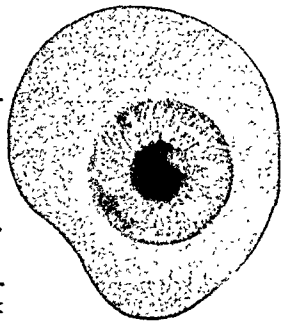
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(*Continued from page 662*)

eral and State encroachments, and to combat them. It undertook to establish a plan of procedure to meet this vital contingency and to consider (a) How, (b) Where, and (c) By whom this action should be taken; and, further, to whom facts which have been and will be adduced should be communicated.

"In view of the above, the Committee urges the Presidents of all County Societies, and other Medical Societies in the State, to confer with the Councilors in their districts, for the purpose of assembling all the practitioners in their districts at some convenient place, at which time some member of the Public Relations Committee will meet with them and present this important matter. Any further information desired will be given with pleasure by G. F. Simpson, M.D., Chairman, Purcellville, Va."

RELIEF OF DROUGHT VICTIMS IN VIRGINIA

The *Virginia Medical Monthly* for April contains the following editorial information regarding the relief of victims of the dry weather of last Summer:

"'2,500,000 DROUGHT VICTIMS WELL-FED BY RED CROSS.'

"Nearly 2,500,000 persons in twenty-two states came under the care of the American Red Cross as a result of drought. Relief operations were the most extensive in fifty years of aiding victims in more than 1,000 disasters. Only 340 professional workers were employed on the huge task, the rest being volunteers. Local Chapters taxed their resources to the utmost before asking for funds from the National Headquarters.

"As early as last September, the Red Cross began distributing to more than 58,000 families, seed for pastures and to more than 27,000 families seed for kitchen gardens, in anticipation of the emergency. The expenditure for this purpose amounted to $326,800. Green vegetables were thus made available up to the first of January, and stock was kept alive for several months. A second garden program got under way in February, and 537,000 packages of seed were distributed. Feeding provided balanced and adequate rations. Red Cross nutritionists, together with Department of Agriculture experts, made it effective in preventing malnutrition and setting up a resistance to disease. Hot lunches were served in many schools. County health officers and private physicians commended the adequacy of rations procured on orders issued by Red Cross Chapters, which were filled at local stores. More than 500 carloads of foodstuffs were contributed. These were hauled free by the railroads, as their contribution to the cause.

(*Continued on page 665—adv. xv*)

(*Continued from page 664—adv. xiv*)

"States involved were: Alabama, Arkansas, Georgia, Illinois, Indiana, Kansas, Kentucky, Louisiana, Maryland, Mississippi, Missouri, Montana, North Carolina, New Mexico, North Dakota, Ohio, Oklahoma, Pennsylvania, Tennessee, Texas, Virginia, and West Virginia."

MEDICAL PRACTICE BILL IN MICHIGAN

The April number of the Journal of the Michigan State Medical Society has the following description of a bill to amend the present Medical Practice Act in ten particulars:

"The question is frequently asked: 'Why amend the present law?' The endeavor will be made to impart the outstanding reasons in tabulated form:

"1. The present law was formulated in 1899. It provides for a Board composed of regulars, homeopaths, eclectics and physio-medics. There no longer exist any of the schools of the last three specified classes. The Governors have been compelled to appoint to the Board so-called regulars. The Board is therefore illegally constituted.

"2. The present law specifies the subjects in which a candidate shall be examined for license. Some of these subjects are no longer taught in our colleges. The amendment authorizes the Board to designate from time to time the subjects of examination.

"3. The present law requires a four-year course in a medical college. A goodly number of our Class A schools permit students to complete their college work in sixteen quarters over a period of three years in place of sixteen quarters over a period of four years. The Board is not empowered to license fully trained students who have completed their courses in three years. Consequently an amendment is worded permitting the Board to license these students.

"4. Under the present law a violation is a misdemeanor. The violator cannot be arrested or tried until evidence of fact is presented. Then when arrested he can appear, give bail and resume his practice, delaying his trial for from one to two years. An amendment is prepared to make violation a felony. This will enable the Board to obtain the arrest of a violator upon information, secure an injunction to prevent practice till tried and so expedite his trial.

"5. In the wording of the present act it has been a debatable question as to whether a license can be revoked without first convicting the violator in a court of record. A recent Supreme Court decision has sustained the Board in this power but in order to block future appeals upon this

(*Continued on page 667—adv. xvii*)

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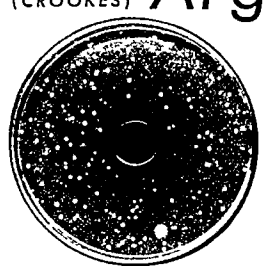
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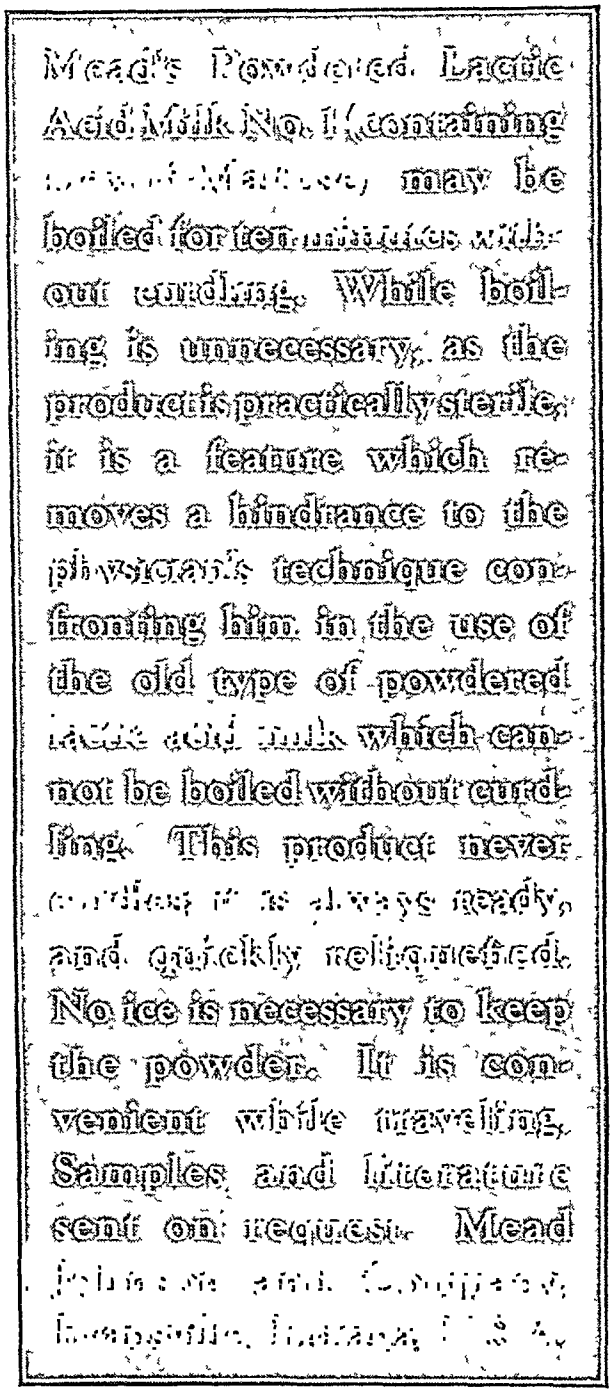
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(*Continued from page 669—adv. xix*)

Smyrna, Sanford and Daytona Beach which was excellent but not well attended.

"Brevard County, by reason of the population of the small towns and the distance to be traversed by the various doctors to the meeting place, is to be congratulated upon its attendance. The Society itself is in harmony and is doing good work. Some of the individual members have been annoyed by the actions and the practices of a non-member physician, who, they report, is guilty of renegade practices and twenty five-cent medicine. A. M. A. pamphlets on medical ethics were procured and forwarded to the Society."

The Tenth District Councilor had an easy assignment, according to his report.

"I attended a meeting of the Polk County Medical Society recently, which as you know comprises the tenth district, of which I am Councilor.

"The Secretary of this Society advises me that as far as he knows there is not a single practitioner eligible for membership in the Polk County Medical Society who is not a member, although there are several who have not paid their 19 dues and are, therefore, not in good standing.

The Councilor of the Twelfth District has few doctors in his field, and they are scattered. However, he makes an excellent report, as follows.

"As Councilor of the twelfth district, which comprises the counties of Glades, Charlotte, Hendry, Lee, and Collier, I have been in communication by letter with every doctor in the district who is eligible for membership. With the exception of Lee County, there are not enough physicians in the four other counties to form a medical society. For this reason, it is very difficult to stimulate interest in attendance at district meetings. Then, too, for the most part, the physicians are located quite a distance from a city and some of them would have to make a trip over bad roads. However, Dr. Stebbins of Charlotte County, holds membership in the Lee County Medical Society.

"The Lee County Medical Society holds regular meetings the third Friday evening of each month at the Lee Memorial Hospital. For the sake of variety, and to stimulate interest, sometimes the meeting takes the form of a dinner. We have an average attendance of 90 per cent, all but two of the eligible physicians of the County being members. We have gained one new member this year, which brings our membership up to eleven members. Twelve regular meetings were held the past year and one called meeting. We endeavor to have interesting, constructive meetings, with a scientific paper by a member, followed by discussion of the subject. I think that our percentage of attendance proves that the meetings are well worth the time devoted to them."

These examples taken in the order of the publication, show a cross section of County Societies in the State of Florida. The rural doctors of Florida are to be congratulated on their interest in the practice of civic medicine, and in the friendliness to one another. Much of the credit for the progressiveness of the Societies belongs to the Councilors, who are liaison officers of the State Society.

DROUGHT RELIEF IN ARKANSAS

The Council of the Arkansas Medical Society met on February 13 and considered the serious problem confronting rural physicians in their efforts to administer to the indigent sick of the drought-stricken sections of the State. The Journal of the Arkansas Medical Society reports the meeting as follows:

"Dr. C. W. Garrison, State Health Officer, addressed the meeting, the substance of his remarks being as follows: Congress has appropriated $2,000,000.00 to be administered by the U. S. Public Health Service through the State Departments of Health in the 22 drought-stricken States; the funds are made available for investigation and health demonstration work, for medical supplies and biologicals; the allocation to each State and community to be based on the local ability to pay and the needs, at the discretion of the Surgeon-General.

"Each State Health Officer has been requested to draft an outline or proposal for his State and submit it promptly to the Surgeon-General for consideration and approval."

Following a general discussion, the Council adopted the following Resolution:

"*Resolved*, that the need for financial aid in almost every county is very urgent, and will continue unabated for a considerable time.

"That sickness will be more prevalent than usual, due to lack of physical resistance because of the under-nourished condition of many of our people.

"That provision has been made to some extent for their physical condition, but none for medicines or hospitalization.

"That Arkansas' proportion of the $2,000,000.00 appropriated by the Federal Government should be made available immediately and with the least restrictions possible under the law and that a reasonable proportion be allocated for drugs and biologicals; and that these supplies be also made available for use in hospitalized indigent cases.

"That immediate action is most necessary as doctors who have always given freely of their services are now in some cases unable longer to do so, and their transportation, medical and surgical supplies should be furnished them when attending our indigent sick.

"That if such relief for the physicians under the Federal appropriation above referred to is unavailable or inadequate that it is the sense and desire of this council that every effort be made to secure this aid both for the relief of the physician and service to the people."

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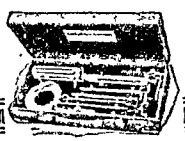
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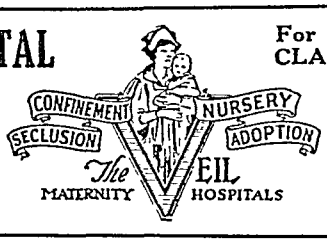
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MANAGEMENT OF DIABETES*

By STEPHEN H. CURTIS, M.D., TROY, N. Y.

DURING the past six or eight years, there has been an unprecedented interest in the study and treatment of diabetes mellitus. No doubt, the remarkable discovery of insulin by research workers at the University of Toronto in 1921 and its proven value as a specific has added materially as a stimulus to our interest.

The prevalence of diabetes is forcibly called to our attention by the number of diabetic patients who present themselves for treatment, hoping that a cure has been discovered. Approximately one person in each one hundred of our population is shown by statistics to be a sufferer from this disease. At first, hospital care of these patients is desirable as education in the management of themselves is essential and this can best be accomplished under competent supervision. It is difficult, however, for many of these patients to go to the hospital and a means must be found to give them adequate care at home. I feel that a two-week sojourn at the hospital at the beginning of treatment is invaluable subsequently, to both patient and physician. The patient can be taught the significance of blood and urine analysis, body weight, metabolism regulation of diet and insulin, if required. A thorough understanding of these essentials by the patient assures cooperation and subsequently better results.

Diagnosis: A correct diagnosis is essential before beginning any treatment. The old cardinal symptoms of diabetes mellitus, namely, polyphagia, polyuria with glycosuria, polydypsia and malaise, usually manifest themselves clinically in well marked cases. Transient glycosuria following the ingestion of a heavy meal, renal diabetes and diabetes insipidus must be differentiated. In any case the history is of importance and urinalysis will usually clear the diagnosis.

Diabetes of renal origin may be detected by a simple test. A definite amount of carbohydrate by weight is added to the diet for a day. The increased output in the twenty-four-hour specimen of urine is relatively small. In diabetes mellitus all or nearly all of the added carbohydrate is recovered in the twenty-four-hour specimen. Diabetes insipidus produces a tremendous output of urine with a specific gravity of 1.000 to 1.010 and without trace of glucose; while in diabetes mellitus the specific gravity is 1.020 or over, usually with the presence of glucose. In diabetes insipidus and renal diabetes, the blood sugar level is 90 to 120 mgs. per 100 c.c. of blood, while in true diabetes the blood sugar level is above 120, two hours after eating a meal containing an ordinary amount of carbohydrate. In untreated cases appearing for the first time for examination it is very common to find the blood sugar level between 200 and 300 or over.

An important point to stress here is that sugar is not always present in the urine in cases of true diabetes examined casually . We often find patients carrying a blood sugar level as high as 180 and occasionally up to 200 without trace in the urine at the time of examination. If the history of the case and clinical findings suggest diabetes mellitus, the blood sugar estimation should be made. Primary true diabetes may be suspected and often found in cases of obesity, dimness of vision due to cataract formation, persistent neuritis, endarteritis of the extremities with or without gangrene, pruitis, ulcers and recurring skin infection.

Pathology: In diabetes, the primary pathology is in the islands of Langerhans in the pancreas which, having become impaired has resulted in a deficiency in the required amount of insulin secretion. This impairment of function may be due to a sclerosis of the islands because of an insufficient blood supply; functional disturbances through the autonomic nervous system; and outside pancreatic disturbances, tumors, infections, etc.

The sclerotic type is usually subsequent to a general arteriosclerosis and the prognosis as regards permanent remission of symptoms is not good. In the functional disturbances, over-eating is a common provocative, disturbances in other endrocine glands may influence the functioning of

* Read before the Rensselaer County Medical Society, April 15, 1930

the islands; acute inflammation of the whole pancreas may occur following a general infection. This is particularly true of la grippe. The prognosis is good under proper supervision in these cases. In primary or secondary tumors of the gland the prognosis is not good. Congenital defects in the Islands as seen in children vary greatly in severity. Many make good recoveries, others under compensatory treatment progress well and some show no improvement.

Metabolism: Food furnishes heat and energy to the body. The three principle elements of food are protein, carbohydrate and fat. Protein provides the amino acid which promotes growth and which replaces wastes of muscle and organ tissue. The average requirement for an adult at rest is about ⅔ gram per kilo of body weight, increasing to 1 gram per kilo during physical work or exercise. The total number of calories required in 24 hours at rest is approximately 22 C. per kilo of body weight. So the difference between the total required and the protein required must be made up of the carbohydrate and fat.

In diabetes there is an inability on the part of the body to store and oxidize glucose adequately, and it therefore becomes necessary in this disease to supply only that amount of glucose which can be properly utilized. It is important to remember that 58 per cent of the protein, and 10 per cent of the fat intake, as well as 100 per cent of the carbohydrate may be converted in the body into glucose. With this fact in mind, it is really easy to realize the added harm in attempting to feed a diabetic patient on high protein foods such as eggs, meat and fish. If the protein in the diet is kept low, the patient will be able to consume more carbohydrates without hyperglycæmia and more fat without acidosis.

In the normal person, the glucose in an average meal, varying from 50 to 150 grams, is transformed into glycogen and stored in the liver and other body tissues where it is available to be reconverted into glucose when needed to supply heat and energy production. The ability to store sugar as well as to burn it is impaired in diabetes and consequently the excess remains in the blood stream. Nature tries to compensate for this by getting rid of as much as possible of the excess through the kidneys. The kidney tolerance point or that amount of sugar in the blood stream to produce glycosuria varies considerably. In many cases, I have seen it as high as 200 mgs. per 100 cc. while in a few cases as low as 120 mgs. The average blood sugar level necessary to produce glycosuria is somewhere between these two points. Primary cardio-renal-vascular diseases undoubtedly have an influence on this factor.

Treatment: As I stated briefly before, education is of paramount importance in the successful management of diabetes. The physician should explain to the patient the nature of the disease, the necessity of proper balanced diet and personal hygiene in such a way that he will thoroughly understand it. Also the patient should be familiarized with insulin, as to its therapeutic value and administration whether it is used at the time or not. This will sometimes save embarrassment if later it should be required, the patient will understand the reason and not be discouraged. Some patients take much more kindly and intelligently to the routine than others. The results show which have cooperated. Most of my patients learn to test their own urine for glucose and some also learn to test for acetone and diacetic acid and are able to get accurate interpretations. I supply a scale, and food value charts. The diabetics are soon able to choose their own menus and either the patient or a member of the household acquires the technique of setting them up by exact weight.

Total amount of food or caloric requirement: There are many factors influencing the caloric requirement. These are mainly age, sex, weight, height and occupation with the basal metabolic rate requiring consideration particularly if it is above +20 or below —20. The basal caloric table which Sandiford of the Mayo clinic worked out is very useful. Roughly however, I take 10 calories as the basal caloric requirement per pound of body weight for persons with an average normal basal metabolic rate, between the ages of 20 and 60 years. The patient may be overweight or underweight at the time he presents himself for examination. I try to estimate at that time what his average weight ought to be, allow 10 calories per pound at that figure and take that figure as the basal caloric requirement. I build up his diet to hold this weight. If the patient is confined to bed, I begin with the basal caloric amount. If exercise is very moderate, I add 10 to 15 per cent, if moderate, 20 to 30 per cent and active exercise 40 to 50 per cent. Many times at the beginning of treatment the blood sugar level is high and acidosis is present and this rule has to be discarded temporarily. It may be necessary to go below the basal caloric requirement, with or without the use of insulin to bring these down to normal. This should be accomplished first, the patient being kept in bed. Finally the diet given should be just sufficient to keep the weight at the determined average normal, the blood sugar at 90 to 120 mgs. and no acidosis, It is better to keep diabetics just a little under the normal average weight of a normal person.

Requirements of the food elements. C. P. F.: In as much as the body forms glucose from both protein and fat, as well as from carbohydrate and forms ketone bodies from both protein and fat, it is necessary to calculate the total available glucose anti-ketogenic, and the total fatty acids,

which are ketone producers, in order to provide a well-balanced diet. It is considered best to use a diet containing one and one-half as much fatty acids as glucose because this can be done without using a large amount of glucose yet with enough fat to give it high caloric value without at the same time being likely to produce acidosis.

The ketogenic-antiketogenic ratio is the amount of ketone producers in the diet in relation to the total glucose which can be obtained in the process of digestion of the food in the diet. It is as follows: 46 per cent of the protein and 90 per cent of the fat form fatty acids which subsequently break down to form acetone and ketone bodies, and thus fatty acids equal 46 P+90F. Glucose is the antiketogenic factor in the diet, and is derived from carbohydrate, protein and fat. Remember that all of the carbohydrate, plus 58 per cent of the protein, and 10 per cent of the fat, is converted into glucose in the body.

First determine the basal caloric requirement. It is estimated that normally about one seventeenth of the total calories should be from glucose, and that about two-thirds of a gram of protein should be allowed for each 2.2 lbs. of weight. The amount of carbohydrate therefore, would be equal to .8 of the total glucose required, minus one-half of the protein; and the amount of fat would be equal to twice the amount of carbohydrate, plus one-half the protein.

$$G=1/17 \text{ total calories}$$
$$P=\tfrac{2}{3} \text{ body weight in kilos.}$$
$$C.=\frac{8G}{10}-\frac{P}{2}$$
$$F=2C+\tfrac{1}{2}P$$

An example case: Man, 50 years of age. Height, 5 ft. 8 in. Weight, 160 lbs. Has a basic caloric requirement of 1,600 calories. Add 30% or 480 calories. 1,600+480=2,080 calories or actual requirement. For convenience we abbreviate P. for protein, F. for fat, C.H. for carbohydrate. Following the formula therefore:

P.=53.3 grms.

The glucose requirement = 1/17 x 2,080, or 122.5 grms.

Therefore, C. H.=(8/10 x 122.5)—(½ x 53.3)=71.4 gms.
F=(2 x 71.4)+(½ x 53.3)=169.4 gms.
Therefore the diet for this case would be

P=53 grms.
C.H.=71 grms.
F.=169 grms.

In children we use 1.5 grms. of protein per kilo so as to keep the fat intake low, and prevent acidosis to which children are very susceptible.

SAMPLE MENUS FOR 1 DAY FOR THIS CASE.

Breakfast	*Grams*	*C.*	*P.*	*F.*
Fruit 10%	100	10.	.8	0.
Oatmeal	80	12.8	3.2	1.6
Cream	50	1.4	1.4	10.
1 Egg		.0	6.0	6.0
Bacon	25	.0	5.	12.5
Butter	30	.0		25.
Coffee		.0	.0	.0
Bread, whole wheat	25	12.	2.3	5.
		36.2	18.7	55.6
Dinner				
Vegetable 3%	50	1.5	0.5	0.
Vegetable 6%	25	1.5	0.5	0.
Potato	50	10.0	1.0	0.
Cheese, cottage	25	1.	4.	0.
Custard	50	2.5	3.	6.4
Pork Chop	50	0.	7.5	12.5
Cream	50	1.4	1.4	10.
Butter	30	0.	0.	25.
		17.9	17.9	53.9
Supper				
Vegetable 3%	50	1.5	.5	0.
Vegetable 6%	25	1.5	.5	0.
Egg	2	0.	12.	12.
Cream	50	1.4	1.4	10.
Mayonnaise	10	0.	0.	10.
Butter	30		0.	25.
Bread, whole wheat	20	14.4	2.7	.5
		18.8	17.1	57.5
Total		72.9	53.7	167.0

When and How to Use Insulin: There are several conditions under which insulin should be used, first, if after having the patient on the proper diet for a week, there is a failure to bring the blood-sugar level down to normal; second, when the patient at first examination shows acetone and diacetic acid, either or both, in the urine; third, in the presence of a complication or co-existing disease.

It has been estimated that one unit of insulin will metabolize 2 gms. of carbohydrate. In the first type of condition, we determine from the blood sugar test during the week, just how much natural carbohydrate metabolism the patient has, subtract this from the amount which the patient ought to have normally to take care of the proper diet, and give one unit of insulin for each 2 gms. of carbohydrate in the difference. This amount of insulin will usually be between 5 and 30 units, and may be divided into 1, 2, or 3 doses per day, the maximum dose not over 20 units, and best given before breakfast. This will take care of the excess blood sugar, the diet remaining constant, and should be continued until the blood sugar level becomes normal. Whether or not the

insulin should be continued indefinitely depends entirely upon the recuperative powers of the islands of Langerhans. The total amount of insulin administered per day must be in proportion to the blood sugar excess, and so this will necessitate a change in the insulin dose every few days. We always are hopeful that it will steadily decrease to the point where none is required. Daily examinations of the urine are very helpful in estimating the drop in the blood-sugar level, and must be relied upon in cases treated at home, or where they can not be seen each day and blood examinations made.

After the insulin has been stopped and the patient is holding the estimated normal average weight, it is necessary to check up at weekly intervals on the blood-sugar level, urine for acetone and diacetic acid, and the body weight. If everything goes well, make no changes. If the weight has dropped a trifle increase the diet at the rate of 5 gms. of carbohydrate and 10 gms. of fat, keeping the protein at a trifle less than 1 gm. for each 2 pounds of body weight. If the weight is increasing, drop the diet at about the same ratio. There are cases in which it is necessary to resume the administration of insulin for varying intervals in order to hold everything in balance. This is easy to do, as by this time the patient has had a fair education on this subject and realizes that it provides him normal comfort and he is quite willing to cooperate.

In the second type of cases, we are unable to balance the diet on the start, as it is necessary first to combat the acidosis. The carbohydrate must be increased and the fats and proteins decreased, because of the over-production of fatty acids. This condition is often seen in patients who present themselves after having been on rigid low carbohydrate or starvation diets for some time. Insulin is administered in the ratio of one unit for each 2 gms. of carbohydrate contained in the diet. This is continued for a few days only until the acidosis clears up and then the patient is put on the properly balanced diet with or without insulin as findings require.

In the third class of cases there is no rule to follow. It is a question of judgment in adjusting conditions as they are found to get the patient into the first class as rapidly as possible. No progress can be made until this can be done. Severe cases of acidosis result in coma, and here the treatment consists of maintaining an alkaline reserve in the blood stream, active elimination, and clearing up the toxemia by administering glucose and insulin to burn up the excessive fatty acids.

In the administration of insulin, the condition of hypoglicæmia must be watched. The symptoms which arise shortly after the administration of insulin, manifest themselves first as a sudden hunger, followed by restlessness and weakness; the face becomes pale and then flushed; and the pulse rate is increased. If the overdose is sufficiently large, these symptoms are exaggerated, and there is sweating, muscular tremor, anxiety, and fear. Recovery is quite rapid after the administration of carbohydrate in liberal quantities. Orange juice, sugar, or candy will suffice. In rare instances however, this condition may go on into convulsions, coma, and death. I have not seen this happen yet, and hope I never will. It is well to remember that the use of insulin over long periods continuously, may stimulate the thyroid gland to over-secretion; and we then see symptoms of hyperthyroidism.

Conclusion

After the diagnosis of true diabetes has been established, the management depends, first, upon appropriate regulation of diet and exercise, and second, upon insulin to make up the deficit where it exists. There is no stated dose of insulin. It must be determined for each individual case. In most cases 30 units a day is the maximum required. Occasionally larger doses up to 60 or 80 units a day may be required, as in coma or in severe infection, and this only for a very short time. The patients are taught the fundamental principles of the treatment and soon learn the technique. If insulin is to be required indefinitely, the patient is taught to administer it to himself.

Some points to keep in mind:

1. Diet is more necessary than insulin without it.
2. Body weight should be kept slightly below normal average.
3. If a meal is omitted, so should the preceding dose of insulin be omitted.
4. Insulin should not be discontinued suddenly without checking up on the blood-sugar level.
5. Insulin is best given thirty minutes before the meal.
6. Hypoglycæmia is more serious than hyperglycæmia.
7. Acidosis is more serious than hyperglycæmia. Watch for acetone and diacetic acid in the urine.
8. Acute uræmia may cause coma instead of acidosis.
9. Insulin should be injected deeply into the subcutaneous tissues and not repeatedly in the same area.
10. Always sterilize the syringe with steam or boiling water. Alcohol renders insulin impotent.
11. Insulin by mouth has no effect at all.
12. The caloric index of the patient is his weight, and not his mind or appetite.

FACTORS IN THE INCINERATION OF COMMUNITY REFUSE

By ROBERT J. BARTLEY, C.E., BAY SHORE, N. Y.

IN the Metropolitan District of New York and New Jersey there are several hundred refuse incinerators, municipal, industrial, institutional, apartment house and domestic, in daily operation, without sensible nuisance. Therefore, it is hardly necessary in this enlightened age to advance arguments for the incineration of refuse as against its disposal by other methods. The other methods, particularly of garbage disposal, such as dumping on land or at sea, rendering in chemical plants or feeding to hogs on local farms, are either unsanitary, unsightly or unbefitting to a community of culture and substance.

It is simply a question of time, policy and availability of funds when every community will be served by an incinerator for the destruction of its refuse. Once the policy is decided, it is necessary to determine the requirements of a community in terms of incinerator capacity best suited to the economical, orderly and efficient disposal of refuse. There are statistics and precedents for estimating the required incinerator capacity of a community from the average per capita production of refuse according to the various classes of population. It is better, however, to make a fact-finding survey in each case, and to determine the quantity and character of refuse to be burned, the maximum seasonal population in the year of the survey, and the anticipated population twenty years hence. The life of a well built incinerator plant should be twenty years or longer and it would be poor economy to have it become obsolete at an appreciably shorter period, due to being under-sized. The fact-finding survey should cover every source of refuse from clubs, hotels, restaurants, markets, stores and hospitals as well as from private homes. It is a comparatively easy matter to increase or decrease the facilities for the collection of refuse by putting on more wagons or trucks, or by laying them off, as the needs may be; but the capacities of built-in furnaces cannot be changed overnight, and alterations, extensions and additions are usually more costly per unit of capacity than the original installation. It is necessary to figure on peak loads with reasonable excess capacity for growth in population.

Plant Location.—Having arrived at the proper figure of capacity from a study of actual quantities of materials and population, the land requirements for plant and approaches are readily ascertainable from prevailing practice. The next step is the selection of a site for the plant. From the point of view of absence of nuisance in the proper combustion of refuse, it is conceivable that a plant could be located in the heart of residential community or in its business section. This is, in fact, being done every day with the built-in incinerators in hotels, hospitals, apartment houses and office buildings. In these cases, however, the refuse is produced within the building where it is burned. In the case of a community incinerator, the refuse must be collected from house to house and transported to the incinerator. It is the system of collection that is more likely to be the subject of complaint than the actual destruction of the refuse. The location of the incinerator is of primary importance for the economical delivery of the material to be burned. It should be central to the area served, and, at the same time, sufficiently isolated so as not to make the residents unwilling reviewers of the daily parade of teams and trucks converging at the delivery point.

Principles Governing the Combustion of Refuse.—The burning of garbage with rubbish resolves itself into the de-watering and burning of the trimmings, parings, plate waste and spoilage of human foodstuffs, with the addition of a waste fuel. The waste fuel is rubbish which consists chiefly of cellulose in the form of newspapers, wrapping paper, card-board boxes and containers manufactured from wood after extraction of the resins and lignin. The fuel value of rubbish is essentially that of wood or wood products. The richer the rubbish is in these products, and the less incombustible it contains, such as bottles and metal scrap, the more closely will its fuel value approach that of wood or cellulose. Mattresses and bed springs sometimes find their way into the rubbish collection; the former increase the fuel value while the latter decrease it by the cooling effect and by replacing combustible. Garbage itself is as rich in heat units per pound of dry material as is rubbish, but garbage will not support combustion until its high content of water has been reduced by evaporation. The heat units in garbage are derived from the cellulose and pectins in vegetable matter, and to a lesser extent from animal and vegetable fats.

The practical unit of heat is the mean or average British thermal unit, which is the 1/180th part of the heat required to raise the temperature of 1 pound of water from 32° to 212° Fahrenheit.

Composition of Garbage. The average proximate analysis of New York City garbage is given by Parsons, Hering and Whinery as follows:

Moisture	68.5%
Volatile Combustible Matter	22.7%
Fixed Carbon	3.7%
Ash	5.1%

Which Includes Fat.....	5.1%
B.t.u. per lb., dry basis	8,936
B.t.u. per lb., as received	1,926

These figures represent the properties of a large run of material from a large community nearby to our own. Furthermore, they agree quite well with the results of a systematic examination of the garbage of Washington, D. C., made throughout a 12 months period by Mr. I. S. Osborn with the co-operation of the U. S. Bureau of Soils (House Document No. 661, 1916). The average results on samples from 51,718 tons of garbage collected from January to December were:

Moisture	73.8%
Total Combustible	22.5%
Ash	3.6%
	99.9%
Which includes Fat (Ether Soluble)	5.1%

The average results of the proximate analyses of two large and extended series of independent examinations are sufficiently concordant to justify the use of the more complete New York City figures as a basis for the estimation of the heat required to burn garbage.

Let us see how much heat is required to bring such garbage to a combustion temperature of 1250° F., since experience has shown that at lower temperatures there is incomplete combustion and an escape of objectionable gases.

The heat required to evaporate the moisture and superheat the resulting heat to the temperature of combustion is found in B. t. u.'s per pound of material from the following formula: $Q = W[(212 - t) + 970.4 + 0.47(T - 212)]$ where W equals the percentage of moisture per lb. of garbage; t is the initial temperature of the garbage; 970.4 is the heat of vaporization of one pound of water; 0.47 is the mean specific heat of steam between 212° and 1250° F., and T = temperature of the combustion process, or 1250° F. With New York City garbage of the average proximate analysis as given above, and with the initial temperature of 32° F. and the final temperature of 1250° F., the heat required to raise the moisture in one pound of garbage to the temperature of the combustion process would be,

$$0.685\ [180 + 970.4 + (0.47 \times 1038)] = 1122 \text{ B.t.u.}$$

Heating the Air Used in Combustion.—From the law of the conservation of matter, the *weight* of the gaseous products of combustion together with that of the air in which the combustion has taken place, must equal the weight of the combustible (ash and moisture free), plus the weight of the air introduced for the combustion. Since the specific heat of the gases of combustion and excess air may be taken as the same as that of air at the same temperature, without appreciable error, the total heat required to raise the combustible plus the combustion air to 1250° F. may be found by taking the sum of the weights of combustible per lb. of garbage and combustion air per weight of combustible, and multiplying this sum by the specific heat of air .24; and then multiplying this product by the difference between the initial and final temperatures. If 18 lbs. of air are used per lb. of combustible (ash and moisture free), the quantity of heat for 1 lb. of garbage containing 26.4% combustible, would be,

$$(18 + 1) \times (0.264 \times 0.24 \times 1218) = 1466 \text{ B.t.u.}$$

18 lbs. of air per lb. of ash and moisture free combustible is about the same quantity of air that is used in burning carbon or coal. As a matter of fact, the higher volatile content of garbage combustible in volatile combustible matter (V.C.M.) justifies the use of larger quantities of air, and it will be found in incinerator practice that 18 *lbs. to* 24 *lbs.* of air are used *per lb. of ash and moisture free combustible* in the *mixed refuse.*

Heat for Inert Material.—Heat is also required to raise the inert material in the garbage to the temperature of the combustion process. With the small percentage of ash in the garbage under consideration, 5.1% of specific heat of 0.18 to 0.20, this quantity is almost negligible, amounting to 11 B.t.u. It may not be negligible when the garbage contains an excessive quantity of tin cans or glass bottles.

Summing up the heat requirements for the combustion of one pound of garbage of the proximate analysis given above, we would have, then:

	B. t. u.
0.685 lbs. water from 32° F. to steam at 1250° F.....	1,122
0.264 lbs. combustible + (18 x 0.264 =) 4.75 lbs. air from 32° F. to 1250°	1,466
0.051 lbs. ash from 32° to 1250°..	11
Total	2,599

Previous analysis, however, has shown that the same garbage contains only 1,926 B.t.u.'s per lb. as received. Therefore, the garbage is short, 2,599 — 1,926 = 673 B.t.u.'s per lb., of the heat necessary for its combustion. This deficiency must be supplied by added fuel. If coal with 14,000 B.t.u.'s per lb. were used, it would take 0.42 lbs. of coal per lb. of garbage. Practically and economically, household refuse is used as the fuel instead of coal. Household refuse may be regarded as a waste fuel of a trifle lower heating value than saw-mill waste or sugar-cane residue after the sugar has been extracted.

Fuel Value of Rubbish.—Let us now look into

the fuel value of rubbish from the same sources as the garbage in order to keep the comparison within practical limits. First of all, a word as to the adequacy of the supply of rubbish. In the Parsons, Hering and Whinery report and from subsequent data, the average proportion of rubbish to garbage in New York City over a twelve-year period was 870:1, 454, or 37.4% rubbish to 62.6% garbage.

The proximate analysis of the rubbish studied in the *Parsons, Hering and Whinery report* is given as follows:

Moisture	11.5%
Volatile Combustible Matter	40.4%
Fixed Carbon	40.5%
Ash	7.6%
	100.0%
B.t.u. per lb., dry basis	7,713

Carrying out the same series of computations for the rubbish as was done in the case of the garbage, the following heat requirements will be found for the combustion of one pound of rubbish:

	B.t.u.
0.115 lbs. water from 32° F. to steam at 1250° F.	188
0.809 lbs. combustible + (18 x 0.809=) 14.56 lbs. air, from 32° F. to 1250° F.	4,493
0.076 lbs. ash from 32° F. to 1250° F	17
Total	4,698

The heat content of the rubbish was found to be 7,713 B.t.u. per lb., dry basis The rubbish, as received, however, was diluted so to speak with 11.5% moisture and 7.6% inert material or ash. The fuel value of the rubbish as delivered would be reduced to,

7,713 — (0.191 x 7,713) = 6,240 B.t.u. per lb. as received.

There is present in the rubbish an excess of 6,240 — 4,698 = 1,542 B.t.u. per lb. over and above the requirements for the combustion of the rubbish.

Coming back to the proportions of the materials as received, 37.4% of rubbish and 62.6% of garbage, the heat balance for one pound of this mixture of garbage and rubbish would be 0.626 x 673 = 421 B.t.u.'s additional required for the combustion of the garbage, and 0.374 x 1,542 = 577 available for that purpose from the rubbish, in excess of the requirements of the rubbish for its own combustion. There is therefore a surplus of 577 — 421 = 156 B.t.u. per lb. of refuse over and above the theoretical requirements for the combustion of both garbage and rubbish in the proportions as received. This surplus would be equivalent to over one ton of coal per 100 tons of refuse.

The foregoing is merely a numerical demonstration of the principles upon which the incineration of refuse, consisting of garbage and rubbish, is based. In practice, the processes of evaporation, gasification, and combustion take place in rapid succession and are usually going on simultaneously in different parts of the same furnace. Experience all over the world has demonstrated that with the newer types of plant the incineration of garbage and rubbish is practicable without nuisance and without purchased fuel. Our calculations show how this is possible.

There are other factors, which for the sake of simplicity, we have not dwelt on. Among them is the heat lost from unburned carbon in the ash, which can be calculated from an analysis of the ash. Likewise, all of the *excess* heat units in the rubbish are not available for the burning of garbage, nor are all of the remaining heat units in the rubbish and garbage quantitatively convertible into processes of evaporation water and elevation of the temperature of the mass to the temperature of combustion. From the total heat units contained in the garbage and rubbish there are fractional losses all along the line of heat carried away in the ash and chimney gases and lost by radiation. The complete balance may be calculated from the analysis of the materials before and after combustion, from temperature measurements in combustion chamber, stack and ash-pit and from constants of the furnace. The losses from incomplete combustion of the gases, as evidenced by the presence of carbon monoxide, are negligible in good practice as shown by the following typical analysis of the stack gases of an incinerator in full operation:

Time A. M.	Carbon Dioxide Per Cent	Oxygen Per Cent	Carbon Monoxide Per Cent
9:21	1.6	18.4	0.0
9:52	3.8	16.2	0.2
10:06	2.2	18.0	0.0
10:34	5.0	15.0	0.0
11:06	2.2	14.0	0.0
11:21	5.0	14.4	0.2
11:33	6.4	13.2	0.4
11:55	10.0	9.4	0.2

The complete combustion of the organic substances in garbage to the end products of carbon dioxide and water is not accompanied by the presence of odors. Incomplete combustion from any cause is characterized by the formation of odorous and noxious intermediate products. The odor of burning fat, due to acrolein, a condensation product of glycerine, is familiar to all. In all attempts to recover useful substances from organic wastes such as garbage, industrial wastes, sewage sludge, etc., by fermentation, dehydration or extraction, the formation of intermediate

products is unavoidable, hence these operations are necessarily accompanied by odors.

The realization of complete combustion of refuse is made possible by proper furnace design, with particular reference to the maintenance of sufficiently high temperature, an adequate supply of atmospheric oxygen, and ample space in the high temperature zone for the thorough mixing and burning of the gases.

Designs of Combustion Units.—Reduced to the simplest terms a combustion unit comprises fire grates, combustion chamber, flues, and chimney, adequately supported and lined throughout with a refractory lining; together with the necessary provisions for charging, stoking and ash removal. This layout is capable of much elaboration, chiefly along the lines of mechanical devices (1) for draft, forced or induced, and (2) for the handling of materials before or after their combustion. Waste heat boilers may be interposed between the combustion chamber and the stack. Systems for preheating the combustion air are in general use.

Furnace Proper.—"The principal factors in furnace design leading to high efficiencies and high boiler capacities are, proper furnace volume, and a furnace form which will give the longest possible flame travel with low gas velocities." (Arthur D. Pratt in Mark's Mechanical Engineers' Handbook.) The same fundamental principles apply with equal force to the design of garbage furnaces as well as to boiler furnaces, the ultimate goal in both cases being complete combustion; in the case of garbage furnaces for the purpose of odorless destruction, and in the case of steam boilers for the purpose of fuel economy.

In connection with furnace volume, the grate area per pound of material at the normal charging rate is important. When the charging rate cannot be predicted with sufficient accuracy, the grate area per ton of rated capacity may be used in design. Ample space between the grates and the stack is necessary for the intimate mixture and combustion of the gases, as well as for subsidence of dust particles. Accessibility to the interior of the furnace for stoking and cleaning is also to be considered.

In connection with the furnace form, the length and course of flame travel are all important. By suitable baffling, the length of flame travel may be increased to two or three times the overall length of the high temperature zone.

The length of flame travel, the space arrangement in the combustion chamber, and the draft are the factors which control the velocity of the gases. Low gas velocities are desirable at certain points in order to permit of thorough combustion of the gases.

Chimney designs are fairly well standardized for known quantities of combustible material and combustion air, and no legitimate expense should be spared to provide safe foundation, substantial construction, and adequate draft.

In addition to the general principles for thorough combustion, there are other factors having to do with the durability of the furnace. The temperature gradients from the grates into the combustion chamber, flues and stack should be such as will not subject standard materials of furnace construction to conditions for which they were never intended. In order to conserve heat, the radiation losses should be reduced to a reasonable figure, but excessive insulation and a high temperature of preheated air may make possible temperatures much higher than necessary and thereby seriously damage the grates and furnace lining. Uncovered metal parts are subject to chemical corrosions. In view of the condition that refuse furnaces are cold for the greater part of the twenty-four hours, and are then raised to a temperature of at least 1250° F. and maintained thereat for a period of from 5 to 10 hours, and that this cycle is repeated day after day, year in and year out, it is necessary to make ample provisions for the expansion and contraction of the materials used in construction.

Disregard of the fundamental principles in the early days of garbage incineration was the cause of many failures, burn-outs and break-downs. Incinerator manufacturers have learned from experience to embody most of these principles in their design, although there are still some anachronisms, and now and then innovations crop out which are neither conducive to economy, efficiency nor durability. Therefore, it is the duty of the public officials or engineers entrusted with such projects to incorporate in the specifications and form of contract suitable guarantees binding upon the manufacturer or contractor for the complete protection of the purchaser-community.

The present tendency is to build plants with multiple combustion units. In designing plant capacities for peak loads and anticipated growth in population, the advantages of multiple units are obvious. One unit may be sufficient to take care of average winter conditions with only occasional use of a second unit, possibly on consecutive Sundays and holidays. The two or more units together should be more than sufficient to take care of the summer load with ease, a certain excess of capacity having been allowed for growth in population. Multiple units of suitable capacity can be kept in first-class operating condition without shutting down the plant for repairs, by alternately overhauling one unit and then the other in the winter months.

Design of Building—Since the combustion units constitute the heart of the plant, the design of the structure to house them is subordinated thereto. The building should conform in shape and in interior layout to the design of the combustion units and to the plan which will freely permit of the most expeditious delivery, charging and handling

of material before and after combustion. The general construction should be substantial and fire-proof. The building should be well lighted and well ventilated, and all reasonable provisions should be made for the comfort of the men employed at the plant. The building is in the industrial class, and there is no reason, in this enlightened age, why the architectural design should not frankly express the purpose of the plant.

Appurtenances — Provisions for the handling and possible storage of ashes, and baling presses for tin cans are minor appurtenances which facilitate keeping the plant and surroundings orderly and presentable.

Storage of Garbage and Rubbish—If a plant is properly designed to take care of peak loads in an 8 to 10 hour charging and burning period, and with a reasonable allowance of excess capacity for anticipated growth of the community, there should be little or no necessity for storage space. The sooner garbage is burned after its collection, the better it is for all concerned. It will be recalled that it was the odors given off from decomposing garbage on scows, more than the odors from the plant itself, that discredited and brought about the abandonment of the garbage reduction process which was on trial at Staten Island. Garbage, left to itself, breaks down quite rapidly. Volatile and highly inflammable alcohols and esters are among the products of the spontaneous fermentation of garbage. Rubbish itself is a fuel and, once ignited, burns with great rapidity due to its loose texture and voluminous air pockets.

If storage bins are necessary to provide for conditions which cannot be foreseen, the greatest care should be exercised in their design and location.

Costs—"Assuming a construction cost of $1,000. per ton of capacity, and interest and depreciation to amount to 10%, the fixed charges would be about 32 cents per ton." This statement will be found in the standard work on the "Collection and Disposal of Municipal Refuse" written by Hering and Greeley in 1921, and it holds true today. How much less than $1,000. per ton of capacity may be paid for a modern incinerator will depend on the simplicity of the building and on moderation in the specification of mechanical appurtenances. Elaboration in architectural design and in mechanical devices as well as the inclusion in the contract of extras not properly a part of an incinerator plant, such as garages and machine shops, tend to run the first cost into figures well in excess of $1,000. per ton of capacity.

Operating costs—The main item is labor. The labor requirements for different plants are variously given as from a fraction of a man-hour to 1.4 man-hours. One man-hour per ton of refuse burned is a safe working basis, although wide variations in load factor or in operating conditions may shift this figure one way or the other. With labor at $5.00 per day of 8 hours and continuous 8 hour operation, this would amount to about 63 cents per ton of refuse burned, which together with a fixed charge of 32 cents per ton of capacity would bring the operating charges to about $1.59 per ton of material burned, bearing in mind that capacities are rated in tons per 24 hours.

Utilization of Waste Heat—In the general run of refuse incinerators there is considerable heat carried away with the stack gases and in the clinker and ash; the same is true of many industrial plants. This waste heat has been used successfully in Europe and Canada and to a certain extent in this country for the generation of steam. The steam thus generated may be used for other purposes around the plant. If it is decided to include utilization of waste heat in an incinerator project, provision should be made in the plans for the proper placing of a waste heat boiler and appurtenances. It is well, however, not to build any fanciful illusions as to the value or the availability of the steam generated. The load in refuse incinerators varies much more greatly than the load in industrial operations. The peak load occurs in summer when there is the least demand for power for lighting and heating purposes. Not only the seasonal load but the daily and hourly load are quite variable. If steam is generated in variable quantities at times when there is the least demand for it, the question arises as to means of harnessing the steam and converting it into some useful form of energy which can be stored for use when needed. That problem has not been solved. The equipment to harness steam and convert it into electrical energy is standard power plant equipment. It is well to bear in mind that the cost of such equipment properly proportioned for the utilization of waste heat recoverable as steam will run into figures exceeding the first cost of the incinerator plant. The utilization of the waste heat from refuse incinerators is an extremely interesting subject for speculation but likewise one which has not been fruitful in useful return.

Conclusion—I have tried to outline to you the fundamental principles underlying the practical incineration of refuse, especially garbage and rubbish. The fundamentals of furnace design, suggestions for plant location, first costs and operating costs as reflected by prevailing practice have also been touched upon. Endless elaboration along theoretical and technical lines is possible. I believe, however, that the fundamentals will serve as a safe and sound guide in the consideration of incinerator projects, and if they are followed and applied with common sense an eminently satisfactory result will be obtained.

ENDEMIC PURPURIC MENINGOCOCCUS BACTEREMIA IN EARLY LIFE, THE DIAGNOSTIC VALUE OF SMEARS FROM THE PURPURIC LESIONS*

By STAFFORD McLEAN, M.D., NEW YORK, N. Y.

DR. McLEAN presented a series of lantern slides showing abstracts of case histories of Endemic Purpuric Meningococcus Bacteremia in early life, and stressed the diagnostic value of smears from purpuric lesions. Of the patients admitted to the Babies' Hospital, with meningococcal infections there were purpuric eruptions in approximately 11 per cent. The youngest of these cases was 46 days of age and the oldest was 7 1-3 years. The face and extremities were areas of election for the hemorrhagic eruption. The practical value of stab punctures of the purpuric lesions was emphasized as an aid to early diagnosis. The advantage of this method of making an immediate diagnosis as opposed to culture of the blood was discussed. In 17 cases in which an effort was made to find meningococci in the hemorrhagic skin lesions in the disease, organisms were discovered in 12. One case report illustrated the usefulness of the smear from the purpuric lesion in the bacteriologic diagnosis. In this example with inflammatory changes in the cerebrospinal fluid the blood culture was negative, and both culture and smear from the cerebrospinal fluid failed to disclose meningococci. The only positive bacteriologic finding was the smear from the purpuric lesion. The simplicity of the technique of examining purpuric skin lesions for meningococci was described, and mention was made of the fact that only when the meningococci were found intracellularly was the result of the examination considered positive, although extracellular meningococci are of considerable collateral interest and may be significant. Positive smears of the organisms were found both in the early and late stages of the purpuric manifestations. Case reports were shown of meningococcemia without meningitis and in meningococcemia with early meningitis. The clinical picture associated with purpura in childhood was described, and emphasis was laid on the higher incidence of the fulminating type of case in the eruptive types of meningococcus bacteremia as opposed to the more common examples of meningococcus meningitis.

Autopsy protocols were presented and the possible relationship between suprarenal hemorrhage and early death in the fulminating cases was discussed.

The high percentage of the classic autopsy picture of status thymico lymphaticus in the rapidly fatal cases of meningococcus bacteremia was demonstrated, but this picture was not believed by the author to explain the early death in certain of these cases.

In conclusion, it was stated that examination of smears from the purpuric skin lesions in meningococcus bacteremia in early life offers a rapid, exact and consistent method for immediate bacteriologic diagnosis.

* A lantern slide demonstration given at the Annual Meeting of the Medical Society of the State of New York, Pediatric Section, at Rochester, N. Y., June 4, 1930.

LOBAR PNEUMONIA COMPLICATED BY ATELECTASIS IN A CHILD WITH COMPLETE SITUS INVERSUS

By MORRIS GLEICH, M.D., NEW YORK, N. Y.
From the Pediatric Department, Harlem Hospital.

N. W. colored, seven years old, took sick suddenly. Five days before admission he had fever, a blood-tinged sputum, dyspnoea, a pain in right chest and an expiratory grunt.

He was acutely ill. There was dyspnoea, an expiratory grunt, and the right chest did not move on inspiration. The right rib spaces were narnower than the left. The entire right chest anteriorly from apex to base was dull or flat, tender and gave no voice or breath sounds. A few scattered rales could be heard at times. Posteriorly, the apex and scapular regions were flat or percussion and the breath and voice sounds were absent. At the right base posteriorly, there were dulness with bronchial breathing and voice sounds and some crepitant rales. The left lung revealed exaggerated vesicular breathing with a hyperresonant percussion note, indicative of a compensatory condition.

The heart sounds were more prominent on the right side. The apex beat was heard best on the right side, five c.m. to the right of the right border of the sternum.

The x-ray and fluoroscope revealed the stomach on the right and the liver on the left side. A dextro-cardia was also seen with apex pointing to the right. There was an homogeneous clouding of the entire right pulmonary field. No foreign body was seen. Atelectasis was the impression. (See Plates 1 and 2.)

The electrocardiographic report showed a

rhythm which was regular and of sinus origin. The P and T waves were inverted in lead one. R was greater than S in lead three. S was greater than R in lead one. Those findings were characteristic of a congenital dextrocardia.

Von-Pirquet, Mantoux and Kahn tests were negative. Bronchoscopic examinations done two weeks apart, showed tissues which were pale and ischaemic, due to pressure from without or an exudate. No signs of foreign body or granulation tissue were present.

Chest taps and fluoroscopic examinations in various positions failed to reveal a foreign body or fluid. His temperature varied between 99-102 F for three weeks. Since then it has been



Plate 1. Complete atelectasis of entire right lung. The entire right chest ant. and post was dull or flat on percussion and gave no voice or breath sounds, except posteriorly, where there were bronchial voice and breath sounds and some crepitant rales (at the base)

normal. There were no chills, sweats or fetid sputum.

On several occasions, over a period of six weeks, bronchial breath and voice sounds could be heard over the right chest anteriorly, in the apical and infra-clavicular regions. Various rales and variations in the percussion note and voice and breath sounds could be heard all over the chest from day to day. These signs were due to increased or diminished amounts of air in the atelectatic lung.

X-ray taken eight weeks after admission, revealed normal right apical and infra-clavicular spaces. Here the percussion note, voice and breath sounds were normal. The upper lobe was completely aerated. The lower lobe was dull on percussion, with diminished voice and breath sounds and a few coarse rales. Here, X-ray showed a fluid level, a dense homogeneous shadow interpreted as pneumonia, and an area about the size

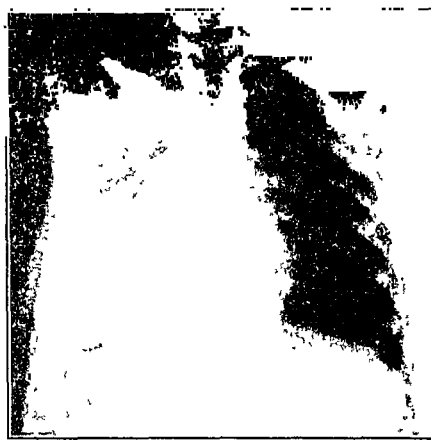


Plate 2 Three weeks later. Right apex and intercostal spaces are clearing, improvement in physical signs are noted. Apex of heart is seen pointing downward and to the right.

of a hazel nut, considered by some as pneumothorax and by others as an aputrid abscess cavity.

Twelve weeks after admission the physical signs in both lungs were almost normal. The x-ray showed a slight cloud at the right base posteriorly. There was some dulness here, with diminished voice and breath sounds and a few sonorous and subcrepitant rales. The patient sat up, ate well, and had neither cough nor fever. One week later he was out of bed.

Comment. This case presented several important considerations. One possibility was a right base pneumonia, complicated by an atelectasis due to a (ball-valve) plug of mucus in a bronchus. Another idea, in spite of negative bronchoscopic findings, was a foreign body in a bronchus. with associated cough, fever, pain and atelectasis. Gradually this foreign body was absorbed. A third thought concerned the abnormal position of the heart. Granted a pneumonic process, the dextro-cardiac causing mechanical pressure on a lobe of lung or bronchus produced the atelectasis. As the pneumonia resolved, the cardiac pressure, no longer operative, the atelectasis cleared.

N. Y. State J. M.
June 1, 1931

EPILEPSY—CLINICAL AND DIAGNOSTIC PHASES

By E. M. JOSEPHSON, M.D., NEW YORK CITY, and MAX M. TEPLITZ, M.D., BROOKLYN, N. Y.

Though there have appeared in the recent literature many studies and speculations on the vascular phases of epilepsy, there has been little emphasized, certain phases of the disease which have come to be regarded by us as of deep significance. This article is in part based upon studies made by one of us (Josephson) over a period of several months at the New Jersey State Village for Epileptics, and certain aspects of it have been checked up recently by both of us.

Careful observations of numerous patients in generalized epileptic seizures of the grand mal type, but not including the Jacksonian type, have shown that during the tonic period of the seizure the heart muscle is involved in the tonic contraction to such extent that no heart sounds can be observed. At the same time, the peripheral pulses are not palpable. So constant has this finding been, that one of us has used it on several occasions, with success, in detecting malingering of epilepsy.

Ensuing upon the heart spasm of the tonic stage of the seizure, there develops dilatation of the right side of the heart, and with regularity, an acute edema of the lungs which is usually of a very transitory nature. The frothing at the mouth, which is a regular sequel of the grand mal seizure, is but a manifestation of this transient pulmonary edema. Examination elicits coarse, bubbling rales throughout the chest, especially at the bases, dullness at the bases posteriorly, and feeble breathing. These signs clear up with more or less rapidity, as the patients expectorate volumes of frothy sputum.

Speculating as to whether vascular changes are a secondary manifestation of epilepsy, or whether they may be primary in nature, a number of tests were undertaken. Blood pressure and pulse rate were compared before and after seizures, as well as in the intervals between seizures; but no constant or significant changes were observed, excepting in cases with associated cardiac disease. Attempts were then made to induce epileptic seizures. In a large number of cases it was found possible to induce seizures by more or less prolonged pressure upon the carotid arteries. In this connection it may be interesting to note that seizures were also induced in some cases of chronic progressive deafness, in which there was evidence of the deafness constituting an early symptom of brain tumor, as manifested by associated impairment of vision and limitation of color fields, altered reflexes, etc. Even more frequently, it was found possible, recently, to induce epileptic seizures in the patients by positive galvanization of the cranial contents, with the electrodes applied in various manners. But following negative galvanization of the cranial contents, it has been found to be difficult to induce seizures by pressure on the carotid arteries. This suggests a possible mode of palliative therapy.

The effects of galvanization upon the cranial contents may be surmised from the findings which one of us (Josephson) has made of its effects on the ear and eye. The variations in vascularity of the eye induced by galvanization of the cranial contents have been demonstrated and photographed, especially readily in cases with vision and vascularity impaired by disease. Negative galvanization induces dilatation of the eyeground vessels and an improvement in vision; whereas positive galvanization induces contraction of the vessels and a loss of vision. These effects are reversible. This makes it apparent that the function of the nerve tissue of the eye, and probably of other nerve tissue, is dependent upon vascularity and nutrition.

These tests seem to possess interesting possibilities in the diagnosis of epilepsy and latent brain lesions, especially in the very important field of industrial examinations; for it cannot be questioned that epileptic seizures in unsuspected cases are accountable for many train wrecks, transportation accidents, and industrial accidents; and any test which will enable the diagnosis of epilepsy in the absence of spontaneous seizures will add to public safety. At any event, these studies bear out the view that the fundamental pathology of the epileptic seizure is impairment of the vascularity of cerebral tissues.

HEREDITARY HEMORRHAGIC TELANGIECTASIA
A REPORT OF TWO CASES

By H. MASON HICKS, M D, AND ELIZABETH KNOX, M D, NEW YORK, N. Y
From the First (Columbia) Medical Division of Bellevue Hospital, New York

HEREDITARY hemorrhagic telangiectasia is a disease characterized by the presence of telangiectases on the skin or mucous membranes, by severe epistaxis and by the history of similar conditions in other members of the family

In 1921, Goldstein,[1] in a comprehensive article, reviewed the literature on this rare disease The first case was reported by Legg in the Lancet for 1876, and other early contributions to the subject were made by Chiari in 1887 and by Osler in 1901 From 1876 to 1921, Goldstein could find only 30 families reported in the literature and he added one family in which eleven members were affected By 1921, the disease entity had been well established and Goldstein includes in his summary of the case reports only those cases in which the three essential factors were present, namely, telangiectases, epistaxis, and family history

Since 1921, scattered reports of similar cases have appeared We have been stimulated to review these reports by the recent admission to the wards of the First Medical Division of Bellevue Hospital of two cases of hereditary hemorrhagic telangiectasia A brief survey of the literature and a report of these cases follow

In 1921, after Goldstein's article appeared, Freudenthal[2] reported a typical case of a 55 year old man with epistaxis of 12 years' duration, and many telangiectases, whose mother, brother and sister also had nose bleeds, though the telangiectasis was doubtful In a number of cases, it is impossible to establish the presence of telangiectases in other members of the family It is usually considered sufficient if a definite history of nose bleeds is obtained

The next case report was by Fitzhugh,[3] of Philadelphia The patient in this case was a woman 37 years old The mother, a brother and a sister had had frequent severe epistaxis, as did the patient In addition, the patient had many telangiectases Fitzhugh emphasized the factor of atavism to explain certain otherwise typical cases in which no hereditary factor could be established Such a case was reported by Miller[4] in 1923, in which bleeding from the nose and telangiectasis were both present, but careful inquiry failed to elicit any history of epistaxis in the family

In 1925, Arrak[5] reported two cases from Germany The first of these was a man, 55, whose father and four brothers also had epistaxis The second was a woman, 49, whose brother and maternal aunt had typical telangiectases and epistaxis This patient's daughter had telangiectasis but no epistaxis However, she had had several unexplained pulmonary hemorrhages No cause for these could be found on repeated physical examinations and x-rays of her chest This case is of interest in view of a series of cases of familial hemoptysis reported by Libman and Ottenberg[6] Also in 1925, Schwartz[7] reported a case of a woman, 49 who not only had epistaxis but also had severe hemorrhages from the tip of her tongue where there were numerous telangiectatic areas The patient's mother had died of an uncontrollable nasal hemorrhage No other member of the family gave a history of epistaxis

In 1926, P E. Weil[8] reported two cases from France The first case was a woman, 36 years of age, in whom telangiectases developed at the age of 6 Epistaxis occurred later A mother, brother, sister and aunt all had telangiectases but no epistaxis Her maternal grandfather had frequent severe epistaxis The second case was of a woman 43 years of age, in whom telangiectasis and epistaxis were present The epistaxis began at the age of 4 Her paternal grandfather died of a nasal hemorrhage Her father had epistaxis but no telangiectases A brother and two sisters had telangiectasis, as did also a paternal uncle and his daughter In the same year, Williams[9] reported two cases from the New York Skin and Cancer Hospital The first of these was a woman, age 56, whose father and brother also had both telangiectasia and epistaxis However, 12 other brothers and sisters were unaffected and so far her own children have not shown the condition The second case is interesting as being one of the few reported in a child This is the case of a young boy of 10 with several small nevi on the face and no epistaxis, but whose mother, two brothers and maternal grandmother had the typical condition Also in 1926, East[10] reported 3 cases One family had 11 members affected, the second 15, and the last only 2 In this large number of persons, he points out the interesting fact that the great majority either developed the telangiectases at about the age of 20, or at least noticed them at that age

In 1927, Mekie[11] reported a family in which 9 members were affected and the usual age of onset in this family was 15 The patient, a man of 38, had first noticed the telangiectases on his face at the age of 15, and the epistaxis began several years later Also in 1927, Mackay and McKenty[12] reported a family from Winnipeg in which 5 members were affected The patient was a woman, 44, who had had epistaxis for 12 years, but who had only noticed the telangiectases for two years before admission to the hospital

In the same year, Balph[13] reported the case of a woman, age 54, with typical telangiectasis and epistaxis, whose mother, maternal uncle, sister and three nieces were similarly affected. In his study of this family, Balph found that though the epistaxis began in early childhood, the telangiectases did not appear until 20 to 30 years of age, and that the symptoms began to be more severe in middle life.

In 1928, Foggie[14] reported a most interesting case from Edinburgh of a woman who had a few telangiectases and an occasional nose-bleed, but whose predominating symptom was painless hematuria, with no other urinary findings. Twelve members of her family, however, had both marked telangiectases and frequent epistaxis. This case is particularly interesting in the light of the cases which have been reported of familial hematuria. No other members of this family had hematuria. Also in 1928, Flandin and Soulie[15] reported from France the case of a woman of 34, with very severe epistaxis and many telangiectases present since early youth. Five other members of the family were affected. In the same year Thomson and Lamb[16] reported a case of a woman, 30, who had had almost daily epistaxis for 15 years. Numerous telangiectases were present. Four other members of the family were affected.

In 1929, Erdheim[17] reported a most interesting family in which 16 members out of 53 were affected. Six of these he personally examined and found telangiectases and elicited the history of epistaxis. In the same year, Harper[18] reported the case of a man, age 45, who had had severe and frequent epistaxis for as long as he could remember but only noticed the telangiectases about 5 years before admission to the hospital. An interesting point in this case is that tarry stools had been noticed several times without any cause for bleeding found in the gastro-intestinal tract. Eight other members of this family were affected.

Goldstein found thirty families reported in the literature and added one more of his own. Since then, we find reports of 19 more families, making a total number of families previously reported 50. The disease is transmitted by both men and women. In most cases the telangiectases are not noted until 15 or 20 years of age, but the epistaxis is frequently present from childhood. The condition usually becomes more marked in middle life.

Case 1. D. C., an Italian male, aged 42, single, was admitted to Bellevue Hospital on November 19, 1929, complaining of severe epistaxis of 6 days' duration. The patient gave a history of nose-bleeds since early childhood. These had occurred more frequently and been more severe during the past two years. He had been admitted to various hospitals during this period for the control of the epistaxis. There was no history of alcoholism, syphilis, or other diseases.

The patient's brother, aged 41, bleeds occasionally from the nose, and has telangiectases on lips, edges of tongue, and conjunctivae. One sister has frequent nose-bleeds. Three other brothers and one sister do not bleed. His father and paternal uncle give a history of epistaxis. The paternal grandmother gave a similar history. The patient's brother and sister each have three children, none of whom bleed.

Physical examination revealed a well developed, poorly nourished man. The skin had a faint yellow tinge but the sclerae were not jaundiced. Lips and mucous membranes were extremely pale. There were numerous minute telangiectatic areas on the lips, edges of tongue, and on the nail beds. The conjunctivae were clear. Fundi were negative. The nares were filled with dried blood. There were no telangiectases on the face or body. Examination of the larynx was negative. The heart and lungs were negative. The edge of the liver was felt two cm. below the costal margin. The spleen was not palpable. There was no lymphadenopathy.

Urine—Amber; alkaline; a faint trace of albumin; sugar negative; few white blood cells and no casts.

Blood—R. B. C. 1,800,000; W. B. C. 8,400; Hgb. 15 per cent (Dare); Polymorphonuclears 78 per cent, Transitionals 3 per cent, Lymphocytes 16 per cent, Eosinophiles 2 per cent, Basophiles 1 per cent. The blood picture was that of a secondary anemia. No abnormal cells were seen. Bleeding and clotting time were normal. The clot retraction was normal. Platelets—200,000. Blood pressure, systolic 110, diastolic 65. Blood Wassermann negative. Blood chemistry—NPN 33 mg. per 100 cc. Sugar 80 mg. per 100 cc.

Course—Patient was transfused on day of admission and the nose was packed. On removal of packing three days later, the bleeding recommenced. Two tubes, each containing 25 mg. of radium, were inserted in each side of nose and nares were packed with iodoform gauze. This was allowed to remain for 24 hours. Since then the bleeding has been much less frequent and less severe.

A month later he began passing bloody stools. Examination revealed a prolapsed rectum and a few small external hemorrhoids. Proctoscopy showed no telangiectases.

At the present time, 4 months after admission, he is having only occasional slight epistaxis. He has had an operation for hemorrhoids and has had no more blood in his stools.

Case 2. J. C., a German male, aged 55, married, was admitted to Bellevue Hospital February 13, 1930, suffering from acute cardiac decompensation. Physical examination revealed a pale, middle-aged white man, extremely dyspneic and

orthopneic, coughing up frothy sputum The nares were filled with dried blood The lips, tip of tongue, soft palate and nail beds showed numerous small telangiectatic areas Laryngoscopic examination showed telangiectatic areas over the left arytenoid There were many sibilant and moist rales throughout both lungs The heart percussed enlarged both to the right and left and there was increased dullness over the base The rate was rapid and regular The aortic second sound was louder than the pulmonic second There was a soft systolic murmur at apex and at the aortic area A higher pitched systolic was heard over the tricuspid area The pulse was rapid and thready Abdomen was negative There was slight pitting edema of lower extremities Moderate clubbing of fingers There was no lymphadenopathy

Diagnosis of familial telangiectases, secondary anemia, cardiac dilatation and myocardial insufficiency was made

The history revealed that the patient had had nose bleeds since early childhood These had increased in frequency and severity The patient's mother had severe nose bleeds and a brother of the patient gave a similar history Of the patient's two children, one son has frequent epistaxis

Blood—R B C 3,100,000, Hgb 35% (Dare), W B C 16 600, Polymorphonuclears 72%, Lymphocytes 21%, Transitionals 7% The platelet count was within normal limits The blood smear was that of a secondary anemia No abnormal cells were seen Blood Pressure—systolic 140, diastolic 75 Blood Wasserman negative

Course—The patient compensated rapidly, and during his stay in the hospital he had only an occasional slight epistaxis He refused further examinations and treatment and was discharged five days after admission

Summary

1 Since Goldstein's paper in 1921 in which he found 30 families reported in the literature and added one more of his own, 19 cases have been reported, making a total of 50 families

2 Two additional cases are presented

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UROLOGY IN CHILDREN*

By FREDERICK J PARMENTER, M D, F A C S, BUFFALO, N Y

RECENT perfection of infant cystoscopes now offers the same opportunity for accurate diagnosis in children which has been possible in the adult for many years past

These instruments range from 12Fr caliber to 18Fr, which permits of both observation and catheterization of the ureters, so that no child, no matter how small, need be denied a proper urological study when necessary

The diseases of the urinary tract found in children are the same as those found in older individuals with the added possibilities of many more congenital anomalies being encountered, which if of an obstructive nature, may cause death before adult life is reached These obstructions, if associated with infection, present a most seri-

* Read at the Staff meeting of the Children's Hospital Buffalo N Y February 10 1931

ous complication, inasmuch as proper drainage is necessary before recovery is possible.

It is true that the majority of cystoscopic examinations, especially in young children, and more so in males, will have to be carried out under general anesthesia. The period of anesthesia, however, need not be any longer than the time necessary to pass the cystoscope and catheterize the ureters—about five minutes. The anesthetic may then be stopped, and the dye used in estimating renal function, injected before the patient has recovered consciousness. There remains then but to take *x*-rays and make pyelograms, if the latter are considered necessary.

The commoner urological lesions which cause patients to bring their children to the doctor are:

1. Renal infections which cause temperature, pain over the kidney when the child is handled and the area pressed upon, pyuria with frequency and dysuria. Swelling over the kidney may be present.
2. Difficulty and dysuria where the urine is passed drop by drop, with the child straining enough at times to become purple in the face, and associated with evident pain. Some children will deliberately hold the urine for long periods to escape the pain caused by voiding.
3. Congenital defects of the external genitals as abnormalities in the opening of the urethra, constant wetting from a ureter which opens in the vagina or perineum instead of the bladder, extrophy, undescended testes, incontinence from concealed spinal bifida or some other cord lesion.
4. Functional nocturnal enuresis or diurnal enuresis.

Renal infections may be Non-Tubercular or Tubercular. Their location may be the cortex or medulla of the kidney, and the process may be a localized or diffuse one. Selectivity of the coccus infections for the cortex and the bacillus group for the medulla was suggested by Cabot and Crabtree in 1917, and their observations in the main are true, though of course exceptions occur in many instances.

The early symptoms of the coccus group are temperature, prostration, local pain or tenderness over the kidney, with swelling if perinephretic abscess develops or the kidney becomes greatly swollen. The urine may be clear and no urinary symptoms present. If cystoscopy, *x*-ray and pyelography are carried out, the results will be negative, as early there is no communication with the collecting tubules and pelvis.

The bacillus group presents identical symptoms with the exception that pyuria and bladder symptoms are present from the onset and, indeed, may precede the others. Cystoscopy shows pus from the affected side, reduced kidney function; pyelography, a dilated kidney pelvis and ureter. Cystoscopy is rarely indicated during the acute process. Females form the majority suffering from this infection; while coccus infections, in the writer's experience, are about equally divided between the sexes.

The pathological picture in the coccus infection is a localized or diffuse collection of abscesses ranging from pin-point to larger, depending upon the duration of the process. Perinephretic abscess may occur with practically no evidence of kidney damage, or if localized, a typical carbuncle may form containing in time as much as two or more ounces of pus.

The bacillus group shows cloudy swelling of the collecting tubules, calyces and pelvis with secondary infection of the ureter and bladder. As pus in the kidney parenchyma rarely forms and the majority recover or become chronic, surgery is rarely indicated during the acute process so that but few specimens are available for pathological study.

Mixed infections are common if the process does not undergo resolution in a short time or the condition becomes chronic.

Chronic infections are characterized by constant pyuria associated with frequency and urgency, which may be severe enough to cause incontinence. Acute exacerbations of fever, pain, etc., are common and if repeated almost certainly point to the flare-up of a chronic process.

As many of the coccus infections undergo pus formation some form of surgery will usually be necessary, varying from drainage of a perinephretic abscess or a localized collection of pus in the kidney, to nephrectomy. Mild infections do recover in many instances upon expectant treatment. The bacillus group almost invariably recover if unilateral upon mild alkalization of the urine, forced fluids, glucose in the vein and salt solution under the skin. Urinary antiseptics are of little use in the acute infections as they are largely diluted by the amount of fluids which should be given and are therefore reserved for the chronic cases, where fluids can be restricted. Should a bacillus infection not disappear in two weeks, complications, as stone or some congenital obstruction, should be considered and an *x*-ray taken, which if negative demands a urological study of the patient. If these measures are carried out, much embarrassment may be saved the physician later and a kidney preserved.

Tuberculosis may be cortical or medullary. If the former, the lesion may heal or gradually spread, destroying the kidney through autonephrectomy, form a perinephretic abscess, or become cortico-medullary, which frequently happens. Naturally a healed cortical lesion will cause no symptoms. A perinephretic abscess results in a slowly increasing swelling over the kidney area with the signs of a very low-grade infection. The medullary and cortico-medullary types early are characterized by frequency, dysuria and pyuria with nothing else to suggest the nature of the condition, and unless a considerable pyonephrosis exists, abdominal palpation will reveal nothing.

In the majority of cases cystoscopy alone determines which kidney is involved in the majority of these cases are unilateral by the time the condition is recognized and if a bilateral lesion had existed, healing has taken place upon one side

Tubercle bacilli are readily demonstrated in the bladder and ureteral urines If unilateral, the treatment is nephrectomy after the child has been brought into the best possible physical condition, even if this takes months of treatment, and the same is true of the post operative care If these measures are not followed the results of surgery are much more apt to be disappointing

Naturally any infection in the kidneys may be uni or bi-lateral, which emphasizes the necessity for a proper study before any surgical procedure, especially nephrectomy, is carried out, because silent infections do exist and have been found when least expected Nephrectomy in these cases would promptly result in death

Kidney stone will often be overlooked if infection or hematuria from irritation does not occur Many will be found in routine x ray examination taken for other purposes Stones may occur in one or both kidneys Pure uric acid or cystin calculi fail to show upon the x ray plate They are rare

Calculi should usually be removed to prevent kidney damage from back pressure and interstitial changes from irritation If not so treated many nephrectomies will be necessary later because of destroyed organs

Tumors will be discovered by the occurrence of a symptomless hematuria or the finding of a mass over the kidney, when the growth has attained sufficient size, and confirmed by urological examination

Congenital anomalies of the kidneys as abnormal vessel, ureteral stricture, dystocia etc which cause partial obstruction produce a slow progressive hydronephrosis with complete destruction in time The process is so slow little or no pain may be present Finally, a swelling over the kidney appears No other symptoms are present save pain, which may be so slight that it passes unrecognized An early diagnosis is possible only through a urological study, therefore pain over the kidney should not be neglected as it is the only symptom

Difficulty of urination is due to obstruction at the vesical neck The common causes in children are Bladder stone, foreign body or diverticulum In the urethra Congenital or traumatic stricture, valves in the posterior portion phimosis etc

The symptoms have already been mentioned as difficulty, straining and dribbling to actual incontinence

If the condition is chronic, as valves in the urethra the resulting kidney back pressure may result in toxic symptoms where the individual suffers from nausea and vomiting loss of weight and strength secondary anemia and the other signs of uremia Many of these cases are treated as difficult feeding or malnutrition is there is little to direct attention to the urinary tract However these children are usually incontinent from bladder overflow and abdominal palpation will reveal the distended bladder Rectal examination will show a full bladder filling the pelvis, and a funnel shaped projection, which is the dilated urethra and vesical neck, extending from the bladder to the point of obstruction in the urethra A catheter introduced may or may not encounter an obstruction However, residual urine is present, and the distended bladder disappears The distended bladder should be decompressed as in the prostatic and the patient properly prepared for operation, because only the rupture of the valve relieving the obstruction can result in cure and saving the child's life This is usually done through a suprapubic incision The end result of neglected cases is double hydronephrosis with destruction of renal parenchyma, uremia and death

Incontinence may be true or false and means absolute loss of urinary control The former occurs in spinal bifida or some other loss of spinal nerve control The rectal sphincter is also involved and an x ray will show the bony defect in spinal bifida There is also a saddle shaped area of anesthesia around the anus and perineum Absence of bladder sphincter as in extrophy, is another example of true incontinence

False incontinence comes from an overdistended bladder due to chronic obstruction, from irritation of the bladder by infection, stone, foreign body and true enuresis

Enuresis from a too strong detrusor muscle, is aggravated by a number of causes and the treatment outlined years ago by a Boston physician, whose name escapes the writer, has been so successful that it is copied verbatim The treatment for all of these conditions depends upon removing the cause when possible which means an accurate diagnosis

Treatment of Enuresis

1 All foods forbidden between meals, even milk and bread and butter
2 Diet list Milk butter, eggs, meats, fish, breadstuffs, cooked cereals, macaroni vegetables, oranges, stewed fruits and simple, unsweetened desserts
3 Exclude the following foods Soups coffee, tea cocoa sweet and salty and highly seasoned foods, ice cream, candy, pastry, cake, jellies, jams etc, condiments bananas and raw apples Meats, eggs and vegetables forbidden for supper to make it easy for the digestive system
4 Child to be in bed by 7 P M If very nervous, school is prohibited temporarily, and a nap re

quired in the afternoon. No play after 4 P.M. Child to be entertained by toys and books in a chair. Moving picture shows, music lessons and evening home lessons prohibited.

5. Habits: No fluids after 4 P.M.

Regular hours for urination at night, namely, 7 P.M. on going to bed, 10 P.M., and not again until 6 A.M. If child cannot go eight hours, it should urinate at 2 A.M. After a few weeks the voiding at 2 A.M. can be omitted. Punctuality is of prime importance.

Day wetters to urinate at regular intervals from three hours during the day to every twenty minutes. Interval gradually lengthened.

This in a brief way covers a few of the important problems involving the urinary tract of infants and children which confronts the pediatrician, where consultation with the Department of Urology will aid in establishing a diagnosis.

In closing, a word upon the place of uroselectan in the field of urological diagnosis:

Uroselectan contains a high iodine content, which permits visualization of the urinary tract when administered intravenously. In normal conditions, the drug passes through the kidneys and is eliminated in the urine, so that it is also a test of renal function in a way. At times the elimination is so rapid that the shadow cast is a very faint one, and the outline of the pelvis and ureters difficult to read. If no kidney function remains, there is of course no shadow. The best pictures are obtained in kidneys which still possess some function associated with an incomplete obstruction. Stones may be obscured by the density of the medium, so that a plain plate should always be made before the drug is introduced or a retrograde pyelogram is made. Uroselectan plates must be properly interpreted, which means some considerable experience upon the part of the examiner. Finally, the diagnosis must not rest alone upon the *x*-ray, but by the study of separate urines, the history, and physical examination, otherwise disastrous mistakes will be common. Uroselectan has its place and at times is invaluable. However, the consensus of opinion at present is, that it cannot take the place of the cystoscope and ureteral catheter as a routine method of diagnosis. It should be used where cystoscopy and ureteral catheterization is impossible or contraindicated by the condition of the patient.

SECONDARY ANEMIA ASSOCIATED WITH DIAPHRAGMATIC HERNIA*

By HARRY L. SEGAL, M.D., ROCHESTER, N. Y.

DIAPHRAGMATIC hernia is no longer the rare condition it was supposed to be before the advent of the roentgen ray, as is readily manifested by the increasing reports of cases appearing in recent years. It is taken into consideration more frequently in the differential diagnosis of certain abdominal and thoracic disorders. Its history, symptoms, complications, and treatment have been so amply reviewed that they will not be discussed here.

The purpose of this paper is to bring to attention one aspect of this condition that has received no special comment in the past, namely, secondary anemia. There are over 400 articles on diaphragmatic hernia, and only about 10 of these note anemia as one of its symptoms or complications. Crohn[1] states that an unusual form of secondary anemia of a marked nature may occasionally be observed in diaphragmatic hernia and that his attention was first called to this by Fineman. Hedblom[2] records that anemia was among the occasional symptoms observed in 229 cases. Bock[3] mentions three patients with diaphragmatic hernia complicated by bleeding and secondary anemia. Engels[4] and others record anemia as a finding in diaphragmatic hernia. None of these authors call attention to the fact that only symptoms of secondary anemia and nothing subjectively to point to the gastro-intestinal tract may be present.

Of four cases of diaphragmatic hernia at the Strong Memorial Hospital of the University of Rochester there were two patients in whom at one time symptoms only of secondary anemia were present and in whom, moreover, there was nothing in the physical findings to call attention to the gastro-intestinal tract or to diaphragmatic hernia. In the review of the literature there were found four similar cases, one of which was also studied at the Strong Memorial Hospital. Brief résumés of these reports have been tabulated under Group 1 in the table, and more detail histories of the two cases with secondary anemia studied at the University of Rochester Hospital are given later.

Besides those patients with symptoms only of secondary anemia there were others in whom the secondary anemia accompanied one or more symptoms related to the abnormality in the gastro-intestinal tract. These have been summarized under Group 2. There were many other cases in the literature in which it was stated that anemia was present or that the patient appeared to be anemic, but they were not abstracted as no laboratory findings were mentioned.

* From the Department of Medicine, University of Rochester, School of Medicine and Dentistry and the Medical Clinic of the Strong Memorial Hospital, Rochester, N. Y.

The cause of the anemia in diaphragmatic hernia, whether or not gastro-intestinal symptoms are present is almost always bleeding, although Southby[5] in his case considered malnutrition as the cause owing to the abnormal position of the stomach and the consequent poor digestion of food. That bleeding may occur is readily realized from the melena present in both of the patients reported here, in the cases mentioned by Bock,[3] and in other reports in which hematemesis, melena, or both are recorded as findings.[6]

The cause of the bleeding may have been due, in some cases, to other conditions present coincidently, such as bleeding polyps, hemorrhoids, blood dyscrasias, and also ulcers not involved in the hernia. Such cases are exceptional, for the study of the patients reported in the literature, which have come to operation or autopsy, proves that bleeding is usually a direct result of the hernia. The following causes of such bleeding must be considered:

1. Passive congestion, as a result of the pressure on the veins as they pass through the narrow hiatus of the hernia, or by angulation of the veins caused by the change in position of the viscera.

2. Ulcer, which may be due to varicosities resulting from passive congestion, or as a result of disturbed arterial supply.

3. Inflammation, in the region of the wall of the viscera incarcerated in the hiatus of the hernia.

Crohn[1] states that the seepage of blood is from the effect of pressure of the diaphragm upon the incarcerated gastric wall and particularly the gastric mucosa. Pancoast and Boles[7] say that hematemesis may occur and that it is due to inflammation in that part of the stomach wall involved in the opening. Morrison[8] records that Dr. Fiske Jones of Boston operated on several cases and found the margin of the hiatus thickened and the stomach wall showed more or less dense cicatrix-like thickening of that portion which had become herniated. This he interpretated as an inflammatory process which might account for the hematemesis. Von Bergman and Staehelin[9] believe that the loss of blood may be due to incarceration or ulcer. Kienbock[10] in a review of ulcers associated with diphragmatic hernia relates the cause of the ulcer to the hernia. He says that, as a result of pinching, angulation, and torsion of blood vessels, there is a disturbance in the circulation which results in impairment in the nutrition of the stomach wall and prepares the way for ulcer or incarceration and even for gangrene and perforation. Dubs[11] gives the same explanation for ulcer formation. Neugebauer[12] says that the hematemesis is due to ulceration resulting from venous stasis. Aue[13] offers it as his opinion that true ulcers may occur as a result of diphragmatic hernia in the following sequence; venous stasis, swelling of the mucosa, hemorrhagic erosion, and finally ulceration. Harrington[14] believes that traumatic ulceration may occur as a result of torsion and malposition of the stomach and according to his view these ulcers are superficial erosions and that they do not penetrate the wall of the stomach as do inflammatory ulcers. That ulcers do occur as a consequence of diaphragmatic hernia has also been shown by many other authors,[15] reporting cases which have come to operation or autopsy. Those cases with ulcers which do not seem to have resulted from the hernia have not been included.

Case Reports

Case 1, Miss E. S., age 64 was admitted to the Strong Memorial Hospital, Nov. 11, 1926 with complaints of anemia and weakness for 14 years. The symptoms came in attacks about once a year and consisted of weakness, dyspnea, and palpitation. For 9 years these were the only symptoms, but 5 years ago she had tarry stools and hemoptysis. The past history and system review revealed little of significance except the following; hysterectomy and appendectomy, 1918, automobile accident in 1921 at which time she fractured her tibia. The family history was irrelevant except that her brother had been operated upon for a diaphragmatic hernia.

Physical examination showed a short stout female adult of rather pale appearance. The heart was slightly enlarged to the left, and a precordial systolic murmur was present. Otherwise the physical examination revealed nothing unusual. B. P. 130/70.

Laboratory Findings—Hb. 65% Sahli, RBC 3,740,000, WBC 6750.

Differential — Polymorphonuclear leucocytes 82%, Lymphocytes 15%, Transitionals 2%, Eosinophiles 1%.

Wassermann reaction of the blood was negative.

Stools—Guaiac test for occult blood was positive.

Gastric analysis—Ewald test meal—Free hydrochloric acid 26 c.c. n/10 per 100 c.c. of gastric contents. Total acid 39 c.c. n/10 per 100 c.c. of gastric contents. Roentgenographic examination showed the cardiac portion of the stomach above the diaphragm. The duodenum was held down and considerable defect was noted on the lesser curvature. Duodenal ulcer could not be ruled out.

This patient had been studied previously at the Rochester General Hospital where the diagnosis of diaphragmatic hernia had also been made. Operation was performed in August, 1928, by Dr.

Fiske Jones of Boston who found a large diaphragmatic hernia, the hiatus of which admitted three fingers. The stomach and duodenum appeared normal.

Case 2. Mrs. Y. K., age 52 was admitted to the Strong Memorial Hospital, December 4, 1929 with a history of four weeks duration, previous to which time she was in good health. Her symptoms began suddenly on arising one morning when she felt weak, dizzy, and nervous. These symptoms persisted, and in addition she developed dyspnea and insomnia. Her past and family history were essentially irrelevant.

Physical examination revealed a short, rather stout Jewish woman whose skin was of a pale yellow tint. The sclera and mucous membranes were pale. The spine showed a scoliosis of the upper dorsal vertebræ to the left and the lower dorsal vertebræ to the right with a slight kyphosis. The right side of the chest was protuberant and the left side was sunken. There was slight impairment of the percussion note at the base of the right lung posteriorly. The heart was not enlarged to percussion and the sounds were of fair quality. The abdomen appeared normal. Vaginal examination revealed an enlarged uterus with several hard masses posteriorly (myomata). External hemorrhoidal tags were evident on rectal examination. Varicose veins were prominent on the left leg.

B. P. 134/78

Laboratory Findings—Hb. 50% Sahli, RBC 3,100,000, WBC 6,000.

Differential — Polymorphoneutrophiles 70%, Small Lymphocytes 28%, Transitionals 2%. The erythrocytes showed a slight poikilocytosis and anisocytosis.

Wassermann reaction of the blood was negative.

Stools—Guaiac test for occult blood was positive in repeated specimens.

Roentgenographic examination showed a herniation of the cardiac portion of the stomach through the esophageal hiatus.

On proctoscopic examination no bleeding points were seen in the rectum.

Comment

These two cases demonstrate that secondary anemia at one time may be the only symptom of diaphragmatic hernia. Without the aid of the roentgen ray the cause of the anemia would have remained unrecognized which emphasizes the importance of the roentgenographic examination in the diagnosis of such lesions of the gastro-intestinal tract.

Abstract of Cases of Secondary Anemia Associated With Diaphragmatic Hernia

Group	Case reported by	Sex	Age	Symptoms	Description of Hernia	Confirmed by	Occult Blood in Stools	Hb. %	RBC† mil.
	Author Bock (3)	F	62	Pallor, weakness, dyspnea, palpitation in attacks for 14 years.	Portion of stomach through esophageal hiatus.	Roentgen ray. Operation.	Pos.	65	3, 7
	Author	F	52	Dyspnea, palpitation, weakness, dizziness.	Portion of stomach through esophageal hiatus.	Roentgen ray.	Pos.	50	3, 1
1	Bock (3)	F	51	Weakness, palpitation, dizziness.	Herniation of stomach through esophageal hiatus.	Roentgen ray.	Pos.	55	3, 8
	Abercrombie (16)	M	8½ mons.	Pallor	Portion of large and small intestines in left chest.	Roentgen ray.	Not examined	60	3, 1
	Carman and Fineman (17) Fineman and Conner (17)	M	22	Pallor, palpitation treated for pernicious anemia 7 years.	Cardiac portion of stomach in right chest, short esophagus.	Roentgen ray.	Not mentioned.		

Group 1 represents cases with symptoms only of secondary anemia.
†RBC mil. signifies the number of red blood cells in millions; thus 2, 5 means 2,500,000 red blood cells.

ABSTRACT OF CASES OF SECONDARY ANEMIA ASSOCIATED WITH DIAPHRAGMATIC HERNIA

Group	Case reported by	Sex	Age	Symptoms	Description of Hernia	Confirmed by	Occult Blood in Stools	Hb. %	RBC† mil.
	Bock (3)	F	73	Tarry stools.	Large part of stomach through esophageal hiatus.	Roentgen ray.	Pos.	45	2, 5
	Hazzard (18)	F	17	Heartburns, difficulty in swallowing, pains substernal and between shoulders, eructation.	Portion of stomach through esophageal hiatus.	Roentgen ray.	Neg.	50	3, 2
2	Nessa (19)	F	65	Vague distress in epigastrium 10 years, occasional vomiting after meals.	Portion of stomach above diaphragm.	Roentgen ray.	Not reported	45	2, 0
	Schaper (15)	M	30	Cough, crampy pains, nausea, diarrhea, black stools 6 years.	Post traumatic hernia, transverse colon, omentum, part of spleen in left chest.	Autopsy, Bleeding ulcer of stomach believed due to hernia, Erosion of branch of pulmonary artery.	Pos.	76	1, 8
	Southby (5)	M	2½	Pallor, weakness, anorexia, gurgling sounds in abdomen.	Almost entire stomach, portion of duodenum above diaphragm, hernial pouch in region of foramen for vena cava.	Autopsy.	Not reported	20	2, 8

Group 2 represents cases with both secondary anemia and gastro-intestinal symptoms.
†RBC mil. signifies the number of red blood cells in millions; thus 2, 5 means 2,500,000 red blood cells.

SUMMARY

Two cases of diaphragmatic hernia from the Strong Memorial Hospital of the University of Rochester and three cases from the literature, in which at one time the only symptoms present were those of secondary anemia, are briefly reviewed.

Five cases of diaphragmatic hernia, in which symptoms of secondary anemia accompanied gastro-intestinal symptoms, are also tabulated. The exact number of these patients could not be estimated as many of the cases reported had no blood findings stated, although melena, hematemesis, and even anemia were mentioned.

The anemia in both of the above groups of cases is usually due to loss of blood resulting from the effects of the hernia. A sufficient number of patients with diaphragmatic hernia and secondary anemia have come to operation or autopsy to prove that such is the case.

CONCLUSIONS

Secondary anemia may be associated with diaphragmatic hernia either alone or in addition to other symptoms of the hernia.

Loss of blood is usually the cause of the anemia and the loss of blood is usually due to pathological changes produced by the diaphragmatic hernia.

N. Y. State J. M.
June 1, 1931

THE VALUE OF THE CANCER CLINIC TO THE COMMUNITY*

By WALTER L. MATTICK, M.D.

From the State Institute for the Study of Malignant Disease, Buffalo, N. Y., Burton T. Simpson, M.D., Director

CANCER morbidity and mortality are definitely on the increase. From 1910 to 1924 the cancer rate increased approximately 20% in the Registration Area of the United States and 29 per cent in the Commonwealth of Massachusetts. The present mortality rate for cancer is approximately 125 per 100,000 population. Thus 150,000 deaths may be expected from cancer in the United States in 1930 of which number about 5,000 will occur in the State of Massachusetts to which number the city of Brockton will contribute about 85 cases. If, in accordance with the assumption of the Society for Cancer Control, we multiply the above figures by three we will arrive at an approximation of the number of living cases of cancer to anticipate in 1930. Such a rate, while highest in the U. S., is followed closely by other states, especially New York and while almost astounding is only evidence of similar trends in all civilized countries. Hence a reason for the cancer clinic.

Besides showing indications of increase, cancer is also a disease failing to respect any persons or races. No economic or social status is exempt; it is equally a disease of rich and poor.

Cancer may occur at all ages from the cradle to the grave but its greatest incidence is after midlife. Thus of all men dying after 40 years of age, 1 out of 9 die of this disease, while correspondingly for women dying after this age period 1 out of every 6 or 7 deaths is due to this malady. The greater incidence in women is accounted for by the greater prevalence of cancer in the genital tract and breasts of this sex whereas amongst men cancer of the digestive tract leads in preference. It may be said with probabilities of assurance that every one living long enough would develop cancer. Thus the great strides in the betterment of living and economic conditions that have added so much to the eradication of infectious disease like tuberculosis and resulted in a material increase of the average longevity, has at the same time increased the expectancy of more individuals to live on to old age and hence to develop cancer. Thus we see malignancy predominatingly as a disease of old age, possibly a result of bodily degeneration, second only as a cause of death to heart disease and pneumonia which latter is mostly seasonal in prevalence.

You will naturally ask, what is the medical profession and state doing about these facts. I might add that practically every large state, university and hospital in our land is intently interested in cancer research in its many phases and has been for some time past. The chemist, the physicist, the biologist, the physiologist and all scientists have joined with the medical profession in a united effort. The work done has been enormous but it has chiefly led to enlightening us on the negative phase of cancer, i.e., what cancer is not.

We can now say with assurance that cancer, while an enigmatic disease, is not contagious or, infectious in the ordinary sense of the word. If this were not true then those specializing in this field would surely die of it. Truly, Doyen, Blumenthal, Nuzum and many others have attempted to isolate a cancer germ, but on critical investigation these have all failed to satisfy even the most credulous as a cause of this malady.

Cancer is not hereditary in the ordinary sense, the work of Sly on mice notwithstanding but a certain predisposition may be transmitted through inheritance.

What then is cancer? Well, so far as we know, cancer is a multiplication out of all reason and beyond all bounds of groups of the body cells which for want of a better expression we say have lost their tissue restraint. These cells are probably changed adult body cells which appear to have assumed the "embryonic" in their physiologic and biochemic propensities rather than embryonal cells per se. Thus cancer, according to Dr. Ewing, one of America's foremost workers on this disease, has been called "an autonomous new growth." The secret of this rapid growth of cells and the lack of normal tissue restraint that has so long baffled the research of ages probably resides in biochemic body changes.

We have long known of the role of chronic irritation in relation to cancer. Thus we have pipe smoker's cancer of the lip, cancer of the mouth in betal nut chewers of Malay, analine worker's cancer of the bladder, paraffin worker's cancer, chimney sweep's cancer of the scrotum, the Kangri stove cancer of Kashmir and mule spinner's cancer, etc. In fact, cancer can be produced experimentally in the stomach of rats by feeding with infested cock-roaches as shown by Febiger, cancer of the skin in mice by persistently painting the backs of the animals with a known carcinogenic grade of coal tar and sarcoma in the liver of rats by infesting with cysticercus as produced by Bullock and Curtis. Thus chronic irritation whether mechanical, thermal, chemical, actinic as *x*-ray or the result of chronic prolonged infections, is influential at least in determining the site of cancer in constitutionally predisposed individuals.

"Cancer a race against time." This is a common expression that is most assuredly true for this is a most insidious disease in onset, seldom

* Read at the opening exercises of the 12th State Cancer Clinic to be inaugurated by the Department of Health of Massachusetts, at Brockton, Massachusetts, June 12, 1930.

giving warning of its presence till late in its course and because of this insidious, painless onset with few or no inconveniencing symptoms, most patients put off consulting their physician till it is too late. In fact, 75 per cent of the patients coming to our clinic at Buffalo and other clinics in this country, come too late when hope of recovery has passed and when all that can reasonably be expected to achieve is alleviation of pain and suffering in the last days of their disease.

Thus the majority of patients delay 6 or 8 months after the appearance of the first warning before consulting their doctor. This, you see, is a sad commentary when we stop to consider that this is a disease with an average life expectancy without operation or treatment in all its forms of approximately two years at the best and often a much shorter period. Thus one-third of the life expectancy is immediately lost and the chances of recovery or increased expectancy beyond this period of two years have been materially decreased by procrastination "which is the thief of time," valuable precious time lost in the race against recovery from cancer.

By way of prophylaxis must be mentioned, early attention to all sources of chronic irritation as jagged teeth, poorly fitting plates or other dentures, persistent, thickened white patches of the mouth or tongue, and chronic indulant, slowly healing ulcer of the lip or skin. Beware of any ulcer or sore that has lasted over a month or two, the mole that suddenly increases in size, chronic "erosions of the cervix" of the uterus, "cystic cervicitis," "cervical" or "rectal" polyps, etc. All these need careful and immediate attention as possible causes of chronic irritation which if persisted in may lead to cancer. Pay strict attention to oral and bodily hygiene.

Where in the body does cancer occur and what are its early symptoms and signs? Cancer may occur in most any organ of the body but some more predominatingly than others. Thus cancer of the genital organs, especially the cervix and in the breast are most common in women and of the stomach, mouth and rectum in men.

Cancer commences as a small lump or tumor and is insidious in onset, generally free from symptoms in the beginning and only when easily within reach of the examining hand, or the sight of the eye or *x*-ray is the lump or tumor recognizable. It is at this stage that cancer should be diagnosed if we wish to secure best result. And here I might stress the value of periodic health examinations in attaining this end. Later in the course of the disease the tumor tends to spread by a process known as metastasis and some types spread very easily even to distant parts which again emphasizes the importance of early recognition and treatment. Such metastasis occurs by way of the lymphatic or blood stream and while microscopic at first becomes recognizable later as demonstrable nodules in the lymph-node or other organs. In this stage it is often too late to expect cure and nothing beyond palliation can usually be offered. Again the dreadful price of procrastination!

About this same time ulceration tends to occur producing mild bleeding or discharges. The aforementioned are classed as fairly early signs of the disease while pain is generally absent till late in the disease and should never be awaited before seeking medical advice.

How then can we be forearmed and forewarned? Only by "eternal vigilance" which is "the price of safety." After passing the age of forty be sure to go to visit your doctor at least once a year for a physical "check up." Women should especially be on the lookout for lumps in the breasts even though painless, retraction, deformities or discharges from the nipple, dimpling or puckering of the skin of the breast or lumps in the armpit. They should also beware of bloody or watery uterine discharges or irregular menstrual bleeding. Everyone should take heed of the passage of blood in the urine or from the bowels. Don't blame the latter onto supposed "piles" and pass it off as harmless without first seeking medical advice. Beware of slowly healing ulcers of the lip mouth, tongue or skin. Don't let such conditions exist over a month without consulting your physician. In cases of chronic indigestion and constipation accompanied by loss of weight, routine fluoroscopic or *x*-ray examinations of the gastro-intestinal tract are in order and can be arranged for through the clinic where necessary. The appearance of a lump anywhere in the body should arouse our suspicions and prompt us to immediate action before it is too late.

Some types of this disease are most amenable to treatment than others. Under present methods of treatment, cancer of the lip and skin have shown promising response; cancer of the cervix in women has lost much of its past dreadfulness, thanks to the advent of radium but still with the aid of radium, *x*-ray and surgery much remains to be done and people still have cancer and many die from the disease. Everybody is eager to see improvement, if possible in our present methods so as to obviate this dreadful mortality and you can rest assured the medical profession and the rest of the scientific world are not asleep on the job.

There are three essentials of merit in the treatment of cancer. They are early diagnosis, surgery and radiation. Biopsy, or the removal of small bits of tissue for microscopic examination is always to be advised where permissible. This should be followed by immediate provision for complete eradication of the localized disease either by the cold knife or the radio knife, if possible preceded and followed by *x*-ray or radium

packs, or the use of radium needles, tubes or seeds interstitially. Thus, in this triad of early diagnosis, surgery and radiation we have our present mainstays in the fight against this dreadful disease.

You will say that this is expensive treatment and none but the wealthy can afford it. Radium costs $70,000 a gram; approximately 1-30 of an ounce. Operations and hospital bills are costly too. This is just why the State of Massachusetts has been pioneering in this field by establishing clinics and making radium and *x*-ray available at Pondville when necessary. If we stop and look back at the tuberculosis problem of 30 years ago we will note that the outlook was equally discouraging. We have no positive cure for tuberculosis yet, in spite of that we organized campaigns against the "white plague" and sailed upon an unchartered sea, not knowing whither bound but with a decided intention to achieve something worth while. In due time state aid was extended to the working classes thus securing for them the necessary sanatoria rest; legislation was passed to improve general hygiene conditions and so in short tuberculosis to our great satisfaction has ceased to be as ravaging as it was. Who knows that with state and federal aid we may not be able to do as much for the cancer problem. At least, this is the way many states and countries of Europe are viewing the situation and let us hope the effort will be equally rewarded.

Lastly, but not least, don't be deluded by short or sure cure promises or advertisements, by radio talks from station KFKB; by the Koch treatment emanating from Detroit with satellite Judases all over the country eager to prey on cancer victims; by Abram disciples who claim to diagnose and treat cancer, syphilis and tuberculosis especially, by determining the vibration rates and using this vibration rate in treatment; by Glover's or similar sera, dietatetic or drug treatments. All so far, to the best medical knowledge have been tried and found wanting. Even the lately and much-heralded Coffey-Humber treatment seems to be rapidly proving a failure.

Let us therefore learn to be cancer minded but not absessed with cancer phobia. Let the family physician remember that much depends on him in this campaign against cancer but that he is powerless if the individual fails to give heed to early warnings and seeks him in consultation too late.

Your state health department has recognized the need and under the guidance of its Commissioner, Dr. Bigelow has been pioneering in this field. They have established an efficient series of cancer clinics with the aid of locally interested groups of physicians and town folk. The legislators have done their part by voting their financial support so now it is up to the people of the state to get the most possible benefit from the clinic. Let us all receive the warning and accept the challenge of the clinical opportunities afforded.

ANAESTHESIA IN GOITRE SURGERY — EXPERIENCE WITH AVERTIN

By ARTHUR S. McQUILLAN, M.D., NEW YORK, N. Y.

From the Goitre Clinic, Fourth Surgical Division, Bellevue Hospital.

THE choice of an anaesthetic is a factor that contributes not a little to the success of thyroid surgery especially when dealing with cases which have been thyreotoxic and when one is forced to do the least amount of surgery on a patient who is at the time thyreotoxic to a greater or lesser degree.

Ether has always been an unsatisfactory anaesthetic. For unknown reasons, it increases the hazard in these cases as it does in the diabetic. It is a vascular stimulant increasing the force and the rate of the heart and obviously undesirable in thyreotoxic patients.

Nitrous oxide-oxygen, or better, ethylene-oxygen, have come to be the anaesthetics of choice. The rapidity of induction, the light degree of anaesthesia, the excellent color of the patient throughout the procedure, and the quick return to consciousness characterize especially ethylene anaesthesia. While due regard to the explosive character of ethylene has to be taken, with proper precautions it can be used with safety. Its advantages in thyroid surgery outweigh the inconvenience and extra equipment for carrying out safety measures.

Local infiltration or block anaesthesia has been used extensively in the past, and is much used at present. In general it is satisfactory. Occasionally patients refuse it and in oversensitive, high strung thyreotoxic cases, one runs into difficulties. Also, one meets a patient who is hypersensitive to novocaine. The author has had several such cases with one fatality directly traceable to novocaine toxemia. On the other hand it has been the author's experience that post-operative thyroid reactions when they do occur are much less severe after the use of a local infiltration or block anaesthesia. Occasionally it is advantageous to supplement inhalation with local or infiltration anaesthesia. This carries out the principle of anoci-association formerly pointed out by Crile, who recognized the fact that reflex stimuli in-

creased the thyreotoxicosis even with the patient under the influence of inhalation anaesthesia. Reflex stimuli, as emotional shock, fright, fear, anxiety, worry, the mechanism of which is little understood, except that they are associated with loss of energy, present problems which are most intangible and difficult to solve Shock and fright may have a profound influence on the nervous mechanism even in the normal subject. These factors are frequent in the predisposing and contributing etiology of Graves' Disease. They constantly intensify and aggravate this glandular disturbance when it exists. They are often responsible for converting an excellent surgical risk into a poor one. Crile minimized effects of these disturbing factors in his method of gradually training the patient to become accustomed to the anaesthetic thus stealing the most opportune time so to speak for the surgical procedure. This method necessarily involves much time, patience and expense and has not been generally used in hospitals not especially equipped and constructed. Hence there has been a need of some simple, safe and effective method of meeting these difficulties, and for this reason I am reporting my experience with avertin used in a series of one hundred Exophthalmic Goitre cases.

Avertin (tribromethanol) was used in these cases with the sole object of initiating narcosis, the degree of unconsciousness necessary for the surgical procedure being accomplished by supplementary inhalation anaesthesia. Avertin exists in liquid form, being held in solution of amylene hydrate. Each cc of fluid equals a gram of avertin and this is given per kg of patients weight. The estimated quantity of the drug is added to distilled water heated to 40 degrees C and shaken to make a 2½ per cent to 3 per cent solution. The temperature must not go above 40 degrees C, otherwise, irritating hydrobromic acid will be formed. This latter is recognized by a blue color, when a few drops of congo-red (1-1,000 sol.) is added to 5 cc of this avertin solution.

The procedure is as follows: The patient is given a simple enema each morning for three or four days preceding the day set for operation, the patient being kept entirely ignorant of the latter. This enema is given fairly early in the morning before the usual time for breakfast. On the morning of the operation the estimated dose of avertin is introduced into the enema of distilled water and this is given in the usual way in patient's room and with patient on left side. Narcosis takes place within three to five minutes following the injection of the avertin enema. The patient is then taken to the operating room where inhalation anaesthesia (usually nitrous oxide oxygen or ethylene oxygen) is supplemented. It is found unnecessary to use the usual preliminary dose of morphine in these cases. The simplicity of this method and the ease, comfort, rapidity and certainty of the narcotic effects of this drug mark its value. In this group of cases the method and reason for using this drug have been aimed at the psychical strain and unpleasantness always inseparable from simple inhalation anaesthesia. No attempt has been made to use avertin as a basal anaesthetic in these cases. For this reason a dose of the drug merely necessary to produce a light stage of unconsciousness has been used. Hence a wide margin of safety has been maintained.

The results in this series have been excellent. There have been no accidents attributable to avertin. Only one case was moderately cyanotic during the operative procedure. This condition quickly cleared after the operative procedure. It was learned later that by error this patient was given a preliminary dose of morphine. As avertin in its larger doses may have a depressant action on the respiratory center, and in view of the morphine-like action of this drug, the use of morphine would seem unnecessary and contraindicated. There has been no noteworthy change in the blood pressure, in any of these cases while under the influence of avertin. The narcosis with this minimal dose has lasted on the average of one hour post-operative. The amount of inhalation anaesthetic necessary to carry the patient through the operative procedure has been reduced to at least one-third. The usual amount of post-operative nausea and vomiting has been greatly diminished. At times sagging of the jaw and blocking of the upper respiratory tract by the tongue have been noted. This must be constantly watched during the whole time the patient is under the influence of avertin and especially after the patient is returned to the bed.

I recommend that avertin be handled by only the best qualified anaesthetists. While under the influence of avertin, the patient must be watched as carefully as under any other anaesthetic. If this is followed I believe avertin a most useful and safe adjunct to inhalation anaesthesia in thyroid surgery.

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For list of officers of County Medical Societies, see this issue, advertising page 777ii.

Next Annual Meeting, Hotel Syracuse, Syracuse, N. Y., June 1, 2, 3, 1931.

CHANGE OF ADMINISTRATION

This is the last Journal to be issued before the change of officers which will occur at the annual meeting beginning on June 1st. Yet the change in personnel will not be great, for when a member is initiated in his official duties, he remains in active service for years. Every surviving past president of the last decade for example is still on the active list as a member of some committee or unit of administration. The Medical Society of the State of New York is fortunate it has a body of experienced men on whom it can rely for advice and leadership.

PRESIDENTIAL COMMENTS ON CURRENT EVENTS—NO. 23

This article closes the President's Comments of the year.

The year's work is characterized by an orientation of the situation in medicine not anticipated in the beginning. That some suggestions of the President should be considered innovations is not surprising. That they should arouse psychological factors involved in any readjustment of attitudes toward the problems of medicine is not unusual. So prolonged a study of medical relationships and the problems of medicine in as extensive a field as has been done in New York State this year could hardly fail to reveal the true situation in medical relationships and problems. While all the suggestions of the year are minor ones in comparison with those called the "innovations of medicine," it is quite likely that they have met with similar reception.

To discuss social evolution and the medical problems arising from it seems to suggest socialism to a considerable number of physicians, but I am bold enough to say that this attitude will not save us from the influence of certain inevitable changes in our national life already begun and advancing. America is steadily approaching the settled state of the older nations. The trend of national opinion is reflected from time to time in the enactment of laws. We have various kinds of registrations and restrictions and taxations and other evidences of the government taking on more and more its parental functions.

All these things are simply the penalties of the onward progress of civilization and the limitation of independent action. These conditions are not the result of the advocacy of any group or of any individual. They depend upon certain incontrovertible facts.

No one can for long raise false issues. Whatever the facts are will determine the issues. Let anyone study the social conditions in this country; take into account those of older countries; realize that we have passed the period of most rapid growth as a nation; and that there is a steadily increasing reciprocal influence on this country of conditions in other countries. Though someone will rise up to object, I doubt not the influence on this country of the five-year plan and multiples of it in Russia if it succeeds. Its present duration has already had an influence. Let anyone study the new book, "Business Adrift," by Donham, Dean of the Business School of Harvard, substituting "medicine" for "business" and see where he stands when he has finished.

About at this point some reader will say, "What has all this to do with medicine?' Let us see if it has any relationship. Medicine has always been a social function. It has always been intimately related to human welfare and human progress. Fear of pain and death are universal human characteristics. Any force great enough to postpone either of these fears is to intimately associated with all the social influences surrounding individual or community or national life that it cannot escape being influenced by them.

The next step in our reasoning is the logical one that the science of medicine has had a phenomenal advance. Almost nothing has gone faster in human affairs than the accomplishments of medical research, and the development of methods to cure and prevent disease. There has come to be definite public understanding of the resources of medicine. This conception is likely to increase just as education advances and general ease of communication increases, and as facilities for the spread of knowledge become more available.

The next step is that the public wants these services. Official organization, voluntary organization, and government are representing the public in its desire. The National Committee on the Costs of Medical Care, the White House Conference on Child Health, the American Federation of Organizations for the Hard of Hearing, the National Committee for the Control of Cancer are examples of only a few of the organizations to advance plans for placing the resources of medicine within public reach. Some of the greatest minds in medicine today are associated with these efforts. Some of them are leaders in organized medicine. Their loyalty to the interests of the general practitioners of medicine has never been questioned.

The next logical step in our reasoning is that people get sick as they used to do. Babies are born as they always have been. There is more work to do in curative and in preventive medicine together than there ever has been in curative work alone. Aside from whether there may too many doctors or not, there is no question that there is an economic disturbance in the practice of medicine. This disturbance is not because somebody else is practicing medicine, but because there is not money enough in the pockets of all the people to pay for modern medical care in sickness. No deluge of words will obscure this fact.

Let us bring in right here another fact because it belongs here. Modern medical knowledge for the prevention of disease and modern public health practice are not as available as they should be in New York State. The greater the availability of modern means for the prevention of disease, the greater the need for physi-

to apply them. The more foundations er in medical research regarding the inci- of disease and stimulate early diagnosis, nore work there is for physicians. The defect in this chain of reasoning is that e must be some method of providing ns to meet the costs of medical care for ɔe who cannot get it themselves. Medicine uld be the leader in developing any plan do this, not because it is more able in an uarial sense—some expert would have to this—but because this involves problems of eat importance in relationships. As a con- ibution to the situation in medicine, anyone terested might read with profit an article by r. Winford H. Smith, Director of the Johns Iopkins Hospital, on Page 10 of the May 16, 1931, issue of the *Saturday Evening Post*.

If the availability of modern medical care is not as great as it should be; if public health practice is not as well organized as it should be; if a considerable part of the people cannot without hardship pay for modern medical resources; and if there is an economic disturbance in the general practice of medicine, then it is time to begin to think clearly of medical problems and relationships. The general practitioner, the most useful man in all medical relationships, has great competition today. Hospitals, clinics, group practice, and specialism are major examples. Will it suffice to oppose changes in medical service when these changes are inextricably involved in the social complexities of modern national life and the national inter-relationship of health problems?

My studies this year plainly indicate to me that there are "rocks ahead." The approach is not rapid enough to alarm anyone not paying special attention. The fact that leaders in medicine in many places are considering the situations in medicine should be sufficient reason for the profession to consider the facts impartially.

What is the objection? What are the psychological factors? Is it fear of something unknown to come? Is it because that any innovation or change has always met resistance at first? Recall the Holmes' and Semmelweis' opposition led by the obstetricians of Philadelphia; the opposition to vaccination a hundred-thirty years ago in Boston, and the opinion of Benjamin Waterhouse held by the Medical Society of Massachusetts. Recall the influence of the test instituted by the Boston Board of Health about the year 1802; the opposition to dissection; to Harvey's theory of circulation; to the discoveries of Pasteur; to the doctrine of antiseptics; to asepsis; and then to other things that everyone can recall.

Perhaps destructive criticism is the natural attitude instead of constructive criticism, just as war and not peace, is the natural state of all nature.

Now let us look at the psychology involved. For this I am partly indebted to "Social Factors in Medical Progress" by Stern.

It is quite usual that any proposal involving a change from the customary way of doing things, even though the results are inefficient, is not approved until a considerable time has elapsed. The second factor is the "power of tradition." Space will not permit its discussion. The third factor is conservatism. The physician is naturally cautious because he deals with a multiplicity of uncertain factors and it forms a background for resistance to change in medical relationship involving new things in the practice of medicine or the practice of public health. Another factor is emotional resistance to a substitution of a new proposal for an existing one. Another factor, as much sociological as psychological, influencing the acceptance or rejection of an innovation, is vested interest. In a restricted sense this means economic interest; in a larger sense it means any disturbance of reputation, prestige, or authority.

Just to recognize that there is a problem in medicine is important. Until the profession sees that there is a problem, there can be no solution. Medicine should have a sufficiently definite and formulated policy or plan to guide it in its attitude toward readjustment of relationships to present day conditions in regard to the major problems of health and sickness service and in the promotion of the health and welfare of the community. Organized medicine in New York State has made a definite advance this year. At least a major part of the profession recognizes the situation in medicine. In no way does this involve the science of medicine. Its phenomenal progress will doubtless continue. A measurement of medicine's relation to public health is reflected in the enactment of eight new health laws. Notwithstanding this, the leadership of medicine in all health activities can be improved. This would be both in the interest of the profession and in the interest of the public. Increased cooperation with all health influences under the technical leadership of medicine will go far toward the correction of the economic disturbance of the general practitioner.

There are many things which I wanted to discuss in this issue of the Journal, but space is too limited to do so. I would like to call attention to the outstanding work of some of the committees in their efforts to evaluate the services that they render. This is the most outstanding observation of the last few weeks.

I have written for every issue of the Journal this year. The object has been publicity of

the activities of the administration I do not intend it to be a challenge for the fut...

In closing the year's work I can ...ukly of the coop...ion of ... and the pl...ure that it has given me. I trust that there has been some contribution to the solution of the problems of medicine. I regret that this article is my valedictory.

WILLIAM H. ROSS.

PRESIDENTIAL OPPORTUNITIES

Progress of the Medical Society of the State of New York during the past year has been the most marked along the lines of adjusting medical service to the needs of the people. The medical profession has expanded its field of activities beyond the relief of individual cases of actual sickness and disability, and has included disease prevention in its program. It has also advised and inspired the people through their organizations, both official and civic, to assume the economic burden of the cost of sickness among those who are unable to bear it.

The practice of medicine was formerly confined to relief given by individual doctors to individual patients. The past year has seen the general acceptance of the principle that physicians in regional groups or medical societies shall give medical advice to municipalities as their patients. The representatives of the State Medical Society have given medical advice to officials in various branches of the State Government—departments of Education, Labor, Health and Public Welfare—and induced them to extend the aid of the State along public health lines. The same principle has been applied by county medical societies in dealing with county officials, and by smaller groups of doctors dealing with villages and school districts.

These principles, proclaimed by the President of the Medical Society of the State of New York throughout the past year, have been generally accepted by physicians, by governmental officials, and by the people. The President has given his time and energy without reserve to the great work of inspiring both the medical profession and the municipalities to join in the great task of making all forms of medical service available to all classes of people. He has devoted almost his entire time to the duties of his office, and has demonstrated the great need of unselfish medical leadership, such as that which he has given. It may be that in the future a portion of the work in which the President has been almost a pioneer will be allotted to his associated officers—the President-elect and the Vice-Presidents. The new officers will have the advantage of the self-sacrificing example of President William H. Ross.

LOOKING BACKWARD

THIS JOURNAL TWENTY-FIVE YEARS AGO

News Items: Physicians today will be interested in the following news items contained in this Journal of June, 1906:

"Tribute to Dr. Austin Flint:—On the occasion of the retirement of Dr. Flint as professor of physiology at Cornell University Medical School, the Class of 1909 presented him with a loving cup appropriately inscribed.

"Dr. Albert VanderVeer, of Albany, who was recently elected a member of the State Board of Regents of New York, took the oath of office on May 10th.

"Opening of Rockefeller Institute:—On May 11, this institution, which was founded in 1901 by John D. Rockefeller, had its formal opening ceremonies. Addresses were made by President Eliot of Harvard University, President Butler of Columbia University, and the President and Secretary of the institute, Dr. William H. Welch and Dr. L. Emmett Holt. At present there are twelve experimenters at work under the supervision of Dr. Simon Flexner. When entirely completed there will be accommodation for 50 workers. Investigation will be carried on in experimental pathology, bacteriology, physiology, physiological and pathological chemistry. The only other institute of its kind is in Germany. Reports on experimental work are published in the *Journal of Experimental Medicine,* which is issued by the Institute bi-monthly.

"Dr. Arthur Woodward Booth, of Elmira, has been duly appointed Examiner in Surgery in the State Board of Medical Examiners to fill the vacancy in that topic caused by the death of Dr. George Ryerson Fowler, to serve until the next annual meeting of the Board."

MEDICAL PROGRESS

Glaucoma.—William D. Rowland believes ere are many neglected cases of glaucoma of ie non-inflammatory type, in which the non-dical refractionist changes the patient's glasses veral times without recognizing the condition. ne general practitioner will detect some cases, ut not all. Great care must be exercised in the interpretation of the patient's complaint, and it is important that the public be educated to the greater service that a medical refractionist can give. The diagnosis of glaucoma is made upon one finding, namely, increased intraocular pressure, determined by palpation of the eye by trained fingers, or more accurately determined by a tonometer. There are two types of glaucoma: the acute inflammatory type, which is always painful, in which there is sudden loss of vision, and for which the patient seeks medical aid immediately; and the non-inflammatory type, in which there is no pain, the eye is white, and a slow irrecoverable loss of vision ensues. A rule to follow is the careful investigation of every case of loss of vision, particularly the sudden losses. Frequent desire for change of glasses or marked changes in vision should lead one to be suspicious immediately of glaucoma, possibly of diabetes, intraocular disease, or intracranial complications. In the large majority of glaucoma cases medical measures should be tried first and, if the intraocular tension is not quickly brought down, an operative procedure is necessary in order to stop further loss of vision by pressure on the retina and optic nerve. The medical treatment consists in the use of miotics—pilocarpine 1 per cent or eserine 0.5 per cent—instilled from once every two hours to two or three times a day. Morphine is particularly well suited to the painful type because it produces a small pupil and helps to quiet the patient. Local application of heat to the eye, the patient being kept quiet with the head raised, usually aids in the vascular outflow. Good elimination from the intestinal tract is advisable. If the acute attack is not under control within twenty-four to forty-eight hours, an operation is indicated, usually a wide iridectomy. The non-inflammatory type requires only miotics, but it is not considered safe to continue with these unless the tension is quite promptly brought to normal. —*New England Journal of Medicine,* March 26, 1931, cciv, 12.

Zona Ophthalmica and Glaucoma.—On the basis of an illustrative case, A. Colrat shows that acute glaucoma may be a complication of zona ophthalmica. The prognosis as regards vision is generally grave, and iridectomy is usually necessary. It is generally an acute, unilateral glaucoma on the side of the herpetic eruption. The early pain attending the eruption has left or diminished, but returns with redoubled intensity. There are dilatation of the pupil, pericorneal injection, and hypertension. In the author's case, there were two stages: first herpetic pain radiating into the hemicranium, then 2 weeks later, pains of glaucoma type, periorbitally localized. In some cases, however, glaucoma has been known to precede the eruption by a few days. Diagnosis is usually easy, provided its possibility is borne in mind and a systematic examination is made of the ocular tonus of every patient suffering with zona ophthalmica. The evolution of the glaucoma is very various in individual cases. One should bear in mind that the nutrition of the eyeball is disturbed in zona ophthalmica, and that infectious complications are to be feared. Iridectomy should be postponed until the upper eyelid is disinfected and cicatrization of the zona vesicles is complete. As regards pathogenesis, the attack of glaucoma, even without zona, suggests a sympathetic trouble, viz., abrupt hypersecretion of aqueous humor, with acute vasodilatation. The participation of the sympathetic in the herpetic process is easy to conceive, for the inflammation may reach the sympathico-gasserian anastomosis and the long ciliary nerves. The effect of the sympathetic upon ocular tension is not well understood, but in a general way it may be recognized that in zona ophthalmica there are signs of sympathetic deficit, while glaucoma seems to be related rather to sympathetic excitation. However, it appears that ocular tonus is not regulated solely by the sympathetic, and it is possible that the action of the herpetic virus may be exerted on other nerve fibers. The problem is complex. The facts are that zona ophthalmica may accompany troubles of ocular tension in either direction. It cannot be too often repeated that a patient with zona ophthalmica is liable to lose the sight of an eye, for multiple reasons, one of which is glaucoma. The possibility of glaucoma should be recognized, in order that effective therapy may be instituted in time.—*Journal de médecine de Lyon, March* 20, 1931.

The Mean Blood Pressure in Glaucoma.—Baillat and D. M. Gomez say that as the result of preliminary studies it appears that the mean blood pressure is of great importance in glaucoma, since it is possible by this means to recognize arterial hypertension that would otherwise go unnoticed. For some time they have been determining this mean pressure in all their cases

of glaucoma, and have almost invariably found it increased, sometimes in very great degree. In some of the subjects the systolic and diastolic pressure would have passed for normal while the mean pressure showed a definite increase In 10 of 17 subjects examined the systolic and mean pressures were both increased, but the latter always proportionately to the former. In 6. however, the only abnormal increase was in the mean pressure. In one case in a man of 28 with no symptoms other than ocular a systolic pressure of 155 mm. Hg. was found and, to the authors' astonishment, a mean pressure of 135 mm. In this patient the heart and aorta were found greatly dilated in the roentgenogram. In a boy of 14 with chronic glaucoma, regarded as of normal tension, the mean pressure was found to be 110 mm. Hg. instead of 80-90 mm., which is usual at that age. Heart and aorta were of normal size radiographically, but the latter was of exaggerated opacity, indicating an advanced sclerosis in one so young. One is thus forced to regard ocular hypertension as the direct and immediate result of arterial hypertension. There can be no doubt that the increase of mean pressure in glaucoma is due to lesions of the small arteries and capillaries, and to troubles of exchange resulting from these. A number of ophthalmologists have insisted upon lesions of the vascular system in this affection. If these lesions involve the small vessels they may also be present in the large arteries. The authors were impressed by the observation in 2 patients, who were still young, of an abnormally exaggerated lesion of the aorta, visible in the entire posterior mediastinum upon roentgenologic examination, and an enlargement of this same vessel in a glaucoma patient of 28. It appears that the attention of physicians should be drawn more and more to the vessels in cases of glaucoma, and that the study of the mean pressure may furnish valuable information with regard to the true state of the arterial pressure. The fact that this increase of mean pressure exists not only in adults and aged persons but also in juvenile forms is of great significance.—*Bulletin de l'Académie de Médecine,* March 24, 1931.

Trigeminal Neuralgia and Its Treatment.—Wilfred Harris, writing in *The Lancet,* March 14, 1931, ccxx, 5611, enumerates the many exciting causes that may start trigeminal neuralgia, such as cold wind, violent emotion, a blow in the jaw or face, a severe dental extraction, etc. It is especially the middle and lower divisions of the fifth nerve that are liable to severe neuralgia, and this gives a clue to the original causation of the disease. These two nerves supplying the buccal cavity are subject in the majority of people to constantly recurring sepsis in their terminal branches in the gums, teeth, and tonsils, to a degree that no other nerves in the body are exposed. It can scarcely be doubted that this is the primary cause of their becoming foci of neuralgic spasms. When the pain is comparatively slight and does not interfere with the normal life and work of the patient no more drastic treatment may be required than radiant heat, ionization, and perhaps gelsemium and the milder analgesics. Morphine, heroine, and cocaine must be avoided entirely because of the danger of drug habituation. When the milder methods fail to afford relief, either the open gasserian operation for resection of the sensory root within the cranium must be undertaken by a skilled surgeon, or else alcohol injection of the offending nerve trunk must be performed at either the foramen ovale or foramen rotundum. When both upper and lower jaws are involved in the neuralgia, injection of the ganglion is preferable. During the last twenty-three years Harris has treated over 1100 cases of trigeminal neuralgia, and with increasing experience he is convinced that the nerve should be injected at the foramen ovale or rotundum. This relieves the pain for at least a year, and often for much longer. Cases in which the neuralgia has returned after injection of a nerve trunk are often more difficult to inject than a fresh case. For this reason it is advisable to inject the ganglion if the neuralgia returns within eighteen months of the first injection. Morphine-hyoscine anesthesia is preferable to chloroform or ether inhalation narcosis. Usually ¼ grain of morphine and 1/150 grain of hyoscine suffices. Often the operation can be performed with the use of local novocaine only.

Studies of Relatively Normal Obese Individuals During and After Dietary Restrictions.—In an investigation of 7,530 Home Office employees of the Metropolitan Life Insurance Company in 1921, H. H. Fellows states that 558 (7.4 per cent) were 20 per cent overweight, and 121 (1.6 per cent) were 40 per cent or more above average weight. Approximately the same incidence of overweight was found among the policyholders of the company. Starting in 1923, 294 of the overweight employees undertook treatment for obesity. Of these all but 33 could be classed as normal healthy adults. The parents of the overweight subjects showed an incidence of overweight in 24 per cent of the cases, thus tending to substantiate the statement that heredity plays a definite part in the production of some types of obesity. Overweight in the group studied occurred in both males and females before the age of 30 years. The treatment consisted almost entirely in the strict adherence to a reduction diet combined with carefully directed exercises. About 75 per cent of the 294 who undertook treatment established a definite weight loss while under observation. At the end of one year 32 per cent had continued to lose weight, and 68 per cent had regained some of the weight lost. Five years after completion of treatment, 193 of

the group were examined; 21 per cent had continued to lose weight, while 79 per cent had regained in whole or in part the weight lost during treatment. It is a relatively easy matter to reduce overweight, but much more difficult to maintain weight at a reduced level. Of the 294 employees only 33 showed physical signs of disease before commencing treatment, and these showed less evidence of physical abnormality five years after completion than at the beginning. Patients suffering from hypertension with or without cardiac complication may be benefited for years simply by reduction of their overweight, and especially where weight at a lower level is maintained. There was no consistent trend evidenced either in repeated basal metabolic rates or respiratory quotients, before, during, or after weight reduction. The results obtained by the administration of thyroid were not brilliant and its use was discontinued.—*American Journal of the Medical Sciences,* March, 1931, clxxxi, 3.

Spontaneous Rupture of the Spleen in Inoculation Malaria.—Bernhard Jutz and August Jacobi, writing in the *Münchener medizinische Wochenschrift* of March 6, 1931, point out the extreme rarity of spontaneous rupture of the spleen, and its even greater rarity in inoculation malaria, only two other cases having been found in the literature, although this treatment of progressive paralysis has been generally accepted as the sovereign method. Enlargement of the spleen, as Gerstmann and others have shown, is commonly lacking in artificial malaria. To the two cases already reported the authors add a third. The patient, a man of 39, suffering with tabetic paralysis, was reacting to the malarial treatment with the usual fever curve (40° C.—104° F.—at each chill) and with no untoward symptoms until, on the occasion of the seventh chill, the pulse suddenly grew rapid and weak. Digitalis was administered with no response, and the patient went into collapse and died within a few minutes. His extreme pallor suggested internal hemorrhage, and at autopsy 2,000 c.c. of blood was found in the peritoneal cavity which had come from a rupture 5 cm. long and 1 cm. wide in the enormously swollen spleen. Microscopic examination excluded any chronic pathologic changes of the spleen predisposing to rupture. There was, on the other hand, an acute infectious hyperplasia corresponding to the anatomic finding of a soft, pulpy spleen in which the plethora (on account solely of the rupture) was relatively small in comparison with an enormous polymorphocellular hyperplasia of the pulp. The question whether with such a high grade enlargement of the spleen a genuinely spontaneous rupture can occur without any external causation is here answered with great reserve. As a rule insignificant acts, such as sitting up, coughing, vomiting, etc., serve as the exciting occasion of the rupture. In this case violence from outside could be certainly excluded, but the possibility of one of the above causes cannot be entirely denied. Whether under such circumstances a rupture should be called spontaneous must be left to the individual medical attendant to decide. The malaria must be admitted as the cause of the spleen's enlargement. An acute congestion as the result of sudden cardiac insufficiency seems to be excluded by the pathologico-anatomical findings.

Bath Treatment for Deafness.—James Adam, writing in the *British Medical Journal,* April 11, 1931, i, 3666, reports several illustrative cases of chronic progressive deafness in which definite improvement was obtained by a course of baths. He recommends immersion for ten to fifteen minutes, at bedtime, in a hot bath to which one pound of Epsom salts has been added. The bath is repeated every second night for a week or longer according to the indications. As the hearing improves the baths are given at longer intervals. In the less chronic cases the response is seen more regularly. One patient who was suffering from Ménière's complex was greatly benefited by the treatment. While the method is likely to succeed only in a minority of chronic cases, it has given good results in patients in whom the usual methods had proved an utter failure. The baths are ineffective if they do not sweat the patient. In order to produce sweating it may be necessary to double the amount of salt. Treatment by the emunctories is an old established method, but far too little attention has been paid to the skin, and to the effects of sweating on the mucous membranes. As hot baths are exhausting, caution in their use must be exercised in elderly, weakly, and cardiac patients.

The Lesions of Latent Syphilis.—Aldred Scott Warthin states that the term active latent syphilis refers wholly to an infection not clinically evident, but which on microscopic examination shows perivascular infiltrations and proliferations. Such lesions are found usually in the aorta, myocardium, meninges, brain, liver, pancreas, adrenals, and testes. Nearly 100 per cent of cases of latent syphilis show focal lesions in the meninges. In the brain of the latent syphilitic, there will often be found on careful search small localized perivascular infiltrations, similar to those found in the brains of cases of paresis and cerebral syphilis. The hearts and aortas of practically all male latent syphilitics show latent lesions. Spirochetes are found in varying numbers in the myocardial lesions. In general it may be stated that a cardiac death is the most frequent form of death for the latent male syphilitic, and a very large proportion of the deaths in middle life from so-called "myocardial degeneration" are in reality the result of latent syphilis. In the modern treatment of syphilis there are no

secondary symptoms. A period of ten to twenty-five years may elapse before symptoms of latent infection again become manifest. In some cases the disease may never become active, but should such a patient die at any time an autopsy and thorough microscopic study will reveal the presence of small latent lesions. In other words, the modern treatment of the disease, like the old, results only in a clinical cure; in no case has the author seen an absolutely inactive instance of syphilitic infection. In a series of autopsies in the University Hospital at Ann Arbor, the incidence of latent syphilis, as diagnosed on the microscopical criteria, was for the decade 1910 to 1920, 43.7 per cent; for the decade 1920 to 1930 the average incidence was 25.7 per cent. In 1,675 autopsies lesions of latent syphilis were found in 408 males and 86 females. From a branch laboratory in Honolulu, out of 140 cases examined of persons dying over 25 years of age, active lesions were found in 70 or 48.6 per cent. The actual incidence of syphilis cannot be known until autopsies are made on every one dying and a thorough microscopic study shall have been made in every autopsy case. A negative Wassermann has little value in excluding the presence of latent syphilis; the Kahn test has shown a greater degree of accuracy.—*Southern Medical Journal*, April, 1931, xxiv, 4.

Rheumatic Peritonitis.—Francis C. Wood and E. L. Elaison present a case report and review of the literature which deal with the question as to whether rheumatic invasion of the peritoneum does occur. The patient, a girl aged 13 years, with a past rheumatic history and a well-marked rheumatic cardiac lesion developed lower abdominal pain, diarrhea, and signs of peritoneal irritation. Operation for what was supposed to be a ruptured appendix disclosed an abundance of clear fluid in the peritoneal cavity and an acute peritonitis of unknown etiology. No suppurative focus was found in the abdomen. Within a few days after operation the abdominal signs and symptoms largely subsided, but the fever and general phenomena continued unabated. Nine days after operation acute pericarditis developed, and after a stormy course of typical cardiac rheumatism of six weeks' duration the patient died. Cultures from the peritoneum and cardiac effusion were sterile. The literature contains a considerable number of cases of presumably "rheumatic peritonitis." In a certain number of these the presence of a peritoneal lesion was established beyond question. There is a striking clinical similarity among many of the reported cases. There is no proof that these peritoneal lesions are rheumatic in etiology, but the close clinical association of the peritonitis and the rheumatic fever suggests a common etiology. The peritoneal lesions do not resemble in appearance or in clinical course any other known type of peritonitis. The lesions found at operation have been inadequate to explain the abdominal signs and symptoms and the severe general reaction. In one fatal case of acute rheumatic fever a serofibrinous peritonitis was found, which resembled grossly and histologically coexistent, typically rheumatic lesions in the pleura and pericardium. It seems worth while, therefore, to bear in mind the possibility of rheumatic peritonitis in the differential diagnosis of abdominal pain when it occurs in a patient with signs of present or past rheumatic fever.—*American Journal of the Medical Sciences*, April, 1931, clxxxi, 4.

The Relation of Endemic Goiter to Topography of the Region.—It is a well-known fact, says J. Axel Höjer, writing in the *Schweizerische medizinische Wochenschrift* of March 21, 1931, that villages lying near one another not infrequently show a different frequency of goiter incidence. Reporting the results of a survey that he conducted in 1929 in 180 localities scattered throughout Sweden, this author states that the thyroid gland was carefully examined in every inhabitant in these villages, in order to estimate the relative strength of the goiter agent. Two topographical factors were found to be of special significance: (1) the proximity of water courses and (2) the nearness of a declivity of a certain kind lying above the place. High plains and low levels are found free from goiter, as are also the slopes of cone-shaped mountain peaks close to the peak. Broad watersheds are free from goiter near the ridge. Goiter is sure to appear if the declivity above a village is the even slope of a hillside, unbroken by valleys or ridges. If there is an abrupt descent of 1:10, or if the place lies 500 meters below the ridge, there will be goiter. If the place lies at the foot of a slope of the appropriate kind, there will be endemic goiter of a grade depending on the distance from the hill. If it is at the bottom of a depression influenced by a hill on both sides, the degree of goiter increases. Water courses with a flowing movement in a certain given direction offer an encouragement to goiter, as when they come from an overhanging slope. Even without a slope, large or swift streams in the immediate neighborhood may produce goiter. This is seen between branches of rivers or between a river and the sea, on peninsulas or near river bends. Again, when a narrow point of flat land in the vicinity of a river is wedged in between mountains and surrounded on all sides but one by long, low hills insufficient of themselves to cause goiter, the disease will be prevalent. If these are slopes abounding in water from which streams and cold evening air sweep down through the point of flat land, this will easily be the site of endemic goiter. Determinations to be valid must be made on a permanent population born and brought up in the region where the survey is made.

LEGAL

DOCTOR'S STATEMENT SUBMITTED BY INSURANCE BENEFICIARY NOT PRIVILEGED

By LORENZ J. BROSNAN, ESQ.
Counsel, Medical Society of the State of New York

We have previously commented in these columns on the rule which generally obtains in respect to the privilege which a patient is given by law against disclosure by a doctor of confidential communications between the patient and the physician, and on certain phases of the law by which such privilege may be waived and the testimony received in a judicial proceeding. The statute which is fundamental in matters of this sort is Section 352 of the Civil Practice Act, which reads as follows:

"Physicians and nurses not to disclose professional information. A person duly authorized to practice physic or surgery, or a professional or registered nurse, shall not be allowed to disclose any information which he acquired in attending a patient in a professional capacity, and which was necessary to enable him to act in that capacity; unless, where the patient is a child under the age of sixteen, the information so acquired indicates that the patient has been the victim or subject of a crime, in which case the physician or nurses may be required to testify fully in relation thereto upon any examination, trial or other proceeding in which the commission of such crime is a subject of inquiry."

In a recent case, a very interesting situation arose as to certain evidence claimed to be inadmissible on the ground of professional privilege. An action was brought against a life insurance company by the beneficiary of a life policy. The company had refused payment claiming that one of the conditions of the policy had been breached, namely, that the insured had been treated, within two years prior to the date of the policy, for a serious disease. The facts involved in the case were well stated by the court as follows:

"March 3, 1926, plaintiff caused the life of her son, aged fifteen years, to be insured by defendant. The application is not made part of the policy nor was any medical examination had. The policy, by its terms, is not to take effect unless, at the time of its issue, the insured is in sound health; and it is declared to be void, if, within two years prior to its date, he has been attended by a physician for any serious disease, complaint or operation, or if, before such date, he has had any disease of the heart. It also provides: '*Proof of claim.* In case of death of the insured, proofs of claim shall be made on blanks to be provided by the Company and shall contain full answers of the claimant, physician and other persons to all the questions asked therein and shall conform to all the requirements thereof.' On June 3, 1926, exactly three months after the date of the policy, the insured died, and plaintiff filed with defendant proofs of death prepared on forms provided by defendant. These documents in part consist of an undertaker's certificate and the claimant's certificate in which she states that the insured first complained of illness four weeks before his death, that such illness consisted of swelling of the feet, that the cause of death was hydrops and that the duration was only four weeks. She delivered another document to defendant as part of the proofs of claim. It is the attending physician's certificate prepared upon defendant's form. She introduced in evidence the undertaker's certificate and her own, but she marked only for identification that of the attending physician. Upon her objection the court refused to admit it. The error assigned in this judgment is the rejection of this document. If competent evidence, it would raise the most serious issues of fact whether at the time of the writing of the policy, the insured was in sound health, whether, within two years prior to its date, he had been attended by a physician for a serious disease and whether, before such date, he had any disease of the heart. In his certificate, the physician states that his first visit or prescription in the last illness of the insured was January 3, 1926, two months before the date of the policy and five months before the death of the insured, that health had been impaired two years before death, that he had attended the insured during the year 1924 for grippe and weak heart, that the cause of death was oedema, with '*insufficientia valv. mitr. et aortae*' as a contributory cause and that such condition had existed for two years. Attached to the certificate is a statement signed by plaintiff as claimant agreeing that the certificate shall be considered a part of the proofs of death under the policy in accordance with its conditions. After this document had been rejected, testimony was admitted to the effect that it had been read to plaintiff prior to the trial and that she had conceded its correctness. Plaintiff seeks to support this judgment upon the theory that the certificate was hearsay,

that her act in supplying defendant with it was involuntary and, therefore, does not constitute an admission by her of the facts therein stated and that it is privileged."

The highest court of our State decided that the physician's certificate was admissible, regardless of the claim of privilege, by reason of the fact that the physician's certificate had been voluntarily submitted as proof of loss, and was therefore a voluntary admission by the claimant that the statements contained in such certificate were true. The court argued that by voluntarily furnishing the company with said papers, she had made the physician her agent with respect to reporting dates, duration and nature of previous illnesses of the assured. The court stated in part as follows:

"She may not be held to a personal knowledge of the cause of death as described in abbreviated medical Latin, but she must be assumed to understand the statement that the insured had been attended for two weeks in the year 1924 for grippe and weak heart, an illness which is described by the physician in plainly written English, and the statement that the first visit or prescription during the last illness was in January, 1926, as well as the statement that health had been impaired two years prior to death. These expressions of fact she made her own. Indeed there is testimony which, if credited, proves that she conceded the contents of the certificate to be correct. * * * This paper unexplained by her and admitted by her to be part of the proofs of death is as much hers as if she had orally related their contents as facts. Its production by her is, *prima facie*, admission that the facts therein recited are true."

This ruling is in accord with an earlier dictum expressed by our highest court in a similar case which was in part as follows:

"The common law did not protect a physician from disclosing as a witness information acquired professionally from patients. The statute was intended to afford this protection and to protect the patient also. * * * The statute should have a broad and liberal construction to carry out its policy. By reasonable construction it excludes a physician from giving testimony in a judicial proceeding in any form, whether by affidavit or oral examination, involving a disclosure of confidential information acquired in attending a patient, unless the seal of secrecy is removed by the patient himself. The verified certificate of the physician which accompanied the proofs of loss was not competent original evidence of the cause of the death of the insured, nor was it offered as testimony of the physician as to that fact. The fact that the insured died of delirium tremens was material to the defense. The admission of a party in interest is as a general rule competent evidence against him. The presentation of the physician's certificate that the deceased died from the cause stated, operated as an admission by the guardian that the fact was as stated. It derived its force from the fact that the claimant communicated to the defendant a statement of the cause of death, which, if true, vitiated the policy. The statement was embodied in a physician's certificate. If it had been contained in the guardian's own statement, or that of any nonprofessional person, it would equally have been an admission of the fact stated. The certificate was a part of the proofs furnished. Its admission in evidence violated no confidence. The confidence had already been violated by the conjoint action of the physician and the guardian. It was not offered as independent evidence of any fact in the case, but in connection with the circumstances of its transmission to the company, as an admission that the fact alleged was true."

CLAIMED NEGLIGENT TREATMENT OF FRACTURE OF FEMUR

The plaintiff in this case, an unusually large man sixty years of age, over six feet in height and weighing about two hundred and eighty pounds, sustained an injury by falling from a scaffold. He was taken to a nearby hospital where *x*-rays showed a fracture of the right femur. The patient's leg was placed in a temporary splint by a member of the hospital staff. The defendant doctor was called in to take charge of the case and, after making a superficial examination, caused the patient to be removed to another nearby hospital with which he was associated in order that he might better be able to care for the case. A further *x*-ray examination was had and the diagnosis was a simple fracture of the shaft of the femur at about its midway point.

On this same day the patient was placed in a fracture bed, where traction and counter-traction for lateral displacement were applied. The amount of traction applied was fifteen pounds which, owing to the tremendous weight of the patient, was later increased to twenty pounds. This treatment gradually exhausted the muscles in the region of the fracture, and finally the bone fragments were caused to come into alignment.

After over a week of this mode of treatment, during which time a series of *x*-rays were taken, the defendant doctor caused the extension to be taken off and the patient to be sent to the operating room. At that time the muscles were so exhausted that when the patient was laid flat there was no necessity for temporary extension. The doctor placed the patient on a Hawley table,

fastened both legs in the foot receptacles and straightened the legs until measurements were the same. An *x*-ray was then taken which showed coaptation and good alignment of the bone, and a plaster of Paris cast was applied extending almost to the waist including the pelvis, and down the leg to the foot. The next day the cast, as a matter of routine, was cut away slightly to better enable the patient to rest more comfortably.

The patient continued under the doctor's care at the hospital for about two and a half weeks from the time the cast was applied, when he was allowed to return to his home, the leg, however, remaining in the cast. The man was a very nervous type and continually complained that the cast troubled him and demanded its removal. The defendant doctor explained that early removal of the cast might very likely cause a divergence of the bone, but the patient was insistent, and the doctor removed the cast after it had been on the leg for six weeks and warned the patient that in his judgment the cast should have remained on for a longer period.

The patient remained in bed under the care of the defendant; and about three weeks later, by palpation and comparison with the other leg, an outward bowing at the seat of the fracture was observed. The doctor made an attempt to straighten out the fracture, manipulating the leg under forceable pressure, but without success. The patient was warned that the only reasonably sure way to prevent shortening was to submit to an open operation. This he refused. The doctor decided against another cast, feeling it would be useless because of the patient's opposition. The patient's condition improved, and the end result when the doctor last saw the case was fairly good except for some bowing and shortening.

Some time later suit was brought against the defendant doctor, claiming that he was negligent in his treatment of the case and that he was responsible for an overriding and overlapping of the fragments of the bone which greatly shortened the leg and impaired its use. The case duly came on for trial, and when directed by the court to proceed the plaintiff's attorney was not ready, although the defendant and his witnesses were in court prepared to commence the trial. Judgment for the defendant was then directed by the court, thus terminating the action in the doctor's favor.

ALLEGED MALPRACTICE IN TREATING STAB WOUND

In this case the doctor, a general surgeon, was called to the home of a girl, about twelve years of age, to treat her for a stab wound on the left knee joint. The doctor was told that the child's younger brother, in a fit of anger, had run the point of a pair of rusty and dirty scissors into the girl's leg. He observed that the child was bleeding profusely from the arteries. The doctor after sterilizing the necessary instruments by boiling them in the family tea kettle on a gas stove for about twenty minutes, proceeded to treat the wound. He first sterilized the wound with iodine and then clamped the arteries with sterile clamps, and proceeded to suture the bleeding points with sterile catgut. The lower end of the wound was left open for drainage, more iodine applied, a wad of sterile gauze placed on the wound, and a bandage wound around the leg. The child's mother told the doctor that he should not call again unless she notified him.

About five days later the doctor was called back and found the wound infected, and considerable swelling present. With sterile instruments, boiled as before, the doctor opened the sutures and put in a gauze counter drain about two inches above the wound. A wet dressing of boric acid was applied.

The next day he again returned and found the condition to have improved. He then removed the drain, washed out the wound with peroxide and inserted a new drain. On that occasion he advised the child's mother that he felt he should dress the wound daily for a number of days, but she pleaded poverty and told him not to call unless requested.

Subsequently a suit was instituted on behalf of the child, claiming that the treatment given was negligent and that the doctor was responsible for the infection. It was claimed the condition became worse to the extent that the child was taken to a hospital and extensive incisions were necessary to clear up the infection.

In addition to charging the doctor with liability for pain and suffering the complaint charged that he was the cause of the child sustaining disfiguring scars. The case was duly brought on for trial, but when reached the plaintiff's lawyer was not ready to proceed, so on motion of the doctor's attorney the action was dismissed.

Volume 31
Number 11

NEWS NOTES

LEGISLATION

FINAL BULLETIN—MAY 9, 1931

The Governor has disposed of the last of the bills left with him by the legislature at its close and we are, therefore, in a position to give you a final statement of the activities of the legislature of 1931.

First, let us briefly review those bills which failed to pass, some of which we worked to defeat:

The osteopaths, sensing that their bill would be rejected after a hearing accorded it by the Assembly Education Committee, amended it almost to the form that it had last year, succeeded in having it passed by the Senate, tabled by the Assembly, and finally failed by one vote to have it taken from the table. They are already planning their campaign for next year.

The chiropractic bill passed the Assembly with a majority of two votes, but was able to muster only twelve votes in the Senate. The physiotherapists failed to bring their bill from the Education Committee in the Assembly, and later joined with the chiropractors in an effort to have that bill passed. It is to be presumed that many of those who are practicing physiotherapy could qualify as chiropractors under the bill that was before the legislature this year.

The anti-vaccination bill was given a hearing before the joint Health Committees, but failed to be reported out in either house. The anti-vivisection bill was accorded a hearing by the Assembly Codes Committee and was defeated.

All of the occupational disease bills were defeated, as well as the bills providing for free choice of physician by injured employee.

The Wicks-Hutchinson bill, which resulted from the Governor's Health Commission's investigation, after being given a hearing by the joint Finance Committees, was amended so that it carried only the provisions for the construction of three tuberculosis hospitals, an increase of the Department of Health by the addition of two divisions, and the treatment of venereal diseases. Another portion of the original bill, providing for the transfer and financial control of Haverstraw and Ray Brook hospitals to the Department of Health, was reintroduced and passed. Still another portion of the original Wicks-Hutchinson bill, also introduced as a separate bill by Mr. Wicks and Mr. Hutchinson, outlining the duties of the Public Health Council, etc., failed of passage. A recommendation of the Governor's Special Health Commission that health officers in cities with a population above 50,000 should be full-time employees, was incorporated in a and passed both houses after being amende read "hereafter appointed."

Among the other bills that passed, in w we had a special interest, were the Hartshorn which places industrial clinics under the in tion and supervision of the Department of S Welfare, and a bill by Senator Fearon w authorizes the Department of Social Welfa make inspection and rules and regulations fc hospitals, whether privately operated or ac ing public funds.

May we express our appreciation of the pr and enthusiastic cooperation received from chairmen of the various county committees year. A larger number than in any prece year took a very active interest in what we doing. Unfortunately, we must admit that are still some who must receive our bulletins from whom we never hear the opinions of physicians in their counties. We have a sug tion, however, that we think would increase efficiency of all of the committees, and th that the chairmen devise a way of passin members of their County Societies the info tion sent out by us in our bulletins. We ca put every physician on our mailing list; and other method of reaching the physicians thr the columns of the Journal, is of necessity n delayed. The Journal prints our bulletin promptly as they are received, but if the bul reaches them at the latest moment that it can publication, it will still be more than a week fore the physicians can read it. We need prc and hearty cooperation in order to forestall active cults, and we hope that each chairman give the matter his careful consideration and vise a plan by which he can improve his ser with us next year.

A list of the bills signed by the Governor lows:

Senate Int. No. 441-Hickey; Assembly No. 727-Piper; amending Education Law to mit employment of optometrists and oculists examining children in public schools. Cha No. 133 of the Laws of 1931.

Senate Int. No. 1047-Cheney; Assembly No. 1407-Piper; amending Public Health Lav increasing fees of registrars of vital statis Chapter No. 265.

Senate Int. No. 1256-Hofstadter; Asser Int. No. 1630-Austin; amending Mental Hyg Law for removal or commitment of insane

apparently insane persons for care, treatment or observation for limited period, to psychopathic wards. Chapter No. 366.

Senate Int. No. 1354-Fearon, amending State Charities Law and Membership Corporation Law, relative to corporations operating under rules of or requiring approval of State Social Welfare Department. Chapter No. 454.

Assembly Int. No. 377-Fitzgerald; Senate Int. No. 1325-Lord; amending Tax Law by providing property belonging to medical societies in Queens County may be exempted from taxation up to $150,000. Chapter No. 433.

Assembly Int. No. 531-Hewitt; Senate Int. No. 377-Campbell; amending County Law by giving coroner a fee of $1.00 for reporting to motor vehicles commissioner concerning a death found to have been result of a motor vehicle accident. Chapter No. 52.

Assembly Int. No. 573-Dickey; Health Law, making it violation of article to possess pipes, lamps and other apparatus for the use of opium. Chapter No. 479.

Assembly Int. No. 574-Dickey; making it violation of article to obtain habit-forming drugs from one physician while receiving treatment from another without disclosing the fact. Chapter No. 480.

Assembly Int. No. 1362-Hutchinson; amending Public Health Law, State Charities Law and Public Welfare Law, relative to tuberculosis hospitals, care of patients, and to other institutions, and appropriating $750,000.00. Chapter No. 481.

Assembly Int. No. 1453-Bentley; Senate Int. No. 1080-Wicks; authorizes Greene County supervisors to establish a public general hospital. Chapter No. 132.

Assembly Int. No. 1724-McKay; amending Education Law by prohibiting the practicing of optometry from house to house or on streets or highways. Chapter No. 375.

Assembly Int. No. 1865-F. L. Porter; Senate Int. No. 1345-Brereton; amending Public Health Law by providing appointment by health officers, of public health nurses, must be approved by district health board. Chapter No. 416.

Assembly Int. No. 1887-Gimbrone; Senate Int. No. 1319-Wicks; Public Health Law, requiring health officers in cities of more than 50,000 to devote entire time to duties of office and not engage in practice of medicine. Chapter No. 473.

Assembly Int. No. 1955-Austin; Senate Int. No. 1469-Wicks; amending Public Health Law by giving county health commissioner equal authority with a local board to investigate and abate public nuisances affecting health. Chapter No. 288.

Assembly Int. No. 1981-C. P. Miller; Senate Int. No. 1491-Gates; amending Workmen's Compensation Law by providing board may within three years instead of one from date of accident, reclassify a disability. Chapter No. 292.

Assembly Int. No. 2017-Rice; Senate Int. No. 1511-Webb; amending Education Law relative to physically handicapped children. Chapter No. 297.

Assembly Int. No. 2037-Hartshorn; Senate Int. No. 1762-Wicks; amending State Charities Law relative to prohibition against use of drug stores as dispensaries. Chapter No. 364.

Assembly Int. No. 2132-C. P. Miller; Senate Int. No. 1625-Gates; amending Workmen's Compensation Law by providing time limit for contracting disease under this section shall not bar compensation in case of employee who contracted disease in employment with same employer by whom he was employed at time of disablement. Chapter No. 344.

Assembly Int. No. 2290-Hutchinson; Senate Int. No. 1843-Wicks; relative to fiscal supervision of state reconstruction home at West Haverstraw and hospital for treating incipient pulmonary tuberculosis at Ray Brook, and transferring appropriations made therefor. Chapter No. 453.

HARRY ARANOW,
WALTER A. CALIHAN,
JOHN J. RAINEY,
Committee on Legislation,
Medical Society of the State of New York.

THE COUNTY SOCIETY IN VENEREAL DISEASE CONTROL

In response to a request from the State Commissioner of Health to the Medical Society of the State of New York, that the State Society give aid in an effort to lessen venereal disease in this State and appoint a member of the Society to act in conjunction with the Director of Social Hygiene in. the State Health Department, your Executive Committee appointed Dr. J. N. Vander Veer to act as such liaison officer and to report back from time to time the progress made.

As no program was formulated and the way was free to plan, your representative has had numerous conferences with Dr. Pfeiffer, Director of the Division of Venereal Diseases, and from them many avenues have opened up wherein the general practitioner should benefit in every way, if the plans can but be matured, though it is not to be surmised that all will be done in a week or even months.

From a recent set of statistics collected by Dr. Pfeiffer, it has been shown:

1. In the Treatment of Syphilis alone about four persons per thousand, or nearly one-half million persons in the United States are constantly under treatment on account of syphilis.

2 Slightly more than one-third of these cases are in the early stages of the disease, viz the disease has developed within the preceding year

3 The rate in urban areas is five times greater than in the rural districts

4. Sixty per cent of all syphilis cases are being treated by private practitioners and the remaining forty per cent in clinics, hospitals and state institutions

5 Forty per cent of physicians are treating one or more cases, but ten per cent of physicians are treating two-thirds of all privately treated cases, and five per cent are treating one-half of all the cases, while one per cent are treating one quarter of all the cases

6 In other words, of 100 cases being treated, thirty per cent are being treated by general practitioners, thirty per cent by specialists, and the remaining forty per cent at public expense

These figures recently compiled by Dr Pfeiffer from a large list of questionnaires sent to practitioners and specialists in this State, in which ninety per cent returned answers, may astound many physicians who have believed that the vast majority of syphilitics were being treated in hospitals, institutions and clinics

It is with these sixty plus per cent and some of the forty per cent, who should be in the hands of the private practitioner, that your Society desires to interest itself in mostly, and next to see that that part of the sixty plus per cent which leaves the private practitioner to seek out a clinic or dispensary, or gives up treatment entirely for economic and other reasons, is cared for in a preventive way, either by return to the private practitioner where that is possible, or to a dispensary or to a clinic, that the drive for amelioration or subjugation of this and later other venereal diseases, be through the cooperation of the State Health Department and your State Society with the private practitioner and vice versa

The fact that only one-third of those coming within a given month to private practitioners, to dispensaries, and to clinics, are in the early and easily curable stage, and that this disease is slightly on an increase, shows a lack of knowledge on the part of the laity as to the likelihood of the disease present among them, or to the laxness of their seeking treatment, and to the laxity or carelessness on the part of the physician in early diagnosis of the initial lesion, or inability to diagnose the disease in its early stage

Upon this basis your Medical Society believes you, as a County Society, should enter into cooperation with the lay bodies, whose duty it shall be to inform the public of the prevalence of the disease and urge patients to seek diagnosis and treatment at the hands of the private practitioner first, and if this is impossible economically, then your Society give aid in hospitals and clinics, or through the local Health Officer

The Medical Society also believes that the Health Department should cooperate in keeping the patient under treatment at the hands of the private practitioner, and where that is impossible should see that dispensaries or clinics are provided and a follow-up system made possible, and even later to plan for a follow-up system which may be utilized in any City or Community by the practitioner to see that his private patients, or semi-private ones, and as now provided in the new Law, and by the local Health Officer for those unable to pay, and their contacts do not err in abandoning treatment

It is later planned, if possible, for the Health Department to furnish more drugs to private practitioners as well as now is done with a few drugs for indigent patients, in the eagerness to overcome this disease, which in the present day from reliable statistics seems to show that deaths from cardiovascular and neurosyphilis now exceed those from tuberculosis Of this, Dr Pfeiffer can speak with authority

If such an effort can be rightly directed, then the physician, and organized medicine, can but rejoice that the three great bodies for the conservation of good health and the eradication of disease, at least in this one disease, have united on common ground

But the medical profession must do its part in self education, received through your State Society's Post Graduate Course In some places, general practitioners are doing yeomen's work without remuneration, where monetary reward should be theirs for time expended Here is where the State Health Department, in cooperation with the Public Relations Committee of the County Society, can spur the lay organizations to unite and see that the Boards of Health, or Boards of Supervisors, include in their budget remuneration for such medical workers

Again there are places in the State where local practitioners are receiving pay for their services as directors or workers in dispensaries or clinics, and who give but meagerly of their time, but make sure of their pay check, having as well at their command, technicians and helpers This is not right, for it is but fair that those who seek the emolument should give fairly of their time, as examples for the younger practitioner, who believes he is being crowded out by the older man

Too many of the clinics are over crowded and under manned, and yet should the local groups of Health Officer, Lay Group and County Society unite in a given move to bring some pay to the younger practitioner in the community for giving part of his time to that clinic, then throughout the State the entire medical profession would benefit economically, the public menace of the syphilitic, especially of the non-paying type, would be better controlled, and the disease brought nearer to eradication.

Organized medicine took a large step forward in the award made to it economically in the Public Welfare Law; and the opportunities now given it for further advancement economically and professionally should not be laid aside, and its enforcement lies with your Public Health Committee, and your own Public Relations Committee in dealing with your own local and new Public Welfare Officer.

When the profession itself passes up the opportunity to do its share, aided by the State Government, and to be paid by your local government for services rendered as individuals, then it should not complain when the State Government steps in to protect its people from the increasing inroads of diseases such as now are being fought.

The brunt of the fight must be borne by the individual doctor, for he it is who sees the case first, and can make or delay, or even negate a cure if he is slothful at his first contact; while to him will come the credit and respect of the community when it permeates through the same that he is careful, painstaking and successful, and his reward can be turned into dollars so soon as that community can be brought to recognize his value.

It is with the diagnosis properly of the primary sore by the first physician seeing it, who lays aside his petty jealousy and has the sore diagnosed by the dark field method, that our combined hope lies.

Where the physician fails to grasp such a reward, then the State will step in to do its share, but only after painstaking effort to have the general practitioner do his part. Remember the gonorrheic! A Wasserman every two weeks for three times to ferret out the cases of intro urethral chancre!

Where the doctor may receive his remuneration direct from his patient, or in indigent cases from the community, then is the State relieved of this financial burden, which has so been placed where it belongs, together with the responsiblity of seeing that the patient is carried through to a complete cure or to sterilization.

But doctors are not in a financial position to employ a follow-up system for their cases, and so here enters in the duty of the community through its local health governing board, or through its local charity group, or even perhaps through the State Health Department to provide full time, part-time, or intermittent survey and follow-up of the venerite.

Where the financial burden is too great for the patient, then the community or the local health governing group must provide facilities for treatment of this disease, extending even to partial or total remuneration of the attendent physician, as well as for the place; equipment, etc., where the patients are to be treated.

Few local communities, or local health departments have the facilities to follow up the lapsed cases, and so they drift along until late cardio-vascular complications present themselves, too late to be afforded much help from treatment.

Your State Society therefore seeks the aid of four groups:

1. The Physicians of each community to urge upon that community the providing of a follow-up nurse for these diseases in individuals when called upon so to do by *any physician* in that given area. Such a nurse might give time to other health activities also.

2. If the local lay groups cannot find the means so to employ a nurse, through the efforts of the Public Relations Committee of the County Society, and their own liason Committee, the Red Cross or other health welfare groups, and through the aid of the local Health Officer, in the interest of the local peoples, and to be supported by local funds, then the State Society asks the Public Relations Committee of that County Society, to cooperate with the local Health Officer and urge upon the State Department of Health the providing and placing of a follow-up nurse in that district to assist the local physicians, when she may be so called upon, to seek out the cases which have neglected treatment, and bring them back to their original physician, and to take up treatment again, or to compel them to report to the local health officer, who must provide treatment. In the rural districts the cases would seem to average but 0.53 per thousand, while in the urban districts this runs up to 2.41 per thousand. A nurse therefore is not needed in the rural districts. on full time, to interview the cases, as not all physicians would need her services and the cases are too few—save as distance in travel might consume time—hence her service could be utilized elsewhere.

3. The Public Health Committee, and the Public Relations Committee of each County

Society shall attempt the enlistment and aid of local groups in the smaller cities, in towns and in villages in the establishment of a first aid station, a dispensary, or similar provision, where equipment could be housed for the diagnosis and treatment of such diseases, as well as for using the station for many other medical purposes. These first aid stations should be under a joint management of the local medical representative, the local health officer and the lay group of that vicinity, whose duty it might be to see that emergency and treatment equipment, for these diseases especially, as well as for many of the local diseases and injuries, was provided.

4. In the smaller cities and towns to try and interest the younger men in utilizing these first aid stations on hourly or part-time basis or in rotation, in attendance upon the indigent who might be sent there by other practitioners, the health officer, nurses of the district school or health officer, the public welfare officer and others, where quick and efficient diagnosis of that first sore may be made; and further to make effort that these younger men be remunerated by the local community for their time so expended, and thus interest themselves in becoming rooted to the local soil, and yet having economical independence

JAMES N. VANDER VEER, *Albany, N. Y.*

WASHINGTON COUNTY

The semi-annual meeting of the Medical Society of the County of Washington was held at Cambridge at 4 p. m. May 12, 1931. The meeting was called to order at 4 p. m.

Members present: Drs. Prescott, Munson, Leonard, Hulst, Park, Falkenbury, Cuthbert, Rogers, Borrowman, MacArthur, Bailey, Paris, Stillman, Casey, Banker, Holmes, Gillette, Fortune, Johnson, Bennett, Sumner, Vickers. Visitors: Dr. Frank vander Bogert, Schenectady; Dr. Kingsley Roberts, New York; Dr. George E. Smith and Dr. Clayton E. Shaw, Hoosic Falls.

An afternoon session was held at 4 o'clock and an evening meeting after a social supper.

The Treasurer's report shows $116.48 available for the society. Dr. Banker stated that the NEW YORK STATE JOURNAL OF MEDICINE had been bound and placed in the Mary McClellan Hospital up to 1930, and a motion was adopted that we have each year bound from now on.

A motion was carried that we accept the agreement with the insurance carriers as arranged by our economic committee.

Dr. Rogers presented his report as chairman of the public health and economic committee consisting of a medical survey of the county, which was placed on file. He stated that he attended the conference of Committee Chairmen and thought that the work in our county compared very favorably with the reports of other counties. He advised that we should urge upon the boards of education the importance of smallpox vaccination in school children. Dr. Rogers has been very faithful in his work the past five years, and the members showed their appreciation by giving him a vote of thanks.

Dr. Leonard presented his report as chairman of the legislative committee. The doctor has in the past five years become familiar with legislative matters and gave us a very exhaustive report.

It was largely through his efforts that the county health bill in its initial form was defeated, and in appreciation of his work the society gave him a vote of thanks. At the suggestion of the doctor, the secretary was requested to write a letter of commendation to our senator and assemblyman for their support of the medical profession.

The Doctor also presented the following resolution, which was adopted:

Resolved, that the Medical Society of the County of Washington hereby declares itself in favor of the principle of County Boards of Health, and be it further

Resolved, that the delegate of this society be instructed to support a resolution introduced in the House of Delegates of the State Society at the next meeting of the Society, which shall have for its object the reorganization of the Public Health Administration of the State on the plan of County Health boards, provided that such plan is approved by such representatives of the State Department of Health, The State Medical Society, the State Sanitary Officers' Association, and of other interested groups as shall have been delegated power to formulate such a plan.

Dr. Falkenbury presented a paper on Fractures, and stressed the importance of extension in the reduction of the same. Dr. Bailey discussed the paper and presented a case of ununited fracture of the femur.

Dr. Munson presented his paper "The Practicability of Epidemiological Investigation in Syphilis and Gonorrhea. He showed the importance of tracing the source of these diseases.

Dr. Gillette presented his paper "Diathermy in the Production of Therapeutic Fever."

Dr. Vickers presented his paper "Spinal Anesthesia." He said it was a very useful addition to our list of anesthetics, but was not applicable to all cases.

Dr. Kingsley Roberts of New York gave a practical paper on "Chronic Cholecystitis."

Dr. Frank vander Bogert of Schenectady discussed the "Feeding of Sick Children."

S. J. BANKER, *Secretary.*

THE DAILY PRESS

Reg'lar Fellers — Can't Help Himself — By Gene Byrnes



From the New York Herald Tribune, April 28, 1931.

The relation of clean hands to washing dishes seems to be a favorite bit of humor for the cartoonists, for this same joke in a slightly different form appeared in the *New York Herald-Tribune* of August 1, 1930, and was reproduced in the NEW YORK STATE JOURNAL OF MEDICINE of November 1, 1930, page 1311. The question sometimes arises as to what constitutes a good medical joke. This one would seem to deserve that title.

MANGANESE AND TEMPERAMENT

Recent reports in the newspapers on the effects of manganese in food may be either half way scientific or semi-humorous; but there is no doubt about the intention of James J. Montague to be funny in the following verses in the *New York Herald Tribune* of April 28:

"When Willie sates the wild desire,
Which wayward urchins often feel
To set the tablecloth on fire
While lapping up the noonday meal,
While mother smiles her approbation
And says, "The child is such a tease!"
It merely is an indication
That she'd had too much manganese.

When Willie, absent from the schoolroom
A few years on in his career,
Is found around the village poolroom
Consuming mugs of foaming beer,
And mother says, 'Poor, pestered creature,
He has to have his little larks;
He's driven to them by his teacher,'
You know what prompted her remarks.

When, grown to manhood, Willie's passion
Is strutting proudly up and down,
The mirror of the glass of fashion
The haberdasher keeps downtown,
And mother thinks that he's a wonder
Of elegance and idle ease,
It merely shows that she is under
The influence of manganese.

This element, it seems, like whisky,
Consumed too avidly, can be
To those who eat of it quite risky
Unless prescribed by an M. D.
And often Algernon and Clarence
Turn out weak limbs of sturdy trees
Because their overdoting parents
Could not keep off the manganese."

A KING'S CATARACT

The Medical Society of the County of New York and the New York Academy of Medicine jointly support a medical information bureau for the purpose of giving out medical information that is correct from the doctors' point of view When the King of Siam underwent an operation for cataract, the Associated Press recognized the world-wide interest of the people of all lands and asked Dr. Iago Galston, the Executive Secretary of the Bureau, to be present at the operation and to describe it for the press Dr Galston's excellent report is printed in the New York *Times* of May 1st, as follows

"The cataract of the eye, for the removal of which King Prajadhipok of Siam has come to the United States, while not presenting a serious surgical problem, is interesting from the medical point of view in that it should occur in so young a man.

"King Prajadhipok is 38 years old Cataracts among the aged are rather common

"Both eyes of the King are affected The cataract in the left eye, which has been developing for six years, is now ripe for removal The cataract in the right eye is not yet ready for surgical treatment There is no way of getting rid of cataracts except by operation

"The term cataract is used to indicate a condition where the crystalline lens of the eye becomes clouded In the operation the entire clouded lens is removed After the operation the patient is equipped with a glass lens worn as spectacles on a frame, to take the place of the lens that has been removed The operation should result in normal, or nearly normal vision

"The exact cause of uncomplicated cataract is unknown, but one of the causative factors is some interference with the nutrition of the crystalline lens

"As the King is also a sufferer from hay fever and asthma, he will undergo a series of tests and treatments by Dr Robert A Cooke to determine his possible susceptibility to the dusts and pollens about the Ophir Hall estate in Westchester, and his constitution will be built up to withstand any possible attacks"

DETERMINANTS OF HEREDITY

The New York *Times* of April 29 has the following bit of scientific news which is of interest to doctors and scientific research workers rather than laymen

"Dr Albert F Blakeslee told the National Academy of Sciences today that characteristics of the whole present human race were decided by bits of matter that altogether weigh less than a pin or drop of water

"This is approximately the weight he said, of the chromosomes that existed in the original cells from which the billion and a half people now on earth developed The exact weight would be about forty-four millionths of a pound Chromosomes are microscopic objects within living cells by means of which human characteristics are handed on from one generation to another

"Dr Blakeslee described a new method for locating genes within particular chromosomes developed at the Carnegie station for experimental evolution at Cold Spring Harbor, N Y, with which he is connected"

STATE DENTAL ASSOCIATION

The New York State Dental Association held its sixty-third annual meeting in the Hotel Pennsylvania, New York City, during the week beginning May 11, and its proceedings were noted in the daily papers The New York *Times* of May 13 mentioned the following papers that were read on the previous day.

"Dr McWinterwitz, Dean of the Yale University Medical College placed the dentist on an equal professional footing with throat, eye, and other specialists

"Dr H E Friesell, Dean of the University of Pittsburgh Dental College, declared no profession had a greater responsibility to humanity than dentistry He said it was the duty of the dental profession to work out some means of providing dental care for those unable to afford treatment

"President Hoover sent a message commending the society for 'furthering the ideals set forth by the White House Conference on Child Health and Protection'

"Dr Walker, President of the State Association, in his annual address stressed the need for a program of pre-natal care and early, regular and frequent attention to the pre school child, to prevent dental disease"

It would seem that there should be a close contact between the State Dental Association and the State Medical Society

BOOK REVIEWS

PIERSOL'S HUMAN ANATOMY: Including Structure and Development and Practical Considerations. Ninth Edition revised under the supervision of G. Carl Huber, M.D., Sc.D. Quarto of 2104 pages, illustrated. Philadelphia, J. B. Lippincott Company, 1930. Cloth, $10.00.

An accurate comprehensive volume on human anatomy of special interest to the graduate student, but perhaps too large for the undergraduate. The descriptions are lucid and complete. The illustrations are numerous and well placed. One is indeed impressed by the meticulous attention to details in every drawing, colored or uncolored. But perhaps a more definite attempt toward more intense coloring, with a suggestion of the third dimension, would be of material assistance in developing one's coefficient of visibility. For a distinct visual sense is a sine qua non in storing anatomical facts.

The sections on embryology and osteology are very complete and well written. Of definite value to the progressive physician and surgeon are the chapters on "Practical Considerations." Here one obtains real anatomical aids briefly but thoroughly written. The salient features of each problem are clarified from a structural viewpoint.

An anatomy is incomplete if the fascial planes are incompletely or inaccurately delineated and described. From the superficial fascia of the scalp down to the plantar fascia, this mesodermic tissue is carefully traced, whether in the cervical, lumbar or inguinal regions.

The division on neuro-anatomy is so comprehensive, that one is awed in contemplating the stupendous task the writing of this book entailed. It is an excellent reference book for the modern doctor.

ALFRED H. IASON.

OUR NEW PROGRESS. Two Essays—Cornucopia and Caritas. By JAMES BAYARD CLARK. Octavo of 128 pages. New York: London, G. P. Putnam's Son's, 1930. Cloth, $2.00.

In these two essays, Cornucopia and Caritas, Dr. Clark, departing from the urological paths along which he has strolled for so many years, enters the domains of sociology and economics and displays much uncanny insight in his analyses of prosperity and charity. We do not believe he has ever pursued a culpable colon bacillus with anything like the ardor he puts into his philanthropist hunt. He traces the origin of the system under which we live and finds that charity is the natural result of exploitation when Puritanism influences the plutocrat. Puritanism blessed the man of flocks and herds, and prosperity became a measure of Jehovah's affection. Very good, but the same Puritanism decreed that he could not enjoy his spoils in pagan fashion. Faced by this dilemma, the plutocrat is forced to disgorge in the modern manner, that is, he establishes Foundations and medical schools, subsidizes education and, worst of all, engages in philanthropy, from which activities flow most of our ills to-day. Dr. Clark works out his thesis in a capable way and the doctor who is interested in sociology and economics in so far as they affect medicine will find much to absorb him in Dr. Clark's little book. But while his diagnostic methods are impressive he offers but little in the way of treatment. He does not know what is going to become of our trick educational system and our trick kindness to the poor and the sick. The last paragraph of his book confesses impotence, tinged with a wistful optimism.

A. C. J.

OPERATIVE GYNECOLOGY. By HARRY STURGEON CROSSEN, M.D., F.A.C.S. and ROBERT JAMES CROSSEN, M.D. Fourth Edition. Octavo of 1078 pages, illustrated. St. Louis, C. V. Mosby Company, 1930. Cloth, $15.00.

Crossen's Operative Gynecology is so well known as a standard work on gynecological operative technique that it needs but little introduction. The fourth edition contains many changes, and the subject matter has been brought up to date and systematized for helpful presentation. Four new chapters have been added:—Genital Fistulæ, Diseases of the Urinary Tract in Relation to Pelvic Surgery, Diseases of the Intestinal Tract in Relation to Pelvic Surgery, and Anesthesia in Gynecologic Surgery.

The illustrations are excellent, and it is quite possible in many instances to grasp the technique of an operation without referring to the text.

The author describes the standard operations for conditions requiring operative treatment, and discusses the particular type of operation which is most applicable to certain types of cases.

The volume is excellent, and it is, not only a wonderful text-book, but it is a fine reference book, as well.

W. S. S.

CHRONIC ARTHRITIS AND RHEUMATOID AFFECTIONS with recovery record by BERNARD LANGDON WYATT, M.D., F.A.C.P. with collaboration of LOUIS I. DUBLIN, Ph.D. Octavo of 141 pages. New York, William Wood & Company, 1930. Cloth, $2.50.

This book is an excellent summary of our knowledge to date of chronic arthritis,—its etiology, preventative measures and diagnosis. He goes into extensive details as to the various measures and treatments, assigning each its proper place. There is a thorough discussion of diet, drugs, vaccine, non-specific proteins, hydrotherapy, colonic lavage, electric currents, radium heat, joint exercises, joint movement, massage, climate, sun baths, orthopedic measures and surgical treatment.

This book will well repay those who come in contact with the sufferers of chronic arthritis.

M. A. RABINOWITZ.

A MANUAL OF NORMAL PHYSICAL SIGNS. By WYNDHAM B. BLANTON, B.A., M.D. Second Edition. Octavo of 246 pages, illustrated. St. Louis, C. V. Mosby Company, 1930. Cloth, $3.00.

This classroom guide on normal physical signs is arranged in skeletal form to assist both teacher and student in making systematic progress. The notes are very much like those employed in most medical schools, but their arrangement in book form should serve as a ready reminder to the student who has been drilled into the contents of this not too colorful type of book.

EMANUEL KRIMSKY.

MINOR SURGERY AND BANDAGING. By GWYNNE WILLIAMS, M.S. 20th Edition. 12mo. of 445 pages, illustrated. Philadelphia, F. A. Davis Co., 1930. Flexible Cloth, $3.50.

This is the 20th edition of a book remarkable for its conciseness, accuracy and completeness. The house surgeon for whom the volume is primarily written can get satisfactory answers to all the varying questions that confront him in his daily work. The author has the rare faculty of supplying the best surgical information with a minimum of unessential detail in the best of the King's English.

GEO. WEBB.

PRACTICAL RADIATION THERAPY. By IRA I. KAPLAN, B.S., M.D. With a special chapter on applied x-rav physics by CARL B. BRAESTRUP, B.Sc., P.E. Octavo of 354 pages, illustrated. Philadelphia and London, W. B. Saunders Company, 1931. Cloth, $6.00.

This book of Dr. Kaplan's may be divided into two portions. The first section is largely historical and also deals with radium and Roentgen physics. The section by Braestrup on "Applied X-ray Physics" is especially commendable for its completeness and clearness.

What may be considered the second section is the practical application of radiology in disease. This is written in an intimate and informal manner and the giving of the technique which has been found to have been most effective in the author's large experience at Bellevue Hospital, New York, is of especial value.

The publisher's work—paper, printing and illustrations—is splendidly executed.

The whole work is most useful as a guide to radiotherapeutic practice and the author has well fulfilled his purpose as given in the Foreword "to state, as simply as possible, the established principles of radiation therapy and the methods for carrying out this form of treatment." C. E.

INTESTINAL TOXEMIA (Autointoxication) Biologically Considered. By ANTHONY BASSLER, M.D. Octavo of 433 pages, illustrated. Philadelphia, F. A. Davis Company, 1930. Cloth, $6.00.

Dr. Bassler has written an extensive treatise on autointoxication, or as he calls it—"intestinal toxemia" Much of the writer's attention is devoted in exposing such commercialized fads as yeast, Bulgaricus milk, Acidophilus milk, colon irrigations, and patent medicines He makes a sharp distinction between constipation and intestinal toxemia and regards them as often being independent of one another. He speculates on the relationship of intestinal toxemia to other diseases and admits that proof is very difficult.

Several chapters deal with the biological characteristics of multitudes of intestinal organisms—a truly bewildering array. The writer evidently has faith in vaccines as a means of treatment even though it has not been successful with others.

EMANUEL KRIMSKY

DOCTORS AND SPECIALISTS. By MORRIS FISHBEIN, M.D. 12mo of 118 pages, illustrated. Indianapolis, Bobbs-Merrill Company, 1930. Cloth, $1.00.

In his most recent book, "Doctors and Specialists," Dr. Fishbein has staged a variety show and has given his audience of general practitioners ample opportunity to laugh with and at their specialist-actors. And even though he recommends this little book "to every doctor with a sense of humor" it also evokes another type of laugh due to satire. He respects his audience, especially the old-time physician and is convinced that his "good points are too many." He forgives him for some of his weaknesses, especially his prescriptions which often "had a kick like an overcranked Ford." But what will our successors think of our modern anaphylactic reactions. Even to this day sick ones live in spite of untoward remedies.

Some of his specialists are devoid of humor. The tonsil specialists he places in the same efficiency class with the Ford organization. He regards the surgeon as good-natured because he always agrees to a surgical diagnosis. And so while Dr. Fishbein sets out to feed his readers with humor he also succeeds in exposing some of the shortcomings of a specialty practice.

EMANUEL KRIMSKY.

PHYSICAL DIAGNOSIS. By WARREN P. ELMER, B.S., M.D., and W. D. ROSE, M.D. Sixth Edition. Octavo of 903 pages, illustrated. St. Louis, C. V. Mosby Company, 1930. Cloth, $10.00.

This new book on physical diagnosis by Elmer and Rose is a 900-page work and offers to the medical student and practising physician a fairly thorough consideration on that subject. Its method of presentation and its contents are by no means novel, and are not much unlike other standard works on the subject. The various familiar physical disturbances induced by disease processes are so numerous that the natural temptation for the serious reader is to supplement much of this information by referring to individual works on the respective topics. The book also serves as a reminder for refreshing oneself on forgotten facts.

It is becoming increasingly evident that the X-ray is relied upon more and more in attempting to confirm physical findings and in a number of instances X-ray findings are interpreted in conjunction with the routine inspection, palpation, percussion, and auscultation

EMANUEL KRIMSKY.

OUR NEIGHBORS

LEGISLATIVE HONORS TO MICHIGAN PHYSICIANS

A supplement to the May number of the Journal of the Michigan State Medical Society contains the stenographic minutes of a joint session of the two houses of the Legislature of Michigan held on April 14 to honor three professors of the University of Michigan for their contributions to medicine. These three doctors were Dr. Frederick G. Novy, chairman of the executive committee of the department of medicine and surgery of the University of Michigan; Dr. Moses Gomberg, professor of organic chemistry at the University; and Dr. Reuben L. Kahn, director of the laboratory of the University Hospital.

The legislators assembled at 4 o'clock and continued in session for two hours. The guests of the Legislature included the Judges of the Supreme Court and many other high officials of the State, including the Governor, the Hon. Wilber M. Brucker, who introduced the guests, the speakers and the honored doctors. In his own address the Governor said:

"I presume never in the history of the Legislature of this State has pause been taken for the purpose of stopping the legislative machinery during the last few weeks of its session when it is so busy, to pay this tribute of respect to anyone other than a member of the State government directly. We do have time to recognize these things that are quietly done, that are accomplishments of progress without all the spectacular drama, all the noise and flamboyancy of brass bands, but for the quiet industry who accomplish the things of the world.

"Today I would speak on the thought, in tribute to them, of the relationship of government and science. Science deals with exactness; it deals with precision, with accuracy. It deals with the things that are certain and definite; it deals with the things that are known and susceptible of important interpretation. It demonstrates itself through such instruments as the yard scale, the slide rule, measuring rod, arithmetical and geometrical formulas, and those things which are precise to a nicety and exact; which have boundary and limitation, which are circumscribed so the knowledge knows certain boundaries with which it is encompassed and beyond which man cannot go.

"Government, on the other hand, is just the opposite. Comparable with science it might be said in an analysis of those two, Government is the inexact, the unprecise, the speculative, problematical, theoretical; it deals largely with perspective and with the personality of individuals; with the reaction on human nature; and with such things as idealism, sometimes practical, sometimes impractical; with the enthusiasm, effort, and with things boundless in their scope without any limitation whatsoever, which are not susceptible of known knoweldge, but which, after all, must be a definite relationship called Science.

"We are met to honor Science more than Government today. Government owes a debt of gratitude to Science that it can never fully repay. Science has made possible the growth, the development of happiness, health and welfare.

"May I say just a word about the relationship of Science and Government? Hand and hand they have gone through the centuries and it is quite fitting and proper today that Science should bow its head to the blessings of Government, and Government should bow its head in recognition of the blessings of Science."

Dr. Alexander Ruthven, President of the University of Michigan, said:

"Universities have two objectives, the diffusion of knowledge, and the increase of knowledge.

"Knowledge is increased by research, which means simply investigation, study, the search for facts, principles and relationships.

"Mr. Ford's automobile; anti-toxin, electric lights, radio, ice machines, and those other accessories of civilization, are the product of research.

"The University is not only doing much for humanity in its shops, hospitals, laboratories and museums, but it is one of the great schools which believes in making the results of the study of its scholars available to the people of the State just as soon as possible."

Dr. Frederick G. Novy, one of the trio of physicians who were honored, gave a brief review of the practical results of medical research during the last half century, and said:

"Benjamin Franklin, standing in the garden of his home in Passail, outside of Paris, witnessed the first balloon ascend. At that time some one remarked to him: 'Of what use is that thing,' and his answer, well known to many of you, was: 'What use is a new-born child?' Time can only tell, and so it has been the story written high and large regarding scientific work.

"Not so many years ago, Pasteur was busy studying the germs causing fermentations. Anyone could have approached him then and said, 'Of what use is it to study this little organism

(Continued on page 722—adv. xiv)

Another Reason Why *Breast Milk* for babies *is Best Milk*

Recent investigations* indicate that breast milk contains a mysterious substance called lysozyme which has the power to dissolve air-borne and certain other adventitious bacteria that reach the infant's intestinal tract, this tract being sterile at birth.

Lysozyme also inhibits the growth of *B. coli* but has little effect on the desirable *B. bifidus* and allied types, and thus tends to stabilize the intestinal flora of the nursling.

No artificial feeding contains lysozyme. Only breast milk is blessed with this wise protection of Nature.

For almost thirty years, Mead Johnson & Company have recognized and urged the use of breast milk. As a second choice—where breast milk cannot be reestablished—we recommend cow's-milk-water-Dextri-Maltose formulae. When artificial feeding must be used, this system, while it does not supply lysozyme, does make possible a practically sterile feeding.

You can pasteurize the milk, you can boil the water, and you know that Dextri-Maltose is practically sterile. Not all carbohydrates are in this class. As a result of long experience in rigid sanitary control, Dextri-Maltose is a *clean* product rather than a *cleaned* product.

SYNTHETIC MILKS ARE NOT THE SAME AS BREAST MILK

The attitude of Mead Johnson & Company on the subject of synthetic substitutes for breast milk is in sharp contrast to the exaggerated claims of others that such synthetic milks are the equal of breast milk, to be used in every case. Mead Johnson & Company's Recolac is recommended only for traveling mothers and for complementing breast feedings in certain classes of cases where its use is quite defensible.

* Rosenthal, L. and Leberman, H: The rôle of lysozyme in the development of the intestinal flora of the new-born infant. J. Inf. Dis., 48:226 (1931). Copy of this paper and list of other bibliography available on request of Mead Johnson & Co.

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It is safe to inject and is almost totally free from the pain and discomfort attendant on the injection of solutions of manganese salts.

COLLOSOL MANGANESE is most successfully used intramuscularly, although some observers report favorable results from hypodermic injection. It has also a growing acceptance for oral use.

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For Fall Hay Fever

90% of all Hay Fever east of the Rocky Mountains is caused by the Ragweeds, Giant and Small. Thus the Hay Fever problem is simplified for the practising physician within this territory.

For the further convenience of the physician, Concentrated Pollen Antigen (Lederle) Ragweed Combined is now available in individual-dose syringes serially numbered. Each syringe contains an accurately measured dose ready for subcutaneous injection without dilution.

For 17 years Pollen Antigens Lederle have been successfully employed by general practitioners in the prevention and treatment of HAY FEVER.

Concentrated Pollen Antigen (Lederle) Ragweed Combined, *For Use Without Diluting*, is prepared by extracting the pure, mature pollen grains of Ragweed and Giant Ragweed 66⅔% glycerol and 33⅓% buffered saline solution. The extracts contain 0.4% phenol as a preservative. The individual-dose syringes are filled with an 0.2 cc. volume and permit the accurate injection of the entire dose or such division of the dose as may be desired. In these small doses, the 66⅔% glycerol with 33⅓% buffered saline may be injected subcutaneously without producing undesirable reactions.

Literature based on seventeen years experience and covering the main features of the Hay Fever problem will be furnished physicians upon request.

We also invite correspondence upon specific cases in any locality.

LEDERLE LABORATORIES Inc. NEW YORK

(*Continued from page 720*)

that you find under your microscope?' I can well conceive a shrug of the shoulders and a brief respone: 'Wait and see,' and it was not many years perhaps before that was realized.

"There is another aspect which I would like to call your attention to and that is this: It was supposed and believed that bacteria caused disease by contact; by being taken in water and the like. It never dawned, until the right time came, that there was another mode by which organisms could enter the body. Forty years ago, Smith in this country, by painstaking research, demonstrated that Texas fever in cattle was transmitted through the bites of ticks. That was something that had never been dreamed of before; that an insect could be responsible for a disease. It was so unusual that the scientists of Europe simply considered it an American way of pulling the wool; but it was not more than a half-dozen years, when the work of Ross in India showed that the malarial organism carried on its whole life history in the mosquito, and that malaria could not be contracted except through the bites of mosquitoes.

"In 1887, the Legislature of Michigan appropriated a modest sum of money for the establishment of the first hygienic laboratory in the United States. I take this occasion, particularly, to express my appreciation of that fact. It is the first institution, as I have said, of this kind. The idea was that Dr. Vaughan, who at that time was a member of the State Board of Health, and it is significant that the reasons for the establishment of that scientific laboratory were put down, first, research into the causation of disease; second, examination of waters and other materials to aid in the diagnosis of disease, and, third, that of teaching. Research was given the first prominent position. The University has endeavored to live up to that as its first objective."

When Dr. Moses Gomberg and Dr. Reuben L. Kahn were introduced, they merely expressed their thanks, thereby winning the praise of the Governor, "Very modestly done."

MEDICAL LICENSING BILL IN WISCONSIN

The *Wisconsin Medical Journal* of May devotes fourteen pages of small type to a description of a legislative hearing by the Assembly Committee on Public Welfare, held on March 18 and 25, to consider a bill modifying the composition of the Board of Medical Examiners. Mr. Crownhart, Secretary of the State Medical Society, said:

"The Wisconsin Board was created in 1897 with 3 allopaths (non-sectarians), 2 homeopaths and 2 eclectics; and then in 1915 when osteopathy

(*Continued on page 724—adv. xvi*)

Modern diets often lack minerals

To-day, authorities are stressing the importance of the essential mineral salts. In addition to building sturdy bones, and blood rich in hemoglobin, these mineral elements aid metabolism and contribute to nervous stability.

Yet many modern diets cannot be depended upon to furnish the proper quota of minerals, and therefore millions of people suffer from the effects of demineralization. Cooking destroys a variable amount of the mineral value of foods — in some instances as high as 76 per cent.

To correct this loss and to remedy demineralization — with its attendant symptoms of nerve fag, neurasthenia, lowered vitality and loss of energy—a tonic rich in mineral salts is needed.

Fellows' Syrup contains the mineral salts of sodium, calcium, potassium, manganese, iron and phosphorus, together with the added metabolic stimulants — strychnine and quinine. Sixty years of clinical experience the world over testify to its value as a tonic.

Suggested dosage: A teaspoonful in half a glassful of water three or four times daily.

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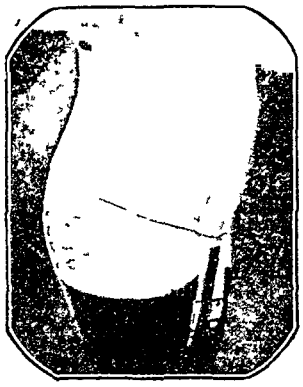
OF THE HYPOPHOSPHITES

CONTAINS THE ESSENTIAL MINERALS

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It does not burn, irritate or injure tissue in any way.

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Baltimore, Maryland

(*Continued from page 722—adv. xiv*)

was recognized in Wisconsin, one osteopath was added to the Board.

"In the original law the State Medical Society submitted the lists from whom the Governor made his selections of non-sectarian practitioners; the State Homeopathic Society, when appointments were due in the homeopathic field, would send in a list of names, and the State Eclectic Society for their two."

Mr. Crownhart exhibited a table of physicians licensed in Wisconsin in ten years, 1920-1930.

Non-sectarian (so-called Allopath)	1019
Homeopathic	8
Eclectic	1
Osteopaths	77

The number practicing in the State is now as follows:

Non-sectarian	2817
Homeopathic	139
Eclectic	44
Osteopathic	100

Mr. Crownhart describes the proposed bill as follows:

"The bill simply provides, instead of 3 allopathic, 2 homeopathic and 2 eclectic appointments as such, that the Governor shall appoint seven licensed to practice medicine and surgery in addition to the one osteopathic member, provision for which remains unchanged. So far as the State Medical Society is concerned, we are perfectly willing that if the Governor sees fit, he might appoint four eclectics and three homeopaths if he may choose them as representing the best in the medical profession of Wisconsin and not as representing classes, that, to our mind, have long since disappeared. We are willing in this measure to give the Governor the widest possible choice to the end of obtaining the best in the public interest."

Formal opposition to the bill was made by representatives of the Homeopaths, the Osteopaths, the Eclectics and the Chiropractors. A lawyer for the Osteopaths made a long plea for a continuation of what he called the old "balanced" board, and said:

"Here we have a medical board today that, as I understand it, stands unanimously against this bill. They know how that board is working even better than the Medical Society of the state—working in harmony for ten or fifteen years now, in perfect harmony, ten years at least, solving all these questions, doing justice to every school of healing and at the same time doing justice to and protecting the people of Wisconsin. And then they propose to come along here with a measure which will unbalance that balanced board, and in the hands of any Governor now or one to come may result in the selection of a majority of one particular school of medicine."

(*Continued on page 725—adv. xvii*)

(*Continued from page 724—adv. xvi*)

The lawyer for the Wisconsin Homeopathic Medical Society said that the members of the several schools of treatment were extremely intolerant of one another. He then praised Homeopathy, and said that the President of the United States has a Homeopath for his family doctor, and that the Homeopath's vaccination by swallowing virus was as effective as that done by skin inoculation. He used the old plea of the chiropractors that the people be allowed to employ the practitioner of any system of healing that they choose.

A chiropractor who said he represented 550 of his cult practicing in Wisconsin, exhibited a man with an old vaccination sore healed by chiropractic, and asked the legislators to "stay in the middle of the road and give the people the right to choose whom of the medical profession or those engaged in the healing arts they want."

An Assemblyman said:

"I want to say to this committee that I have had experience with all branches of the healing profession, I presume. I have seen the treatment of the allopaths; I have gone to allopathic doctors; and I have gone to homeopathic doctors; and I have gone to osteopaths; and I have had experience with chiropractors. And I want to say to this committee that I think that all of these branches of the healing art have a very distinct place in our social condition at the present time, and I see no reason for the passage of a bill of this kind. It seems to me that any society which seeks to put this kind of legislation across upon the people of the state of Wisconsin have lost some of their hold on their position in society. And it seems to me that any institution in that society, or any healing art which attempts to say that they should have the controlling force upon any board is weakening their own position, and I wouldn't think that any society would be backing a proposition of this kind."

The bill proposed by the State Medical Society of Wisconsin was defeated.

GRADUATE COURSE IN WISCONSIN

The *Wisconsin Medical Journal* of April contains the following account of a postgraduate course on insulin:

"The University Extension one-day course in insulin and its use is commended to physicians of the State who desire a better acquaintance with this remedial agent and its technique. It is especially recommended to those practitioners who attended medical school before the discovery of insulin; for such physicians, acquaintance with the subject has necessarily been limited.

"The instructional staff includes the following: Leland S. McKittrick, M. D., Boston, Mass., Russell M. Wilder, M. D., University of Chicago, E. L. Sevringhaus, M. D., University of Wiscon-

(*Continued on page 726—adv. xviii*)

With this in hand



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(*Continued from page 725—adv. xvii*)

sin and Lenore L. Healey, Dietitian, University of Wisconsin.

"The sponsors of this course are the State Medical Society of Wisconsin, the University of Wisconsin Medical School, and the University Extension Division.

"The instruction combines an afternoon of lectures and demonstrations for physicians, and a free evening lecture for the lay public. The course is intended to be an inexpensive substitute for a postgraduate course at a metropolitan clinic. In providing for a public evening lecture without cost, in each city, it was thought that, in view of the large number of diabetics who are cared for in the home, there is value in teaching to laymen the necessity of continuous care of these cases under rigid rules prescribed by the family physician. Dr. Sevringhaus' evening lecture for the lay public will stress the avoidance of those diets and fat-reducing methods that have no sound scientific basis.

"A book of instructions for physicians and patients will be given to each physician attending these one-day clinics. It will be found invaluable especially in acquainting the patient with his duties in maintaining the prescribed standards of diet and rules of living. Every item of home equipment and materials for urine testing necessary in the treatment of diabetes will be demonstrated."

GOLF TOURNAMENT IN WEST VIRGINIA

The question of holding a golf tournament in connection with the annual meeting of a State Medical Society has been discussed frequently, with the proponents of the sport gaining ground. THE NEW YORK STATE JOURNAL OF MEDICINE of April 15, page 495, carried an announcement of a proposal to form a golfing association at the next meeting of the State Society. The *West Virginia Medical Journal* of May contains the following editorial on a golf tournament to be held in connection with the annual meeting of the State Society:

"All arrangements for the annual Association golf tournament, which will be played over the course of the Clarksburg Country Club from May 18 to May 20, have been placed with Dr. Frank V. Langfitt, of Clarksburg, and any member-golfers who desire information about the tournament should get in touch with Dr. Langfitt. According

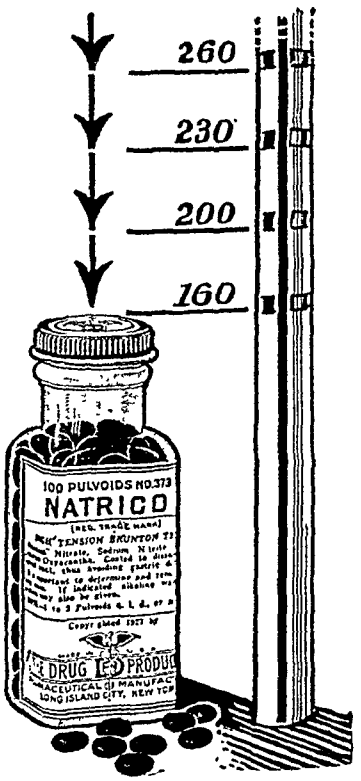
(*Continued on page 727—adv. xix*)

Summer Weather Means Suffering for High Blood Pressure Patients

When the mercury climbs in the thermometer, it is likely to go up in the sphygmomanometer as well. Concentration of the blood resulting from excessive perspiration frequently means higher blood pressure. Symptomatic relief is required.

This relief from physical distress is well afforded by Pulvoids Natrico, which promptly lower blood pressure without shock, pending exact diagnosis and treating of the underlying cause. "One patient I had with a pressure of 300 was lowered to 205 in a week," is representative medical comment on Pulvoids Natrico.

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(*Continued from page 726—adv. xviii*)

to the precedent established in past years, the tournament will be a handicap affair and each participant will turn in his handicap before entering the tournament. The silver cup will be awarded for the low score after the handicap is deducted.

"The tournament will open at the Clarksburg Country Club on the afternoon of May 18, which is one day before the convention proper gets under way. Play will continue through Tuesday and Wednesday morning. Each participant will play 18 holes and then turn in the score to Dr. Langfitt or his representative at the club. The 18 holes may be played at any time between Monday afternoon and Wednesday noon, but each participant will be required to announce the fact when he begins tournament play.

"The tournament prizes will be awarded at the annual banquet on Wednesday evening. In case of a tie for first place, the tie will be played off on Wednesday afternoon before the banquet takes place. The golf tournament has always been an interesting attraction of the convention and a large number of entrants is expected."

COUNTY SOCIETY ORGANIZATION IN VIRGINIA

The May number of the *Virginia Medical Monthly* contains a letter by the President of the State Society, Dr. J. A. Hodges, who discusses the need of organizing a county medical society in every County of the State. He writes that twelve Counties have not organized societies at all and that ten societies are each composed of from two to nine Counties. Dr. Hodges says in closing:

"It is well known that there are several most efficient group societies with a membership representing physicians from two or more County organizations, and that there are six District Societies composed of more than two (2) Counties which are component units of the State Society, and that there are, also, a number of recognized District Societies, which are not component parts of the State Society. All of these are doing most excellent work, but their activities do not cover the entire field of opportunity. All of these should be continued, and even enlarged, but every County in the State should have at least a skeletal organization, even though some physicians in these Counties may be members of some of the above groups, for, without this, some physicians in each County will be deprived of their privileges and professional opportunities.

"It is most urgent that those physicians who know the value of proper medical organization, should interest themselves in aiding others who are not so fortunate. This will in no sense injure any existing medical organizations, but strengthen them, and give all physicians equal op-

(*Continued on page 728— adv. xx*)

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(*Continued from page 727—adv. xix*)

portunities to forward scientific organized medicine. It will also assist the officials of the Society in making practical the new plan of putting into effect the changes in Councilor Districts adopted at the meeting in Norfolk.

"Consequently, the officials of the Society will be pleased to have any assistance, either as individuals, or as members of Society organizations, to aid in this necessary work."

PAY FOR INSURANCE CERTIFICATES IN MICHIGAN

The May number of the Journal of the Michigan State Medical Society carries an editorial describing the official action taken by the officers of the State Society in regard to fees to be charged by doctors for filling out insurance certificates. The writer says:

"During the last three years a persistent effort has been made by the Civic and Industrial Relations Committee to arrive at some definite understanding with the Health and Accident Insurance Companies regarding the payment of a fee of not less than $2.00 for filling out each preliminary and final claim proof.

"Numerous committee meetings, and a conference with representatives of a number of the outstanding insurance companies, have been held and every angle of the situation has been carefully analyzed. The insurance companies strenuously object to the plan and argue that Michigan represents only a small section of the medical profession of the entire United States and are unwilling to concede to the demands of the profession.

"Nevertheless, by its action, Michigan has created the interest and favor of other State medical societies in the question involved. The rights and privileges of the individual physician are being encroached upon by the insurance companies' continual insistence that the filling out of claim blanks is only a part of the physician's professional obligation to his patient.

"This whole question is one which affects every physician in the United States. It affects their income, their time and their convenience. There are approximately 145,000 physicians in the United States. From the statistical standpoint if only one insurance blank were filled out yearly by each physician, it would mean a total sum of $290,000, which the physicians are saving for the insurance companies. Every physician fills out at least ten to twenty of these blanks a year, which means that over a million dollars a year are being contributed to the incomes of the insurance companies. There can be no question that the profession is justified in the stand which they have taken.

(*Continued on page 730—adv. xxii*)

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(Continued from page 728—adv. xx)

"It now becomes quite apparent that the question is one for the consideration of the American Medical Association, and the Michigan delegates are proposing a resolution at the meeting of the Association at Philadelphia in June, which covers this subject from a national viewpoint., Until such action is taken by the American Medical Association as is deemed advisable, the physicians of Michigan are urged to adhere strictly to the import of the resolutions and refuse to fill out blanks for the insurance companies until advance payment of the fee has been arranged."

SOCIALIZATION OF MEDICINE IN ILLINOIS

The socialization of medical services is discussed in the following editorial in the April number of the *Illinois Medical Journal:*

"The lay public, both privately and collectively and from both selfish and altruistic viewpoints, is taking advantage of medicine's contributions. Private citizens and politicians are insisting that medicine be socialized. Life, health, accident and industrial insurance companies are shaping many of their policies on medicine's discoveries. The menace in this respect is manifest in the employment of large numbers of medical men in these industries and in health movements who are being subordinated gradually but surely to a position that is merely that of technicians. Socialization of medicine means the subjection by legislative control and political manipulation, of the medical profession in a system of state medicine which includes any movement which would compel physicians to practice on terms dictated by lay people.

"1. In medical education there is a dangerous trend of the times. Great universities and large foundations, through lay board control, regulate the placement of medical schools, the adoption of curriculums, and dictate the selection and compensation of professors.

"2. A menace in its embryonal stage is the organization of lay institutions which practice medicine. Doctors in these organizations occupy a similar position to employes of life, health, accident and industrial insurance companies, being mere employes who carry out the policies of lay directors.

"3. Another phase of serious and dangerous inherency is the lay influence in the control and management of hospitals. Hospitals are the workshops of the medical profession yet lay trustees outline the policies governing the hospitals. These require visiting physicians often to submit to rules and regulations made by lay superintendents or head nurses, even though these rules and regulations may be contrary to what is considered by physicians as best suited to the welfare of patients.

(Continued on page 731—adv. xxiii)

(*Continued from page 730—adv. xxii*)

"Lay control of hospitals has introduced a new feature into the field of medical practice. Some hospitals are practicing medicine as a business These hospitals are hiring physicians, charging patients for professional advice and treatments by these physicians, collecting the fees and entering them on their books as revenue received By this practice hospitals are actually competing with their staff members. Obviously there are possibilities dangerous to both physicians and hospitals incident to this lay advance into the field of *medical practice.*"

STATE MEDICINE IN NEBRASKA

The May number of the *Nebraska State Medical Journal* has an editorial which is an index of the arguments for and against state medicine It first quotes the A.M.A. definition of state medicine, as follows:

"Any form of treatment, provided, conducted. controlled or subsidized by the federal or any state government, or municipality, except such service as is provided by the Army, Navy, or Public Health Service, and that which is necessary for the control of communicable disease, the treatment of mental disease, the treatment of the indigent sick, and such other services as may be approved by and administered under the direction of or by a local county medical society of which it is a component part.

"It aims to provide adequate medical care for persons not otherwise able to command it. As carried out in a number of European countries all aim to provide a method of distributing the economic load of medical care by requiring a combination of contributions from the insured persons and employers, compulsory savings and indirect taxation. The government administers the fund thus accumulated and employs the physicians. In England for instance it is called the panel system and physicians practicing under the system are called panel physicians. They get about $2,000 per year and are assigned to care for approximately 1,500 persons. All persons whose incomes are less then than 250 pounds a year are compelled to contribute to this fund and are eligible for treatment under the panel system."

The article then lists the arguments for state medicine, as follows:

"1. There is need for improvement of our existing system of medical service.

"2. There is a large amount of unnecessary sickness.

"3. It is the cause and result of much poverty, crime and delinquency.

(*Continued on page 732—adv. xxiv*)

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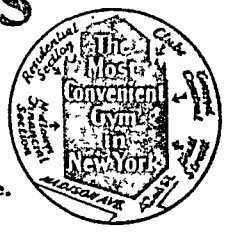
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(Continued on page 731—adv. xxiii)

ETHICS OF READING PAPERS IN MISSISSIPPI

The April number of the *New Orleans Medical and Surgical Journal* contains an editorial by Dr. E. F. Howard, President of the Mississippi State Medical Association, in which he discusses the ethics of reading papers before State Medical Societies, as follows:

"There are two irregularities constantly creeping in that tend to disorder, and sometimes to ill-feeling. One of these is the abominable fault of a paper extending beyond the time limit; the other the extremely discourteous trick of an author, who is unable to attend the meeting, of sending in his paper to be read by someone else

"The law in the matter is entirely clear. 'No address or paper before the Association, except those of the President and Orators, shall occupy more than fifteen minutes in its delivery.' 'Each paper must be read by its author.' These two rules are very frequently over-ridden or disregarded, and invariably it is the fault of the man in the chair.

"A guest failed to come but sent his paper. Someone else read it. The paper ran over the time limit; the chairman called time. Someone moved extension. A protest was raised. Protest was overruled. The By-Law was over-ridden and the paper read to the bitter end.

"Again it was the fault of the Chairman. It was improper to admit the paper; it was equally improper to extend the time limit. Such action is only when done by unanimous consent, which was not possible in either case since a protest had been made. The Chairman should have made a ruling, stuck to his guns and called the next paper.

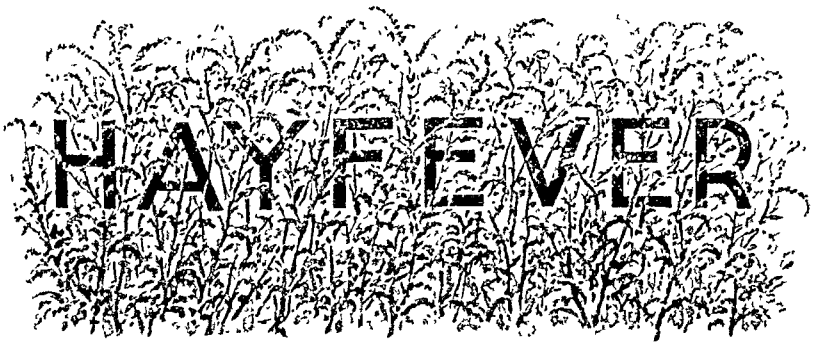
"There is no use in having laws unless they are obeyed. Far better wipe them all out and let every Chairman run his section to suit himself than have laws that only fetter the law-abiding and are ignored by the others.

"The Secretary prints these rules on a front page of the program every year—and nearly every year one or the other of them is violated.

"All of which is respectfully referred to the attention of the Chairmen and essayists for the 1931 meeting."

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GROUP CLINICS, AN OPINION FROM GEORGIA

The March issue of the Journal of the Medical Association of Georgia contains an informative editorial on group clinics, as follows:

"Private Group Clinics"

"A study of private group clinics in the United States, made for the Committee on the Costs of Medical Care, by C. Rufus Rorem, has been issued as Publication No. 8 of the Committee.

"There are approximately 150 such clinics, with a total medical personnel of about 2,000. They represent a comparatively recent development in medical practice, most of those now in existence having been organized since the World War. Almost none is to be found in the Eastern States; the majority are in the middle west.

"The average capital investment in plant and equipment, excluding hospital facilities, was $10,000 per practitioner in seven clinics, which supplied information on this point. The average capital investment in medical equipment and apparatus was $3,600 for 217 practitioners in nineteen clinics supplying information.

"There are two general classes of clinic practitioners: those who share in the ownership of the clinic assets and participate in its profits; those employed solely on a salaried basis. The former group is composed of relatively older men. Data from thirty-four clinics revealed an average of twenty years since graduation from medical school for the 'owners' and eight years since graduation for the 'salaried' physicians.

"Of 415 clinic physicians listed in the 1929 American Medical Directory, 337 were members of the American Medical Association. Clinic physicians were found to belong to specialized associations to a greater extent than independent practitioners in the same communities, a result, in part, of the fact that a larger percentage of clinic members are specialists.

"The distribution of the various specialists among fifty clinics was as follows, indicating those groups in which each specialty was represented by at least one practitioner: internal medicine, fifty; surgery, fifty; eye, ear, nose and throat, forty-six; obstetrics, thirty-seven; urology, thirty-five; pediatrics, thirty; *x*-ray, twenty-seven; pathology, twenty-six; dentistry, seventeen; gynecology, seventeen.

"Perhaps the most striking development in group clinic practice is the 'business office,' a separate department under a lay business manager, who is an employee and whose duties and respon-

(*Continued on page 735—adv. xxvii*)

sibilities are determined by the clinic physicians. Financial dealings with patients usually rest in the hands of these business managers, physicians wishing, it appears, to have as little of these as possible, although their wishes with regard to the establishment of fees prevail.

"According to statements by forty-two clinic managers, clinic fees appear to be regarded by the general public as neither higher nor lower than those of local doctors in private practice. Twenty-one managers say their fees are 'about the same,' eight say they are 'higher' and thirteen that they are 'lower' than those of independent practitioners.

"The practice of the typical private group clinic is essentially local. The majority of patients, managers say, are persons of moderate means, with a considerable number who might be classed as well-to-do, and a few others who are very poor.

"Approximately one-fourth of 60,000 patients served in fourteen clinics in 1929 were hospitalized during diagnosis or therapy. Approximately 10 per cent of 41,000 patients in ten clinics were treated by major surgery. In twenty-one clinics, 528,000 visits by patients were received by 215 members, an average of 2,459 per practitioner.

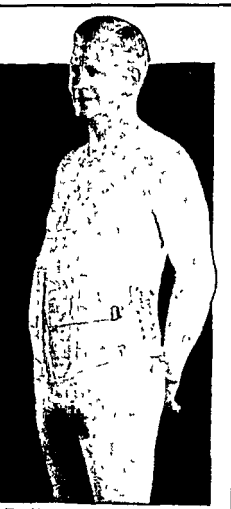
"Data were received from twenty-seven clinics regarding gross and net income per practitioner. Gross incomes ranged from $10,708 to $25,606, and net incomes from $5,960 to $17,449. The average gross income for each of the 314 practitioners was $14,908, and the average net income $9,747."

The following conclusions of the Committee are of interest:

"The employment of business managers has usually resulted in increased administrative economy and efficiency. The establishment both of fees and of collection policies is based upon financial data obtained through conventional business methods. Inasmuch as the financial status of a clinic patient is usually investigated, group clinics probably perform less 'free service' than would an equal number of independent practitioners doing the same volume of work.

"Private group clinics, through their available equipment and their coordination of medical specialists, are in a position to fulfill the basic requirements of good medical care with economies from which either or both the clinic members and the public may benefit."

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STATE MEDICAL LIBRARIES IN CALIFORNIA

The April number of *California and Western Medicine* describes a legislative bill for establishing medical libraries at state expense:

"The state medical library bill, which was introduced in the present session of the legislature, was briefly presented and discussed on page 803 of the December, 1930, number of *California and Western Medicine*. The bill, as submitted, was a modification of the measure which was introduced two years ago.

"Inasmuch as California maintains at Sacramento a state general library which operates under the jurisdiction of the California Department of Education, it was assumed that the proposed 'state medical library' should naturally find a place under the same department (as a subdivision of the state general library). Because the funds to be expended were public moneys, it was provided that such branches when established should be housed in buildings of the University of California.

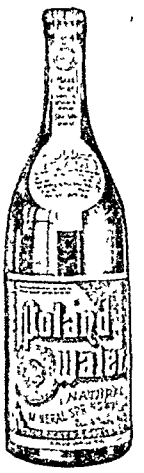
"It was found, however, that the California Department of Education was not favorably inclined to taking over the supervision of such a state medical library. It was also learned that a system of divided control was not deemed desirable by the regents of the University of California. The bill was accordingly rewritten so that the state medical libraries should be under the control of the state university, with divisions of approximately equal size in San Francisco and Los Angeles. The libraries would work in close cooperation with existing medical libraries in those cities and would aim to particularly provide 'packet library service' which would promptly, through the mails, bring books and literature on any subject to members of the profession in the northern and southern sections of California. It is hoped that the bill as amended will go on to passage."

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LICENSING HEALTH CENTERS IN CALIFORNIA

Licensing health centers and clinics is suggested in the following editorial in the April issue of *California and Western Medicine:*

"A proposed law which has been drafted, but which at the time of this writing has not yet been introduced into the legislature, is one that would demand that every clinic, health center or institution of similar designation or import, which cared for ambulatory patients, would be required to secure a license annually from the California State Board of Health. This bill was prepared by Dr. J. L. Pomeroy, County Health Officer of Los Angeles, and has received the endorsement of the Los Angeles County Board of Supervisors. It was worked over by the Medical Advisory Board of the Los Angeles County Health Department, and was also considered by the proper committees of the California Medical Association. This bill is modeled somewhat after similar laws which have been enacted in the states of Massachusetts and New York. The major object in the measure is to bring about an annual registration of every such clinic or similar institution in California, in order that the public health interests might be properly safeguarded. There was no thought to interfere with the full activities of legitimate clinics, but it was kept in mind that there was great need for some type of inspection and licensure of organizations or institutions which do not measure up to proper standards.

"Members of the California Medical Association will no doubt remember that at the last annual session of the California Medical Association the Committee on Medical Economics, through a special subcommittee brought in a report on the findings which had been gathered in a preliminary survey of clinics and dispensaries in California."

NEW YORK STATE JOURNAL of MEDICINE

PUBLISHED BY THE MEDICAL SOCIETY OF THE STATE OF NEW YORK

VOL. 31, No. 12 NEW YORK, N. Y. June 15, 1931

MEDICAL RESPONSIBILITIES

By WILLIAM H. ROSS, M.D., BRENTWOOD, N. Y.

THE PRESIDENT'S ADDRESS AT THE ANNUAL MEETING OF THE MEDICAL SOCIETY OF THE STATE OF NEW YORK, JUNE 2, 1931, IN SYRACUSE

TWO years ago, in accepting office, your President-elect said that he had no illusion as to the size of the task to be assumed when he should fill the office of President; and he has none now. He had no doubt as to the responsibility to be assumed; and it has been greater than he anticipated. He realized that the President should give something of himself to his office. Whether or not your President has done this, you are able to judge. Anyway, he has given all of his time.

Your President has an orientation now, unexpected in the beginning. The problems of medicine are greater than were thought; and their solution is not so easy. The power of tradition is better understood. Any solution involves a change from the customary way of doing things. The physician is conservative because he deals with a multiplicity of uncertain factors. His life is individualistic. He usually applies the same habit of thought to problems of relationships that he applies in directions to a patient. Subconsciously, he thinks of problems in the way that he is accustomed to thinking of the problems of practice. He is not in the habit of having anybody tell him what should be done. Emotional resistance to a substitution of a new proposal for an existing one always appears. The sociological and psychological factor of vested interest influences the acceptance or rejection of an innovation. The minor part of vested interest is economic and the major part is disturbance of prestige and authority.

Medicine is the oldest profession in history. It is older than the civil law. It is the only altruistic profession. It has always determined its own gratuities and contributions to human welfare. It is the only profession intimately associated with the primary instincts of mankind. For ages it has been the only hope of postponing the fear of pain and death. It is, therefore, closely interwoven with the social relations of mankind and inseparably related to the real needs of people. Medicine is, therefore, a social function. It always has been a social function.

The time span of social change has usually been longer than the period of one human life, and during these intervals the profession of medicine developed its traditions. Nowadays something or other is taken into the everyday life of people about every ten years which changes the current of human relationships—the automobile, the radio, the influence of the World War, the present inter-relationship of all the countries of the world, the increasing density of population in cities, the economic depression, and unemployment.

Go with me in thought into one of the European countries and realize that two and one-half million acres devoted to the production of food have in two years been increased to ten million acres with every indication that in two years more it will be increased to twenty-five million acres. This country alone can supply all that the markets of Europe will consume and certain products of America will be reduced to a domestic basis.

The World War changed many consuming countries into producing countries, and has led to world-wide over-production which may well continue. The present unemployment throughout the world may more or less continue. Hospitals and clinics with sufficient endowment may undertake the care of people who have not money to pay for modern treatment; or public opinion may devise an objectionable method of distributing the costs of the hazards of illness. Economic conditions may never again become as they were. Physicians cannot compete with basic economic disturbances any more than industry. Let me repeat that medicine is a social function intimately concerned with the general social condition of people. Whatever affects people economically will affect medicine economically.

Other factors enter into the situation. The public character of medicine and the general knowledge of what can be done to prevent disease

have directed public expectation to the medical profession as the only competent body to develop organization for the administration of the known medical needs today. The profession of medicine is still influenced by the period when a physician was paid by gratuities. The general expectation still exists that under certain circumstances the doctor should give his services.

The world is full of examples of medicine's contribution to the social welfare of mankind. I am not sure that the profession of medicine would like to have this reputation disturbed.

Just as the science of medicine and its application to human ills advance and certain diseases come under control, in the same proportion a physician's work decreases unless he shifts his activity enough to make earlier diagnoses and earlier treatment a part of his work.

There are complexities of society today and enough general economic disturbance to slowly stimulate the state to take on its parental function for the care of the health of its citizens. Since health is an asset to the state and sickness a liability, it is the responsibility of government to take a hand in the solution of health problems not now being taken care of. If the medical profession will recognize that it is the burden of the state to supply certain equipment and certain facilities for the care of its citizens, and that it is the responsibility of the physician to supply the technical service, a partnership will be established which is both in the interest of the public and in the interest of the profession.

If the multitude of indications really show that this nation has reached the peak of its growth, and from now on will more or less approach the social conditions of other countries which caused the government of these countries to take a hand in the solution of relatively similar problems, then the profession of medicine and the leadership of public thought must consider the situation. Medicine cannot be allowed to abandon its historical, social, altruistic, personal relationship to individuals. Some method of rational control of the situation confronting medicine must be thought out.

The importance of health as a basic foundation for every effort in the world—war, industry, stability of government, civilization itself—is accepted by the thoughtful public and illustrated by the interest of governments over the world in health matters. The national study of the costs of medical care and medical service, and the study of child health are but examples.

The total health bill of this country is three per cent of the national income. The physicians of this country receive $750,000,000 per year. There are 120,000 working physicians in this country. They receive $6,250 on the average per year. This is the gross income and out of it they must provide their equipment for practice and transportation. The cost of a medical education today plus the value of the time to acquire it would, if invested at six per cent until the individual is fifty years old, allow him to retire and maintain himself and family for the rest of life without working. The average amount paid for medical service to physicians in this country is $6.25 per capita per year. Hospitals receive about the same amount per capita. The physician is not overpaid. Hospitals are not overpaid. The thinking public is grasping these facts. The general public will sooner or later acquire this information, also. The public, however, knows just about as much concerning this as our own men appear to know and whenever we say that we ought to educate the public as to the problems of medicine, we should add, and our own members also.

The medical profession, accepting certain fixed basic conditions as a guide to its relationships, has gone on quite well until social conditions began to change and complexities of society began to increase. The change from the time when social conditions remained about the same for more than one life time, to the present when they change about every ten years, makes necessary a constant readjustment of medical relationships. The assumption that there is nothing more in medicine than to fill its scientific storehouses, and that each generation of physicians will live amid essentially similar basic conditions as the generation before and the one to come, is for the first time in our history, false.

If there are any who do not yet see that there is a great change in social conditions, let me remind you that it is only about two generations since anyone had a bathtub; that the great increase in hospitals and their use and the phenomenal alvance of the science of medicine are practically all within two decades; that the marvelous educational influence of radio is within one decade and of the automobile within a generation; and the scientists tell us that the ultra-violet light that fascinating agent, is due for a more spectacular sweep into popular use than was expected of radio.

While I do not know that it is possible to work out the future problems of medical relationships except approximately, there is today in medicine an agency that was used in the civic affairs of Greece four thousand years ago. It has been used in industry, in all civic effort, and in the affairs of government. Considered as a medical agency it undertakes to bring opposing interests into conference, to find the common ground, to compromise differences, and to coordinate similar objectives into a cooperative undertaking. It limits waste, increases accomplishment, and defines leadership. We can, at least, find approximate solutions for problems if we adopt enough of the science of foresight.

Walter Brett Donham, in "Business Adrift," says: "The whole structure of the theory and practice of curative medicine on which such outstanding progress is being made is, when applied to the treatment of the individual, subject to just the same hazards as all efforts are to see into the future of medical relationships, and yet we continue to apply it when the individual is sick because useful results are possible."

Since we must accept this method of the application of the science of medicine, it should not be difficult to accept similar reasoning in the relationships of medicine.

Organized medicine assumes responsibilities today unthought of a generation ago,—education, legislation, and others. As a profession, medicine is doing more to meet public criticism today than any other profession. The welfare of future generations of physicians depends upon the correct handling of the problems of today.

Just as there is a world economic disturbance today about which very much is coming to be known, so there is a world disturbance in the relationships of medicine about which much is coming to be known. It involves the economics of medicine as well as the services of medicine. No one alone is big enough to raise an issue, and no one alone can adjust it. It must be a cooperative undertaking. In many respects the problem cannot be met by those untrained in economics. It will require an association with economists and statesmen in the ranks of medicine.

I have lived more or less with these thoughts, ideals, and facts for two years. The principles touched upon in this little address should not be forgotten until the truth is found.

"If you can dream and yet not make dreams your master,
If you can think and not make thoughts your aim,
If you can meet with Triumph and Disaster
And treat these two imposters just the same;
If you can make one heap of all your winnings
And risk it on one turn of 'pitch and toss';
And lose and start again at your beginnings
And never breathe a word about your loss;
If neither foe nor loving friend can hurt you,
If all men count with you, but none too much,
Yours is the Earth and everything that's in it."

ARE THE WIDESPREAD CRITICISMS OF THE MEDICAL PROFESSION JUSTIFIED?

By WILLIAM GERRY MORGAN, M.D., WASHINGTON, D. C., PRESIDENT OF THE AMERICAN MEDICAL ASSOCIATION

AN ADDRESS AT THE ANNUAL MEETING OF THE MEDICAL SOCIETY OF THE STATE OF NEW YORK, JUNE 2, 1931, IN SYRACUSE, N. Y.

"O wad some power the giftie gie us
To see oursels as ithers see us."

DURING the past few years there have been appearing an increasing number of published articles, a few by members of our own profession, but a vast majority from the pen of the laity, criticising more or less severely, sometimes harshly, the work of the medical profession, more especially that of the bedside doctor. Occasionally some writer has come to our defense and has ably answered specific criticisms. Criticism for the sake of fault finding, without at the same time offering constructive suggestions, has little creative value.

To attempt to enumerate the more important articles which have been published, condemning in a sweeping manner, the modern practice of medicine, would be impossible in the time at my disposal.

One author makes the trite observation, that "there have been vast changes in medical therapy, both in method and practice since the time of Hippocrates." The physician has been largely the author of the advance in the art and science of healing, and the rank and file have more or less kept up with the progress. He makes the further observation that "medical diagnosis, in spite of modern facilities, is far from infallible, while experts agree that medical education is as a whole entirely inadequate." To this the medical profession can agree. I maintain, however, that this state of affairs exists through no fault of the directing minds of medical progress since medical practice and teaching have been slowly passing through a period of evolution.

Farther along this author states "In the etiquette governing relations among men of the same profession, there are things which savor of a conspiracy against the public," and gives assent to the statement by Ross that "It constitutes a betrayal of the truth, the sick man, and the public." My answer to this criticism is that our code of medical ethics is a bulwark of protection of the public, and in no sense a betrayal of the sick man or the public, because they hold the doctor up to the highest standard of truth, of fair dealing and of giving the best service to the patient and the public, of which he is capable. Another charge is that "Modern medical codes have been somewhat reprocessed, but even tolay

it is very difficult or often impossible for a patient to find out what has been done to him by a surgeon." This appears to me to be a just criticism. In the vast majority of instances, I believe a patient, when he has sufficiently convalesced, has a right to the knowledge of the type and extent of the operation which he has undergone, if he so desires.

Modern specialism in medicine is severely criticized by a prominent medical writer who says "Pseudo-specialism and inefficient specialists are all too prevalent and do much to discredit legitimate specialization." This position is well taken. Many recent graduates in the past and even at the present time are embarking in the practice of specialties having had little or no special training to fit them for their chosen line of work, and too often they have not had the basic training which comes from a period spent in general practice, which is so necessary to the complete understanding of diseases affecting that particular part of the human body which they will be called upon to treat. In the immediate future this trend in medical practice must be corrected if the profession as a whole is to attain the high standard for which we are striving.

Until recent times comparatively few doctors really understood the processes by which the human body is nourished. The subject of food and diet was a "terra incognita," and curiously enough, considered of little importance in the effort to bring relief from bodily ills. Especially was this true of surgeons in their daily work. How often in the early years of my practice have I heard the surgeon, in giving his postoperative orders to the nurse, say "Oh, give him a little toast and tea, or egg albumen,"—an abomination to the man who has had his appendix or gall bladder removed. For this oversight and inattention the surgeons have had to pay very dearly, and their patients much more so. This leads me to call attention to the very just and oft repeated criticism of the profession for the enormous and constantly increasing number of medicaments which are used at the present time by physicians in their daily prescribing. As a matter of fact, do we understand and give sufficient thought to the physiological effects of the medicaments which we administer to our patients? Are we not too prone to be satisfied that this or that drug relieves some specific symptom, heedless of what other effects may accrue to its use? For instance, to relieve an agonizing headache we may administer the old-time antifebrin, heedless of the fact that it may seriously depress the action of the heart and so interfere with the necessary metabolic processes, thus in the end leaving the patient more prone to a recurrence of the symptom from which he seeks relief. A more profound understanding of the action of drugs upon the human body leads the skilled clinician to reduce the number of medicines which he employs as a routine practice. I cannot too strongly emphasize this phase of the practice of medicine. We are too prone and too ready to accept the claims of manufacturers and travelling salesmen as to the virtues of each new group of remedies which are offered to us. This is not a fault confined to the doctor of small experience, but is common to all medical men. When we once fully realize this universal failing, the accruing dividends of pharmaceutical manufacturers will show a progressive downward tendency, to the everlasting benefit of suffering humanity. As Oliver Wendell Holmes said, "If all the medicines in the world were thrown into the sea, it would be better for men and worse for the fishes."

Our medical periodicals in the future must use ever increasing discrimination in advertising remedies for the use of the profession. They must find some other source of revenue from which to draw their financial maintenance. The criticisms which have been so often brought against us in this particular have a just foundation. That the remedy lies entirely in our hands cannot be disputed. The skillful and experienced specialist in any of the fields of practice is less prone to use a wide variety of medicaments than is the average general practitioner.

Another wide-spread oft-repeated criticism of the methods employed by physicians in the treatment of illness is that they use Latin and other unfamiliar terms, both as to medicaments administered and to methods employed, as well as to pathological conditions. It is stated that many druggists have no understanding of the derivation and meaning of many of the terms used upon the prescriptions which they are called upon to fill. This is as true as it is unfortunate. In defense of the use of our terminology I declare that to abandon it would be to open the door to widespread misapplication of many of our medicaments, a large number of which are of high potency for evil as well as for good. In many instances the knowledge by the patient of the particular drug which is being used would inhibit to a certain extent the physiological action of that drug. Then too, there is ever present the danger of creating drug habitues when we are administering narcotics and analgesics. This alone is sufficient justification for our present day method of prescription writing.

Another lay criticism, which has only just recently made its appearance in the press, is that doctors are in the habit of treating symptoms rather than diseases. This is a subject which has of itself been deemed worthy of treatment by physicians in formal and able addresses before medical organizations; and it cannot be discussed in anything like a comprehensive manner in a rambling and discoursive address such as the present one.

No fair-minded individual, be he physician or layman, who understands the treatment of disease

entities, would answer such a criticism in either the affirmative or the negative, and let it go at that. The experienced and conscientious clinician always attempts to make a diagnosis before he undertakes to direct any course of treatment. However, there are instances which occur in every physician's practice where he finds it advisable and necessary to relieve some crippling symptom before he can satisfy himself as to the diagnosis of the disease with which the patient is suffering. Is it not true, nevertheless, that here and there throughout our country there are too many physicians who, because of the enormous pressure under which they are called upon to work, or who taking their obligations to their patients casually, do to some extent prescribe for the relief of the symptoms presented, neglecting the study and observation necessary to determine the underlying cause for these symptoms? In this regard criticism of our methods is somewhat justified. One convincing fact which has been borne in upon me in my travels about the country during the past two years, is that the habit of making snap diagnosis, or no diagnosis at all before instituting treatment is surely giving place, in the routine work of the daily practitioners, to an earnest desire and a determination to study more or less critically every patient coming under his observation. This to my mind is one of the most encouraging signs of the trend of the times in medical circles. As I have so often remarked in the press and from the platform during the past few months, this trend toward more careful study on the part of the bedside doctor in his daily practice is one of the most effective barriers to the adoption of federalized medicine.

The medical profession is held responsible for the lack of some method by which a stranger in a locality would be able to select for himself or his family a competent medical advisor; and further, that the membership of a physician in a county, state, or national association does not guarantee his competency. Can we deny at least the partial truth of such a criticism? Do medical governing boards sufficiently scrutinize, as a routine precautionary measure, the applicants for membership who came before them. Has not the desire for augmented membership sometimes blinded such governing boards to the lack of qualifications of the applicants? What the laity does not realize is the difficulty, at times, of arriving at a conclusion in such matters which is just both to the prospective member and to the public. And how often we are charged with being a close corporation or a self protecting guild when we deny admission to our ranks to those who are unworthy of membership! It may be apropos here to say that the criticisms for the rejection of an applicant usually come largely from the public, whom we are seeking to protect.

Not only have some lay writers, but able experienced clinicians made the statement that physicians do not seek to protect patients from fear of impending disaster, and even at times use this fear as a method for inducing the hesitant individual to undergo some line of treatment which appears to him unnecessary or undesirable for one reason or another. It is undebatable that such criticism has a basis of truth. It seems proper to mention in this connection a matter which is the subject of a wide divergence of opinion, namely, the advisability, in the majority of instances, of acquainting the individual afflicted with some grave malady, as to the true nature of his illness. I take the view that such a course is unwise, except in those cases in which there are grave reasons for doing so. Often such knowledge on the part of the patient proves to be a serious handicap.

Again, as the result of the progress of scientific medicine, new methods and new laboratory tests are being brought out year by year, some to stand the test of clinical practice, and others to have a short vogue only to pass into innocuous desuetude. We are charged with unnecessary application of such methods and tests. I fear there is definite justification for such a criticism. With this criticism, and closely linked thereto, is the one that too often the physician whose duty it is to ultimately evaluate the results of a multiplicity of such tests does not have, or make, the opportunity of coming into sufficient personal contact with the patient to be in a position to give the proper individual interpretation and correlation of the aggregate findings. This inevitably leads to the practice of giving a composite final diagnosis, bewildering alike to the mere bedside doctor and to his patient, to whom such reports are submitted.

Perhaps no other profession is so prone to swing to extremes as is our own medical profession. We are charged with being faddists, a criticism which we find difficult to controvert. If some new line of treatment or an instrument is brought out in Seattle with a sufficient blare of trumpets, in a few days it has travelled with incredible rapidity to Calais, Maine, and on its way has made converts of a large percentage of the medical population in the intervening territory. Were it possible, in the vast majority of instances, to have proven at the outset the undoubted value of such a method or instrument, and to have presented its merits in an understandable manner, the criticism would then be turned to the highest possible praise. However the converse of the proposition is the true one, with the result of the needless expenditure of money and time, and the sad disappointment of the multitude. Every now and then some medical writer complains of the tardiness of the bedside doctor in seeking to learn of and make use of the new and dependable methods which are developed from time to time by the research laboratories or the advanced workers in the field of clinical med-

icine. Concerning this complaint in the practice of the past, we must plead guilty. However, a rapid and decided improvement in this regard is to be noted by the close student of the progress of clinical medicine.

Yet another criticism, voiced largely by some of our leading medical writers, is that we cling too tenaciously to methods which the progress of medical science has found to be valueless. Let us not close our minds to the truth of this observation. I hasten to add, however, that sometimes we are too ready to abandon a drug, an instrument, or a method which has proven of practical value in our hands, in order to adopt some new drug or method which in a short time proves to be only a fad of the moment. It is difficult, having once laid aside something which has been of service to us, to recapture quite the same efficiency in its use as we had originally acquired.

Medical men today are of one mind that specialized practice has reached the limit of practical possibility, and even many students of medical economics believe that we have swung much too far in this direction. In defense of specialization in all lines of human endeavor, I may express in my own words the trite thought that the complexity of life today is such that it is well-nigh impossible for any individual mind to reach perfection in all departments of any profession or industry. Nevertheless, I do feel that society needs, greatly needs, competent, well-grounded, and experienced young practitioners whether it be in medicine, engineering, or trade. The laity is becoming somewhat restive under the wholesale slaughter of teeth and tonsils, so much so that our leading dentists and laryngologists, being held responsible for the failure of relief from some vague symptoms in one part of the body or another, have led the retreat from this, I might almost say, fad. We physicians are now beginning to realize that these appendages are of sufficient value to the human economy to attempt to discover some method by which they may be conserved.

The public openly and repeatedly asserts that the medical profession is lamentably ignorant in the matter of human nutrition. Testimony as to the truth of this criticism is given by some of our foremost internists. There is a slowly developing better understanding of food and food combinations suitable not only for the sick, but for the maintenance of sound health.

Some physicians, and even an occasional lay student of medical economics, call attention to the important fact that our medical teaching, among other shortcomings, fails to give sufficient opportunity to the student for becoming informed as to the reactions of the normal human being to his environment. There can be little doubt that this criticism also has a foundation in fact.

Perhaps the harshest criticism which has yet been voiced by lay writers is that the altruistic aims of the medical profession, upon which is built our pride of tradition, are being rapidly and progressively sacrificed upon the altar of the Golden Calf. Such a charge against our profession ought to be as unjust as it is malicious. Is there, however, just a shade of justification for this indictment? Are we becoming over-commercialized, just a little bit? Maybe, but if so, it is in order to keep pace with the rapidly advancing costs, not only of the practice of medicine, but of maintaining our position in the community in which we live. This impression upon the part of the public is unquestionably gaining ground, and it is the chiefest of the arguments for the adoption of state medicine put forth by its proponents. Because there is perhaps some justification for the criticism that the financial aspect of the practice of medicine has gained a parity with the altruistic aims of the healing art, and because of the importance of this aspect of our professional lives, I feel we have grumbled perhaps a little too persistently about the amount of work which we do for those not in a position to offer us monetary consideration for our services. During the past few months there has come from members of the medical profession here and there, criticism of the plan which I offered in my address to the House of Delegates last year, for a change in the financial arrangement between medical men and the hospitals which they serve. My suggested scheme of renumeration for such service is not inconsistent with my belief that we should be willing to serve without compensation, those members of society who are impoverished. An occasional critic of my method has suggested that it adds force to the advocacy of state medicine. This might be so if at the same time we insisted that the community, county, state, or federal government, pay us in dollars and cents for every item of service which we render to the poor outside of public institutions. I have emphasized this particular phase of our work because, as I have already said, one of our bulwarks against the wide-spread adoption of state medicine is our ready willingness to serve the public to the limit of our capacity regardless of financial reward.

There is an honest conviction in the minds of a good many people that all classes of physicians habitually experiment on their patients in the use of drugs and methods with which they are not sufficiently familiar to make scientific application possible. I dare say that the average physician would indignantly protest that such is not the case. And yet, if we look into this phase of medical practice with an open mind, may we not recognize that there is a basis of truth for the accusation? And further, is there a single member of the profession, in actual practice, who does not do this very thing from time to time? However, the laity is not sufficiently grounded in the science and practice of medicine to dif-

ferentiate between the practice of administering drugs and methods which the physician has not hitherto employed, but with the composition and physiological action of which he is so thoroughly familiar as to warrant his adoption of them; and those physicians who heedlessly and without having familiarized themselves with the composition and physiological action of such remedies, yet prescribes them in the hope that they will hit the target. This is an important distinction.

Another unwholesome practice, which I am thankful to be able to say is gradually passing out, and which has, and is even yet causing unfavorable comment by medical men and the laity, is the practice of fee-splitting. Until comparatively recently the public at large was ignorant of the prevalence of this practice. Within recent months my notice has been attracted by some articles dealing with this subject, in which the stand was taken that if fee-splitting be indulged in aboveboard and with the knowledge and consent of the individual patient concerned, it should be recognized as ethical by medical organizations. Such a position is not well taken, and is a step in the wrong direction. Physicians are human like other members of society, and it would be unwise to place before us a temptation to step just beyond the limits of ethical procedure. The old saying that it is unwise to play with fire lest we get burned, applies somewhat to this question. Personally I should regret the adoption of such an attitude by the profession.

Oft-repeated by laymen is the assertion that our choice of consultants, whether specialist or surgeon, is influenced by some selfish motive, rather than by the skill or competence of the medical man selected. There can be little doubt that this criticism is too often justified. This is a practice which should receive serious thought, since all of us from time to time meet with instances which appear to verify it. We should always consider the best interests of our patients as paramount in the service which we render. And after all, our own best interests and those of our patients are inseparable.

Another cause for dissatisfaction with the service of the physician, voiced constantly by many physicians not in active practice, and also by lay writers, is that we do not discharge our entire obligations to society, in that we hold aloof from community activities outside of our professional routine. For a good many years I have felt the force of this accusation, and have urged on the physicians in my own city the advisability, nay, the vital necessity, as a sacred duty, of becoming active in the civic affairs of our town. There is perhaps some excuse for the reluctance of Washington doctors to interest themselves in civic affairs, because, we are in reality a federally controlled community, without a vote, and with little voice in the conduct of its municipal activities. Nevertheless, we are surely lax in not taking a more active part in the promotion of preventive medicine and social hygiene. It cannot be denied that in many communities the medical profession has been slow to show a disposition to cooperate with the municipal, county, state and federal health services. However, it is encouraging to note everywhere a very marked improvement in the attitude of practicing physicians toward legitimately constituted public health activities.

It is a widely circulated statement by lay writers that the individual of small means cannot exercise his own choice in the selection of his physician. We are reading this criticism so often that it appears advisable to study this question, and should it be found true, to seek a remedy for so regrettable a state of affairs. But after all, is there any real foundation for such a belief? There is little evidence to prove the truth of such an assertion. I wonder just how large or small a proportion of practicing physicians are daily turning from their doors a man or woman because he or she is unable to pay the entire usual fee for the service requested. Methinks the percentage of such physicians would be so small as to be negligible; and certain it is that that type of a physician in the long run would be negligible in his influence upon the standard of the profession; and more than likely he would be derelict in his duty to many patients, regardless of the remuneration he expected to receive. Among the many thousand physicians with whom I have been privileged to come into intimate contact in the United States, Canada, and England during the past two years, I do not believe that there has been one of this type.

An exhaustive survey of the literature, having for its main object criticism of the medical profession coming from the pens of men and women in all walks of life, leaves the student with the definite impression that approximately seventy per cent of such criticisms are without foundation in fact. Of this seventy per cent, some are by conscientious but highly misinformed writers. It is true that as a class we physicians are supersensitive to arraignment of our acts, whether by brother practitioners or by laymen. This is unfortunate, because we should, and we do, learn by our mistakes, which are not brought home sufficiently to our consciousness unless we are held answerable for them. The great Sir William Osler has expressed it succinctly when he said:

"No class of men needs friction so much as physicians; no class gets less. The daily round of the busy practitioner tends to develop an egotism of a most intense kind, to which there is no antidote. The few setbacks are forgotten, the mistakes are often buried, and ten years of successful work tend to make a man touchy, dogmatic, intolerant of correction, and abominably self-centered."

N. Y. State J. M.
June 15, 1931

BETTER PRACTICING DOCTORS

By WILLIAM D. JOHNSON, M.D., BATAVIA, N. Y.

THE PRESIDENT'S INAUGURAL ADDRESS AT THE ANNUAL MEETING OF THE MEDICAL SOCIETY OF THE STATE OF NEW YORK, JUNE 2, 1931, IN SYRACUSE, N. Y.

ONE of the most difficult of human problems is the proper evaluation of our immediate surroundings and the relative worth of our activities. We will all subscribe at once to the statement, "There is nothing new under the sun," and in the next breath, hear and tell of some new thing. Nearly everyone thinks the times are out of joint, and his own experiences unique.

Education need not end in doubt, but it stops when a man stops doubting. To sit in the grandstand and watch one's self march by is as impossible as the proverbial lifting of ourselves by our boot-straps, and even the power Burns evoked. "O wad some power the giftie gie us, to see our-



WILLIAM D. JOHNSON, M.D.
President of the Medical Society of the State of New York

sels as ithers see us,"—is generally denied. But for the purposes of demonstration, or argument, some basis of fact must be assured, or allowed, even in a world of relativity, with realization that in its ultimate essence, nothing can be known.

Perhaps Man's distinction among the other animals is that of having created his own environment, mental, physical and moral, so that we, the heirs of all the ages, live in a man-made world "Which one portion would like to make into an Inferno as soon as possible, and the other, with no thought of presumption, into a Paradise at about the same time." We call one portion Devils, the other, Angels.

Evolution still rules the universe, however, and man is but a time phantasm, yet he thinketh himself real. It requires considerable stripping of the haberdashery we have acquired in the past to cancel out the non-essentials and arrive at the basic facts of our being. Healers of the sick, members of the maimed,—these have always been and always will be, "so long as man's body is subject to enmity and casualty." This division of labor did not arise at first from motives of pecuniary gain, but from the cosmic roots of love and self-sacrifice, which in turn had their origin in family life. Then some genius fiend organized the whole thing into a business, and Commercialism, our bane and antidote, was born. That the more ancient of the two motives is that of love and self-respect, is evident by the respect shown it by all, and the scorn in which the mere business man in medicine is held. Sentiment, like habit, becomes firmer with age. That idealism in medicine is the mainspring of what is best and most enduring, is also proven by the type of doctor chosen by young men when they select medicine as a career. I think it could be proven that for one who looks up to the financially successful, there are an hundred whose eyes are turned the other way. If we have established as a premise, "What is of most worth?—What has organized medicine to do about it?"—it would seem that this whole business of ours has been of slow growth without sudden or radical changes at any time. And if History is to be as it always has been, continuous and consistent,—even the events which we call "Revolutions," being only transient and inconsequental in perspective,—the most we can hope for is to hand on to the next relay of torch-bearers an unchanged idealism which, after all, is the only permanent part.

What we call the science of medicine is a most variable and unstable affair, constantly changing and constantly to change. We are justly proud of the body of scientific medicine of today. If we could live into the next generation, we would be ashamed of it. The very ardor with which we defend it shows our suspicion of it. Men fight for their beliefs, not for the things they are sure of.

Are the ideals of our profession in serious danger? I think not,—certainly not from anything within ourselves and only temporarily from with-

out. Kipling says: "Remember always that, except for the appliances we make, the rates at which we move ourselves and our possessions through space, and the words which we use, nothing in life changes." The utmost any generation can do is to rebaptize each spiritual or emotional rebirth in its own tongue. Then it goes to its grave, hot and bothered, because no new birth has been vouchsafed for its salvation or even its relief.

The particular demons we fear in our immediate future may be looked at with equanimity.

State medicine, which a generation or two will try, will fail for several reasons. The main ones are that it will lack the personal one of responsibility and reward, and that an intelligent body of men will not for long lend themselves to the programs of ambitious politicians to buy votes with their free services. That the lay organizations will guide us for long is also unthinkable. Propaganda making under the guise of education in already well understood by the rank and file of our profession, and one has but to turn to St. Paul's first epistle to the Corinthians, Chapter XIII, for a definition of Charity, from which I quote:

"Charity suffereth long and is kind.
Charity envieth not.
Charity vaunteth not itself, is not puffed up;
Doth not behave itself unseemly, seeketh not her own;
Is not easily provoked, thinketh not evil;
Rejoiceth not in iniquity, but rejoiceth in the truth."

The only charity that will endure is the kind that "Blessed him that gives and him that takes." Organized charity is almost a contradiction in terms, and bears the same relation to the real thing that prostitution does to love and marriage.

In the long view our faith in legislation to cure social evils is pathetic. Seventeen thousand new legislative enactments in our country in the last year proves Pope's couplet:

"Hope springs eternal in the human breast,
Man never is, but's always to be blest."

Self-restraint in legislative activities, letting measures "Cure in the wood" might seem wise.

After all, the only way the doctor has got by in the past and will in the future, will be by being the best possible doctor. We would all like the loaves and fishes,—the emoluments and haberdashery of success as the world estimates them, and also to have said over our deathbed the prayer said over the doctor of the old school! "Almighty God, dinna be hard on Weelum McClure, for he was never hard on onybody in Drumtochy,"—but, gentlemen, it can't be done.

"Lord, God of Hosts, be with us yet,
Lest we forget, Lest we forget."

EARLY TREATMENT OF THE CROSS-EYED CHILD

By E. K. HALLOCK, M.D., FREEPORT, N. Y.

In the animal kingdom, any individual who varies markedly from the pattern of his fellows is an object of abuse, derision, and persecution. This is no less true in the human family, and often more so during childhood. A child who is different in body from his fellows may suffer serious psychological harm, in addition to his physical abnormality. His whole adult life may be adversely affected. Among such abnormalities, and impossible to conceal, is the condition of squint, or strabismus.

It has frequently been noted that children with errors of the muscle balance of the eyes are often first brought to the oculist for advice much too late. In many cases, the time has already passed when all of the damage can be undone. The parents are not always at fault. Poor advice is often responsible. The mother is told, and wants very much to believe, that the condition is temporary, and that the child will outgrow it. By the time that she is convinced this is not so, much damage may have been done. Errors of muscle balance lead to serious results, and they should be corrected early in life.

The normal condition of muscle balance is present when, with the gaze fixed on infinity:

1. The eye is in focus, with the ciliary muscle at rest;
2. The axes of the eyes are parallel;
3. With the gaze fixed on nearer objects, the amount of accommodation required is proper for the distance between the object and the eye;
4. The amount of convergence is just sufficient to direct each eye to the object looked at.

Normally, these two functions—accommodation and convergence—are concomitant. For distance, the eyes do not focus actively, and there is no active convergence; for near objects, each eye must focus, and each eye turn in, the proper amount for clear sight. This is binocular fixation; and as a result of it, we acquire binocular single vision—that is, although each eye separately sees the object, still with the two eyes together, only one object is seen. Binocular single vision depends upon the action of the fusion center, the existence of which is inferred. It has not been located anatomically.

The child is not born with an already developed habit of binocular fixation. He learns through experience, by a sort of trial and error method, that vision is clearer when rays of light from the object strike the macula, or most sensitive spot of

the retina. There is at first a pendulum-like oscillation of the eyes, until finally each is brought to rest with the macula in the proper position. Thus binocular fixation is developed as a habit in the earlier months of life. In these first months, therefore, there need be no alarm felt if an occasional deviation is noticed. However, should such deviation last more than a few minutes at a time, advice should be sought; for if binocular fixation does not exist, then single binocular vision is not possible, and the great advantage of stereoscopic sight is lost.

Many faults of muscle balance come from refractive errors, or improper focus of the eye. In such cases, our ideal condition of balance is not present. The amount of focussing effort needed is not proper for the distance between the object and the eye. If the child is far-sighted, he must accommodate for distance, although the normal eye is at rest for distance. But the brain does not realize that the eye is trying to look at a distant object. Because the eye has to focus for a distant object as it should only for an object lying nearby, the brain considers that the object looked at lies nearer to the eye than it really does; and hence the brain converges both eyes to meet at a too-close point, where the object is falsely considered to be located. Now, of course, neither eye is directed at the object; if he is to see it clearly, the child must cause one eye to fix, and let the other eye do all the deviating. His dilemma is this: if each eye is to fix, the object must be out of focus; if the object is to be in focus, it can be seen with only one eye at a time. The child is forced to choose between clear sight with one eye only, or blurred sight with two eyes. The one-eyed sight is always chosen. Usually the better eye is used for fixation, and the other is allowed to deviate. It may then seem that only one eye is crossed, but the condition is essentially binocular, and the angle between the eyes remains the same. In some cases either eye may fix at will; and the condition is then known as an alternating convergence.

If single vision with two eyes depends upon fixation with each eye simultaneously, the reverse is equally true: if a seeing eye deviates, there must be double vision, unless suppression of sight takes place. The sight of the deviating eye is thus a hindrance, not a help. The child would be better off without it. And, too, the more the eye deviates, the better, for the false image is thus moved further away from the true, and the diplopia becomes less annoying. The tendency, then, is always to encourage the eye to cross more and more, and to suppress the vision of the crossing eye more and more. At first, the amount of crossing is greater for near than for distance, as the amount of accommodation is greater; but the child can habituate himself to the condition more easily if the deviation remains constant; and the excessive convergence is encouraged for distance also, and a true convergent strabismus develops. And so the course of events runs: accommodation is needed for distance, when the eye should be in focus while at rest; each eye is forced to turn in, in proportion to the amount of accommodation; the better eye is used for fixation; increased convergence and suppression of sight is encouraged in the deviating eye. Squint, then, is the final outcome of the endeavor to avoid double vision.

As in any other pathological condition, the aim of our treatment must be to remove the cause, and to repair the damage done. The basic factor, the refractive error, can only be corrected by giving the proper glass, after accurate objective measurement of the refraction, which can only be done with the ciliary muscle put at rest by atropin. No other determination of the refractive error is of value, as a large part of it may be covered up by the eye's spasm in its attempt to get clear vision. As the strain on the accommodation is thus removed, the tendency toward excessive convergence is also removed. Still, however, there is a subnormal vision in one eye; unless this is corrected, the better eye will continue to do the most of the work, and the poorer eye will not be used. Here as elsewhere, an atrophy of disuse takes place, and amblyopia results. Also, binocular fixation and fusion are more easily established when the sharpness of sight is about the same in each eye. So by building up, if possible, the sight in the poorer eye, the proper muscle balance is encouraged. This may be done by covering the good eye for a certain period each day; by using a special exercise glass,in which the lens before the good eye is frosted; or by continuing the use of atropin once or twice a week in the good eye. in order to force the other eye into activity. The treatment may be somewhat uncomfortable for a time, but it should be persistent. It should be started early in life, as the chance of material improvement decreases rapidly after the age of six or eight. Our first thought should not be operation to straighten the eyes. It is only when no improvement in sight, or lessening of the convergence has followed the use of the proper glass and orthoptic exercises for at least a year, that operation should be undertaken. It is then indicated, first to make possible binocular single vision, which as we have seen, depends on fixation with the two eyes simultaneously; and second, to relieve the child of the psychological burden which he carries. This is true, even in cases where there is but little hope of any real increase in sight. Operation does not remove the necessity for glasses, as it does not correct the refractive error. If the proper glass is not worn, the convergence frequently recurs after the operation.

Unfortunately, often we do not see these children early enough in life. The mother sometimes tells us just what caused the trouble,—the child had mumps, or it was frightened, or it fell. She

has allowed the condition to go on for several years, sometimes because she has been told the child will outgrow it, and sometimes because she fears she will be told that the child must wear glasses. As a matter of fact, the alleged cause has little to do with the matter. At the most, it merely determines the time of onset of a condition which would occur anyway. The time of a child's life at which he falls out of trees, or has measles or mumps, is about the same time that he begins to call on his eyes for close work, and the focussing strain becomes significant. (The external rectus paralysis which may follow diphtheria is quite another matter. This causes a paralytic squint, which must not be confused with the accommodative type.) As to outgrowing it, this may happen, due to a broadening of the face, but it is a cosmetic cure only, and the eye still remains much subnormal in vision.

The condition in alternating strabismus is somewhat different; glasses alone generally will not suffice. Due to the alternate use, vision is often equal in the two eyes; operation is indicated earlier.

There is also a non-accommodative strabismus, in which the deviation may be the result of, and not the cause of, the poor vision. Hemorrhages at the macula from birth trauma, or other causes, may have reduced sight to such a degree that there is no impulse toward binocular fixation, and so the eye is allowed to deviate. There may even be an actual aversion to binocular fusion, supposedly due to a lack of the normal fusion center. In such cases, the eyes may be in perfect focus, and so nothing can be expected from the use of glasses. Operation is indicated in these children for cosmetic reasons even if the vision is not markedly improved.

ABSCESS OF THE PREGNANT UTERUS; RUPTURE DURING LABOR

By ROBERT LOWELL WOOD, M.D., F.A.C.S., BROOKLYN, N. Y.

MRS. W., aged 30, para one, was first seen on July 27, 1929, at my office, at which time she was six weeks along in her second pregnancy, the last period being on June 11th. She menstruated first at fourteen, every twenty-eighth day, lasting two days only, without pain. She had had a spontaneous dry labor six years ago, the baby weighing eight pounds and twelve ounces, in good condition, and nursed by the mother. A laceration of the perineum had been repaired with good result.

The patient's only illness or indisposition of significance was a pain in her right lower abdomen, which had persisted for five years and which was diagnosed as chronic appendicitis.

Her membranes ruptured spontaneously on February 25, 1930, and she entered the Peck Memorial Hospital, although she had but slight, infrequent pains. On the morning of the 26th, as she was found to be fully dilated, and the head was on the perineum, in the L.O.A. position, with the fetal heart loud and regular, a normal baby was easily delivered with low forceps. The placenta came away spontaneously in ten minutes. Bleeding was slight in amount, and two sutures were placed in the old perineal scar for a tear of the mucous membrane. One ampoule of gynergen was given after the delivery of the placenta, and the patient placed in bed apparently in good condition.

One-half hour after the delivery the patient suddenly began to have agonizing pain in the right lower quadrant. She was pale, her pulse was imperceptible, with blood pressure 60 systolic, her rectal temperature was 99.4 her abdomen was distended and exquisitely tender. A blood count showed 2,100,000 red cells, 10,000 white cells, blood type 2. A blood donor was secured in twenty minutes, and the patient was given 500 cc. of blood by the Scannell method, bringing her pressure up to 110. She was conscious at this time, though 1/6 grain of morphine had been given at her first collapse.

The patient was now transferred to the operating table, and the abdomen opened by a midline incision, when free pus exuded. The appendix and the right tube and ovary were normal, but on the posterior surface of the uterus, just below the right cornu, and behind the round ligament, was a ruptured abscess cavity the size of a walnut, which did not communicate with the cavity of the uterus, as was demonstrated by finger and by probe. Suction drainage of the abdomen was begun, and two Penrose drains were inserted into the cavity and into the cul-de-sac, and the abdomen was partly closed. The patient came down from the operating room conscious, with a slight chill, was cyanotic, and her pulse was of better quality but rapid. Harris rectal instillation of saline was instituted. She was put in Fowler's position, and digifoline 15 minims every four hours, and morphine gr. 1/6 every four hours were given. The patient made a good recovery, and the baby throve on artificial feeding.

The probable diagnosis is that the posterior wall of the uterus had been the site of a small fibroid, which during the time she complained of pain, was undergoing degeneration, with progressive thinning of the wall over it, so that with the first hard contraction it ruptured and produced the shock which nearly caused her death.

N. Y. State J. M.
June 15, 1931

PRESENT STATUS OF THE DIAGNOSIS AND TREATMENT OF CANCER*

By WILLIAM P. HEALY, M.D., F.A.C.S., NEW YORK, N. Y.

WHEN one attempts to review any part of the field of medicine, in so far as the developments which have taken place in recent years are concerned, he is almost certain to obtain the impression that during the second half of the nineteenth century the efforts of clinicians and research workers in the medical sciences were devoted largely to the problems of etiology and diagnosis. As a result of these studies especially in bacteriology and pathology, as well as in clinical medicine, our knowledge of the etiologic factors in many of the most serious diseases then prevalent was greatly increased so that when the twentieth century opened it was but natural that the large store of accumulated facts should be turned to a practical purpose.

We find ourselves then in the twentieth century turning this knowledge into weapons for the treatment and prevention of disease. An era of prophylaxis and therapeutics in medicine has been inaugurated which is so successful that, as you will see later, the diseases which caused large numbers of deaths twenty-five and thirty years ago and during the latter part of the nineteenth century such as typhoid fever, tuberculosis, malarial fever and pneumonia have been largely done away with or reduced in frequency as well as mortality.

Our success in combating the contagious and infectious diseases especially from the standpoint of *prevention*, wonderful as it has been, nevertheless has been dimmed by our inability to control two other of the major ills affecting adult life especially. These are heart disease and cancer. Either of these diseases with little or no warning may strike down an apparently healthy adult in the prime of life.

It would seem that Hippocrates (B. C. 460 to 375) was responsible for the use of the term carcinoma as applied to malignant tumors showing progressive growth. Nevertheless the condition now spoken of as cancer was well known and was treated by excision and by caustic ointments a thousand years before the time of Hippocrates. One may then safely say that for thirty-five hundred years or thereabouts the disease known as cancer has been recognized, studied and treated. Throughout the greater part of that time it is true there was much confusion and difference of opinion regarding cancer, its nature and treatment.

Indeed it was only during the past one hundred years and in fact since the construction of the achromatic microscope in 1824 in Paris that the recognition and study of the cellular structure of malignant tumors became possible.

It was through such studies by Waldeyer and his associates that the origin of cancer from epithelial structures was established and the former belief that normal tissues could be transformed into cancer was destroyed. It was also demonstrated that cancer always has a local origin and the metastases or secondary tumors develop from cells arising in the primary tumor and which are then carried elsewhere in the body by the lymph or blood streams.

In this, the twentieth, our own century it is no exaggeration to say that as a result of the great impetus given to the study of cancer both by clinicians and laboratory research workers, as well as statisticians from life insurance companies and lay organizations that the urgent need for an *accurate follow up record over a period of years of* all cases seen and treated in order to determine beyond a reasonable doubt the value of different methods of treatment has been fully recognized and adequately met.

The establishment and maintenance of these follow-up systems has been an added financial burden upon the hospitals that maintain them, but it is felt that the information obtained and the benefit gained for the patients by prompt recognition of unfavorable symptoms often permitting curative measures to be instituted have fully justified the cost.

Moreover the insistence upon unbiased, honest and accurate follow-up records is the best safeguard and, at times, the only reliable check on the quack, the charlatan and the well meaning but mistaken enthusiast who claims or believes that he has a so-called cure for cancer. Such records to be of value must be complete and should consist of the usual clinical history, physical examination, pathologist's report on the microscopic study of the tumor itself or a biopsy specimen removed from the tumor, operation record, treatment chart showing dosage and method of application of radium and *x*-ray if used, or serum, vaccines, foreign proteins, caustic pastes or any other preparation or procedure designed to palliate or cure the disease.

It is only when records of this sort are available for study and review by the profession that the public can be protected from false claims or misguided enthusiasts.

There are few things more pathetic and more deserving of better treatment and protection than the relatives of a patient hopelessly ill with cancer as they reach out in all directions for a miracle to be performed and willingly, with childlike simplicity and confidence, become the prey of quacks. It is on the one hand a tribute to their love and affection for the patient but on the other hand it indicates a complete loss of balanced judgment and intelligent decision on their part.

To the man in the street the term cancer in-

*Read at the meeting of the Medical Society of the County of New York, on December 22, 1930.

dicates a single disease regardless of the organ involved, the histologic structure of the growth or its clinical features. To a certain extent this may also be said of the medical profession as a whole.

On the other hand, those who have had a fair experience in tumor therapy realize that the term cancer includes a vast group of malignant tumors varying greatly in their histologic characteristics, clinical behavior, and response to different forms of therapy, even when these tumors occur in the same organ.

Only a very moderate experience with cancers of the breast for instance will quickly impress one with the marked variation in their gross appearance, rate of growth, spread of metastases, appearance of ulceration and degree of malignancy in different cases and yet to the world at large they are all alike because the term cancer is applied to each. It would be as reasonable to regard all cases of appendicitis as of equal severity and to make no distinction between the mild case and one in which the appendix has ruptured and a severe infectious peritonitis has developed. And yet there is a certain similarity in that the end results in both diseases, cancer and appendicitis, are favorably influenced as you know by early diagnosis and prompt treatment while the disease is still limited to its original site.

One may ask, why is cancer? In other words what is its cause? Despite all that has been done to determine it I regret to say that we are still ignorant of the ultimate cause of cancer.

An important fact for us to realize is that there is absolutely no evidence that cancer is caused by a germ or a parasite. It is therefore not a contagious or an infectious disease and as physicians we know that there is no fear of its being transmitted from one person to another.

Whatever cancer is, it is something that has to do with the life or growth of the body cell. Cancer is regarded as a lawless or wild growth of body cells that has come about as a result of insult to the cell in the way of damage or injury or persistent irritation.

We know that certain organs or parts of the body seem to be predisposed to, or develop cancer more readily than others. When we study those organs in their relationship to the habits or normal activities of the individual we find that in most instances the site at which the disease first appears is one that is more or less subject to irritation or injury.

In the case of lip, tongue and mouth cancers they are prone to be associated with irritation from smoking or from the sharp edges of bad or broken teeth or poorly fitted plates. In the stomach and bowel the location of the growth is always more common at points subject to irritation and injury. Likewise in the uterus, cancer is extremely common in the neck of the womb and we feel that this is, in many instances, a result of neglected lacerations caused by childbirth. Actually about 90 to 95 per cent of all cases of cancer of the neck of the womb occur in women who have borne children. This is far too great a penalty to pay for the great privilege of motherhood and it is the duty and obligation of the medical profession, especially those in general practice and those devoting themselves to obstetrics and gynecology, to see that all lesions of the cervix whether inflammatory or traumatic are promptly treated and cured, to the end that in so far as it is in our power those women, the mothers, may be protected from this disease.

On the other hand this cannot be done without full cooperation on the part of the women themselves and this means regular, annual, periodical, thorough, health examinations.

Because of the extraordinary efforts made in recent years to educate the public regarding the occurrence of cancer and in view of the large sums of money expended by various organizations, in particular the American Society for the Control of Cancer, with the purpose of impressing upon the public the necessity and importance of seeking medical advice promptly in the presence of certain symptoms or conditions suggestive of cancer, and because of the intensive campaigns conducted by county medical societies in the desire to develop a greater interest in periodical medical examinations of all individuals; the question has arisen as to whether or not the medical profession as a whole is prepared to make an early diagnosis of cancer and to institute proper therapy for the lesion when so recognized. Last year Ewing and others, after a careful survey of this question as it affects physicians and the medical service available in this country for the early diagnosis and treatment of cancer, concluded that the medical profession as a whole was not ready to handle the problem.

More recently Wood in a very frank and enlightening review of the question of diagnosis of cancer emphasizes the extreme difficulties which beset the physician in his efforts to make an early and correct diagnosis of cancer.

These difficulties are present not only in the obscure cases of internal cancer which lack clinical symptoms in the early stages and are only recognized as a rule when too far advanced for successful treatment but also in lesions occurring on the surface of the body, in the mouth, the breast and the neck of the womb. In these locations the lesion may be seen and felt and yet the diagnosis in an early stage is often impossible until a portion of the growth has been removed and studied by a tissue pathologist.

On the whole those who tend to criticize physicians for not recognizing cancer in its earliest stages should realize that the disease does not carry a label nor has it any pathognomonic clinical sign or symptom which will permit its recognition in its inception even by the most expert, except

by accident or good fortune, without biopsy and the cooperation of the pathologist.

As a matter of fact many of the patients who present themselves for examination, suffering from a fully established incurable cancer have lost no weight or strength and seem to be otherwise in good health, all of which is confusing and puzzling to the patient's family and friends and sometimes even deceives the physician.

This difficulty in making an exact clinical diagnosis in the earlier stages of the disease does not however excuse the physician from the necessity of making a careful and thorough general physical examination in order to check up the underlying reason for definite symptoms presented by the patient. Unfortunately from time to time patients presenting serious and urgent symptoms see several physicians over a period of weeks or months before they meet with one who makes even a physical examination in an effort to reach a diagnosis. Under such conditions of professional neglect if the patient should be suffering from cancer the chance of effecting a cure is greatly diminished if not entirely lost.

Since it is difficult to make an early diagnosis of cancer at a time when a cure by operation or radiation therapy, either alone or combined, may be expected and as the majority of the cases when seen are suffering from advanced cancer, and a cure by any method is extremely doubtful or improbable, an attitude of pessimism regarding the entire cancer situation has arisen in the minds of both the profession and the public. This attitude we believe is not entirely justified by the facts.

While there is no gainsaying the fact that the earlier the diagnosis the greater the probability of cure regardless of the organ in which the tumor is located, it is nevertheless true since the establishment in recent years of radiation therapy upon a firm foundation that even advanced cases of cancer beyond the reach of surgery or those having recurred after operation have been controlled, made to disappear, and have remained well under irradiation with radium and *x*-ray.

We have come to realize that tumors with certain histological characteristics are radiosensitive and that others with different histological characteristics are radioresistant. In general it may be said that the greater the degree of cellular anaplasia and tendency to lymphatic invasion presented by the tumor the more malignant it will be and the greater will be its radiosensitivity. It will thus be seen that the very conditions which make a bad prognosis in surgery, give a better prognosis when radiation therapy is the method of treatment employed.

This so-called radiosensitivity of tumor tissues is an important and extraordinary reaction. A few weeks ago a lady 60 to 65 years old applied to the Memorial Hospital for treatment, she was found to be suffering from a carcinoma of the vagina which extended from the cervix to the introitus, arose from the anterior vaginal wall and completely blocked the vaginal canal. A diagnosis of cancer too extensive to hope for cure was made. With the thought and intention of doing something to palliate the disease and retard its growth the patient was referred to the roentgen therapy department where she was given what is known as a pelvic cycle consisting of four treatments with the high voltage machine.

To our astonishment in three weeks from the time treatment was started the entire growth had disappeared and six more weeks have now elapsed and there is no indication of its return.

So important do we regard this question of radiosensitivity that the pathologist today makes, in addition to the usual tissue diagnosis as heretofore, an effort to grade the tumor according to the probable degree of radiosensitivity as indicated by the histologic characteristics of the stroma and the cells.

It is rather generally agreed that in the treatment of carcinoma of the cervix radiation therapy has given such satisfactory results both from the standpoint of palliation in advanced cases to five year cures in favorable cases that today hysterectomy is seldom advised for this lesion. This is especially true since the only form of hysterectomy worthy of attempting would be the so-called Wertheim procedure and the operative mortality is so high, 20 to 25 per cent, in the experience of the average surgeon, and the postoperative complications are so distressing that surgeons have very little enthusiasm for the procedure.

The explanation for the satisfactory results following treatment with radium and *x*-ray is due, we believe, to the high degree of radiosensitivity in cervical cancer.

We are learning that to a certain extent radiation therapy may be used to advantage in cancer of the uterine body.

Some of these cases do well with radium alone and others do better if radiation therapy precedes hysterectomy.

These differences are due to variations in radiation sensitivity of the tumor and this in turn depends upon differences in histologic structure. It is thus seen that we tend to become more and more dependent upon the opinion of the tissue pathologist for both the method of treatment and the ultimate prognosis.

From the clinical standpoint it is extremely gratifying to note the increased number of patients referred by their family physicians for opinions on suspicious looking lesions or with symptoms suggestive of beginning carcinoma. From time to time an early cancer is thus recognized but most of the cases fortunately have only what may be termed precancerous lesions. We feel that it is by such watchfulness on the part of the medical profession in clearing up lesions

of the socalled precancerous type that the incidence of cancer can be reduced. Otherwise all the money spent in publicity does nothing to reduce the number of cancer cases or the development of other cases of cancer. It merely tends to prolong the lives of those who already have cancer by encouraging them to seek medical advice sooner and under those conditions a certain number will be cured because of earlier diagnosis.

It is on the other hand extremely important for both the profession and the public to know that cancer, treated early enough is curable. It is no stigma for a patient to develop cancer. Cured cancer patients should be willing to tell the world that they have been cured and thus help to reduce the pessimism that is far too prevalent. There are in this great city today many people who have had cancer and have been cured.

It is on the whole unfortunate that the friends and relatives of cured cancer cases always subsequently conceal the nature of the ailment. The public hears only of the hopeless cases, of those that die, and never a word about those that have been cured.

If I may here sum up briefly some of the thoughts touched upon.

1. An early clinical diagnosis of cancer is largely a speculative matter.

2. Biopsy with microscopic examination of tissue by a competent pathologist is essential for exact diagnosis in the early lesion.

3. To quote W. Sampson Handley—The detection of early cancer is not a one-man job. It may require the cooperation of the patient, the family doctor, the specialist, and the pathologist. It may, in some cases, be impossible even then.

4. If we are to reduce the incidence of cancer, physicians must be on the watch for socalled precancerous conditions as these are usually curable.

5. Much more is being done today to cure and to alleviate cancer than is realized by the profession and the public. Therefore, the usual attitude of pessimism which seems to be associated with the diagnosis of cancer is not altogether justifiable.

6. The responsibility of seeking medical advice promptly for any and all symptoms still rests with the public.

7. The only forms of treatment that have stood the test of time are those dependent upon surgical removal of the lesion with the knife or cautery and treatment with radium and *x-ray*.

THE RELATION OF DIGESTIVE ANOMALIES TO DIGESTIVE NEUROSES*

By JOHN L. KANTOR, M.D., NEW YORK, N. Y.

Introductory

PROPOSITION I. Digestive anomalies explain in part the mechanism of some of the symptoms commonly encountered in functional digestive disorders.

Definitions: A digestive *neurosis* is a disorder of function in the absence of a demonstrable lesion in the end organs of digestion. A *lesion* is an *acquired*, localized alteration of tissue resulting from trauma, infection, vascular disease, neoplasm, or other cause. An *anomaly* is a congenital variation from the usual in the form or structure of an organ.

Digestive Neuroses

In the digestive neuroses the symptoms are assumed to result from disturbances in the nervous control of the digestive function. These disturbances may be classified as follows:

1. A congential generalized autonomic instability or imbalance. This is sometimes described as vagotonia, spasmophilia, or sympathicotonia, depending upon which division of the involuntary nervous system assumes a relative or temporary preponderance. The great mass of neurotics and neurasthenics belong in this group.

2. An acquired generalized autonomic instability. This is probably caused by intoxications which may be either exogenous or endogenous in origin. Among the exogenous nerve poisons are alcohol, nicotin, caffein, lead, narcotics, and possibly vitamin deficiency, in susceptible individuals. Endogenous toxins may be bacterial, endocrine, or metabolic in origin.

3. An acquired localized autonomic instability. Here the related nerve pathways remain "sensitized" after the disappearance of a local organic disorder, an example being a residual post-dysenteric colonic irritability.

4. Reflex digestive disorders resulting from disease in other systems. Syphilis, tuberculosis, nephrolithiasis, and asthma are well-known illustrations.

5. Organic disease of the nervous system. Important nerve centers or pathways may be involved, either directly, by tumors, infections (poliomyelitis) or degenerations (multiple sclerosis), or secondarily, by pressure of inflammatory exudate or scar tissue.

6. Psychasthenia, in which the patient suffers from a disorder of the psychic component of digestion. This means that his symptoms depend on his feelings, moods, or emotions, or else on certain perceptions or ideas if these have, by past

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experience, assumed the form of conditioned reflexes. In this and the next two forms of functional disorders the pathways linking the higher brain centers with the autonomic system have not yet been fully demonstrated by neuroanatomists.

7. The psychoneuroses, chief of which are the anxiety neuroses. The latter develop in sensitive individuals in the face of insoluble personal situations. Other psychoneuroses are nosophobia (fear of disease), melancholia, and hysteria, a striking form of the latter being anorexia nervosa.

8. The psychoses, such as dementia precox, circular mania, and the paranoid states.

The most common symptoms of a functional character as encountered in the practice of gastroenterology are, in the order of their frequency:

Constipation	in 46 per cent. of cases
Flatulence	in 33 per cent. of cases
Vomiting	in 20 per cent. of cases
Headache	in 17 per cent. of cases

Digestive Anomalies

Anomalies represent points of weakness in the body structure. These weak spots predispose the subject to the development of symptoms. Anomalies vary in degree from those incompatible with life to those compatible with life and health except under unusual circumstances.

The symptoms produced by anomalies are extremely variable in their occurrence. The same abnormality may cause symptoms in one subject and not in another; or in the same subject, the symptoms may appear at one time and not at another. The reason for this peculiarity is to be found in the fact that the body as a whole compensates for the presence of a congenital defect. It is only when this compensation breaks that symptoms actually develop. The break in compensation may result from any of the following causes:

1. Mechanical factors. Thus the mere presence of a Meckel's diverticulum causes no discomfort, but if a loop of intestine becomes twisted about the sac, strangulation occurs.

2. Infection. A diverticulum of the colon (partly congenital in origin) is asymptomatic, but if infection is superadded, diverticulitis results.

3. Juxtaposition of two or more anomalies. The combination of a Meckel's diverticulum (primary anomaly) plus contained ectopic gastric mucosa (secondary anomaly) may lead to ulceration, hemorrhage or perforation just as in simple gastric ulcer.

4. Old age and increasing asthenia. This factor is particularly prominent in the case of all hernias and herniations (i.e. diverticula of esophagus, duodenum, colon), in which the weak spots exist from birth but the fully developed condition does not occur until later in life.

5. Associated functional instability. A redundant colon may exist for years without symptoms until a "nervous breakdown" brings out the characteristic rebellious constipation.

These considerations enable us to amplify Proposition I in the following form:

Proposition II. When a neurosis and an anomaly coexist, the former supplies the break in the compensation, the latter furnishes the anatomical mechanism (*anlage*) for the development of symptoms. Or, in other words, the anomaly expresses the specific somatic component of the clinical picture: it grooves the way for the particular symptoms presented.

During the past eight years my associates and I have been studying the anomalies of the digestive tract with particular attention to their clinical significance in a large group of private patients complaining of digestive disorders. Although some of these malformations are relatively rare, others are so common and so intimately associated with the neuroses that we believe them to play a significant role in the practice of every day medicine. From our material, the following illustrations of the above theories are selected for presentation.

Eventration of the Diaphragm

This is a rather rare anomaly—it was found in less than 1 per cent. of over 1800 x-rayed patients. The high position of the diaphragm in these cases is due to diminution or absence of muscular tissue in this organ. The left side is usually affected. The characteristic symptoms, when these are present, are palpitation, precordial or chest distress, belching and flatulence. These are all due to the imprisonment of air in the stomach above the level of the cardia, and in some instances, to imprisoned gas in the distended splenic flexure. As in all cases associated with gas distress the symptoms are not constant but result especially from fatigue, or excessive nervous or emotional strain. The following case is particularly interesting:

A nervous and sensitive young married man was brought to consultation by his wife who objected to his peculiar behavior after meals. As soon as the repast was over he would repeatedly bend over to his left side, accompanying each such gesture with violent efforts at belching. These antics were attributed by his spouse to his neurotic makeup. Fluoroscopic examination quickly revealed the left sided diaphragmatic eventration and proved that the instinctive body bending was in reality a clever device to bring the imprisoned stomach bubble below the level of esophageal entry.

Duodenal Bands

Description. These structures represent the unabsorbed free edge of the lesser omentum. As a result the second portion of the duodenum is pulled over to the right and fixed to the liver, gall bladder or colon. In this way a sharp angulation is produced between the fixed upper and the free

lower portion of the descending duodenum This malformation acts as a point of irritation and is manifested roentgenologically by transient stasis or actual retroperistalsis A low cecum (see below) is associated with these cases twice as often as in the unselected series (36 vs 18%)

Incidence Eighty-five cases of duodenal bands were encountered in 1754 x-rayed subjects, an incidence of almost 5 per cent Women predominated over men in the ratio of 4 to 1, and asthenics over sthenics in the proportion of almost 7 to 1.

Symptoms A definite clinical picture (so called duodenal migraine), seems to be associated with the presence of duodenal bands The characteristic symptoms in the order of their frequency are Nausea (44%), headache (44%), vomiting (41%), frequently of bile, epigastric pain not explained by organic disease (25%), and vertigo (20%). The frequency of each of these symptoms far exceeds its incidence in our control series of 3,000 unselected cases.

Explanation of Symptoms Experimental evidence seems to be unanimous as to the extreme sensitiveness of the duodenum to stimuli It is well known that a short stasis high in the alimentary tube is far more disturbing than a longer block lower down in the canal In the case under discussion the duodenal irritation or stasis may arise from a local mechanism due to pressure of the bands themselves, or from a local plus a remote mechanism in which the bands fix the duodenum and thus render it more susceptible to dragging arising from the following structures

1 A mesenterialized right colon (right coloptosis)
2 A low cecum especially if cecal stasis is present
3 A congenitally short mesentery of the small intestine.
4 Atypical origin of the superior mesenteric artery or its branches

The dragging mentioned above is effective only in the erect posture and is mediated through the following structures which cross the second and third portions of the duodenum

1 The transverse mesocolon
2 The right colic artery
3 The middle colic artery
4 The superior mesenteric artery
5 The root of the mesentery of the small intestine

Such is the probable anatomical substrate in cases of duodenal bands As with other forms of migraine the symptoms are notoriously influenced in their appearance and intensity by the degree of nervous instability manifested by the patient

The Redundant Colon

Description The redundant colon is one that is too long for the individual who owns it The distal colon is usually affected The most common form of redundancy is a long central pelvic loop Other varieties are the "straight efferent loop' and the 'pelvic loop to the right" Although the form of the loop is usually constant in each individual, changes in configuration occasionally occur

For *diagnosis*, both the opaque meal and the opaque enema are essential The former method demonstrates the disturbed physiology, the latter visualizes the actual abnormality in structure The stomach is often displaced to the right and distorted (so called cascade stomach) by the distended loops of redundant colon

Incidence Redundant colons were encountered in 258 of 1614 x-rayed patients, an incidence of 16 per cent Males and females were about equally affected and the distribution as to habitus was also approximately equal, the sthenics predominating but slightly over the asthenics

Symptoms Constipation, the outstanding manifestation of this anomaly, occurred in 69 per cent of cases as compared with a basic incidence of 46 per cent The costiveness is usually, though not invariably, manifested from birth Despite the extreme degree of colonic stasis—a week often intervenes between bowel movements—there is surprisingly little general disturbance as expressed by nausea, vomiting or headaches

Gas distress, present in about the same proportion of cases as is constipation, takes the form of flatulence with localized distention in the left abdomen corresponding precisely to the region of the redundancy Pain is common and is due to spasm and local colitis superimposed on the redundancy It is particularly prominent in those addicted to the use of cathartics and enemas The painful spasms may suggest diverticulitis or cancer of the colon, heart or gall bladder disease or even so called chronic appendicitis

It is important to realize that volvulus can occur only in cases of redundant colon We have the impression that this accident is the direct result of atypical peristalsis produced by violent efforts at purgation

Relation of redundant colon to neuroses The interplay of the functional and structural elements in the production of symptoms is well illustrated by the following instance

The patient was a stocky young mother constipated from childhood Three years ago her constipation became much worse and abdominal pains and gas distention came on Two months ago all her symptoms disappeared completely for six weeks, only to return in full force at the expiration of this period Examination showed a redundant colon, but why this variability in symptoms? Further investigation gave the answer Three years ago the sudden death of her sister furnished the emotional shock for the initial aggravation of her underlying disability Two months ago she skipped a menstrual period and was overjoyed at thinking herself pregnant as she

ardently desired a second baby. When her menses returned after two months' absence her keen disappointment brought on a recurrence of symptoms.

The Low Cecum

Description. This anomaly results from an excess in the normal embryologic process of cecal descent. There is an actual overgrowth of the entire ceco-colon as a result of which the cecum passes beyond its normal point of arrest in the middle of the right iliac fossa and reaches well down into the lower half of the true pelvis. The diagnosis of this anomaly is readily made 9 hours after the administration of a standard opaque meal. Duodenal bands were associated in about eleven per cent. of our cases which is twice their average incidence.

Incidence. The low cecum is the most common anomaly of the digestive tract. It was encountered in 18 per cent. of our cases and occurred two and one-half times more often in women than in men and four times more often in asthenics than in sthenics.

The *symptomatology,* we believe, offers a characteristic clinical picture. Vomiting, which occurs more than twice as often as in unselected cases (43 vs. 20%), is habitual and easy. Attacks are brought on by fatigue, dietary indiscretion, excitement, menstruation, and headache. Vomiting "equivalents" are represented by nausea and car or train sickness, which indeed, often accompany the full-blown symptom. Headaches occur more than one and one-half times as often as in the general series (38 vs. 23%). They are often of the migraine type, may be accompanied by nausea and vomiting, and are either associated with or replaced by vertigo in some cases.

For one reason or another, low cecum patients are frequently operated on for appendicitis. Our records show that this operation has been performed in this particular group more often than in any other we have investigated, actually one and one-half times as often as in the unselected series. On the other hand a "pus" appendix was revealed less often than in any other class of patients. This leads us to conclude that low cecum bearers are often appendicectomized with little apparent justification. This is undoubtedly due to the fact that this condition has been frequently unrecognized and misinterpreted, and that a wrong surgical therapy has been applied for its relief.

Explanation of Symptoms in Low Cecum. Two theories are available. According to the first the cause of the disturbance resides in the cecum. According to the other the symptoms are mediated, surprisingly perhaps, through the duodenum. The evidence seems to be all against the first hypothesis for it is only when cecal stasis occurs in a low cecum that there is increased headache and vomiting. Cecal stasis in normal or high ceca does not seem to produce this result. It follows therefore that the symptoms cannot be due to the cecal stasis as such because if this were the case the stasis should be equally operative no matter where the cecum is located.

According to the duodenal hypothesis the symptoms are the result of intermittent mild duodenal blocks produced by the occasional drag of the distended low cecum, the actual pressure on the duodenum being mediated through the structures which cross its second and third portions as already enumerated. We believe that this theory, though perhaps not completely proven as yet, is strongly supported by embryologic data as well as by the results of surgical observations in cases of advanced chronic duodenal obstruction. Lack of space forbids a detailed presentation of the available evidence but it may be mentioned in passing that in the severe cases the obstruction has actually been relieved by surgical procedures of one sort or another directed to relieve the drag of the offending right colon. It need hardly be added that in the mild cases with which we are here dealing, medical treatment is ordinarily efficacious.

From the foregoing considerations it becomes evident that the syndrome presented by the low cecum is rather complex in its nature. On the anatomical side we have the basic overdescent of the cecum. To this is added a secondary factor, namely cecal or ceco-colic stasis. Now inasmuch as the stasis is essentially the result of colonic malfunction it becomes clear how intimate must be the relation between functional and psychic factors on the one hand, and the anatomical substrate—the anomaly—on the other. This explanation appears all the more reasonable when we recall that the asthenic women who so largely comprise this group are a particularly sensitive and nervously unstable class, all of whose complaints are either initiated or aggravated by strain, fatigue, and emotional excitement.

Summary

1. According to current notions, the symptoms of gastro-intestinal neuroses are attributed entirely to disturbances in the autonomic nervous control of digestion.

2. Stress is laid on the *absence of an acquired lesion* in the end organs of digestion.

3. The possible *coexistence of a congenital digestive anomaly* and its possible role in symptom production is generally overlooked.

4. According to the evidence here presented the neurosis furnishes the underlying functional instability—the break in compensation—and the anomaly, when present, expresses the actual digestive symptomatology of the clinical picture.

MEDICINE AND THE PRESENT SOCIAL TREND

By NELSON KINGSBURY BENTON, M D, NEW YORK, N Y

THIS is a new world, we are told, and we may believe it All about us are the signs of revolution or rapid evolution The world is topsy-turvy and our ideas are in a state of utter confusion Even the children pity their elders for their want of sophistication, and snootily boast the revolt of youth Possibly the early and judicious use of the old fashioned slipper might have done much to curb this revolt

This is the day of criticism, mean, petty and destructive We are to have no heros They have all been dragged from their pedestals, and left sprawling in the mire Washington, Jefferson, Hamilton, Daniel Webster and finally Abraham Lincoln Even the legendary characters of the court of King Arthur or the warriors of ancient Greece, who have, through the ages, represented to childhood certain virtues and desirable qualities, are now reduced to the ridiculous This debunking has just one use, it brings the unknown writer into the light of day and increases his royalties enormously The use of lurid methods for the purpose of attracting attention and gaining a following has become widespread Obscure professors, theologians, child minded senators, ambitious and seemingly sentimental state executives are all seeking places in the sun through criticism of our present institutions and the promise to tear them down And they are succeeding Mob-psychology is doing its work We are all rushing pell-mell, knowing not where we are going nor what we are going to do when we get there And we care little so long as we escape the ignominy of being called conservative

It might be well to pause in our headlong rush, to glance at the band of pipers who are thus leading us like the rats of Hamelin Town We would find very few business men or skilled laborers, a large sprinkling of professional people, especially teachers, and a solid mass of unskilled workers, almost entirely of foreign extraction This last group fills many of our hospital beds, sends its money home to Europe in times of prosperity and in periods of depression sets up such a howl that we are at our wits end to appease it To satisfy the demands of a screeching minority, certain of our legislators are ready to not only rifle the public treasury, but to write into our laws many pages of socialistic doctrine The two programs that now appear most likely to deceive the public and win votes are those that have to do with the provision by the government of power and of health service The groups that have developed these fields to their present high state of efficiency can look for very little consideration at the hands of our manipulators of government When government does enter into competition with private enterprise medicine will be the first to feel the restraint of its cold, dead grasp The picture that presents itself is more drab, if possible, than that of the life of an army medical officer, with his book of army regulations as his principal reference and the writing of reports his chief duty In evidence that this is not pure imagery, there is said to be a bill at this time before the legislature of the Commonwealth of Massachusetts seeking the organization of medicine under State control, along the lines of the army medical corps The only enterprise of any size now operated by the government is the post office This is pointed to by the socialistically and communistically inclined as an example of successful endeavor It is true that we are able to send a letter thousands of miles for two cents, but who will have to make up the deficit for this year amounting to one hundred eighty million dollars? Moreover does anybody know of a more undernourished dejected-looking object than the average postman or postal clerk. And we have no reason for believing that we shall fare better if we permit ourselves to be forced into the employ of the State

Strangely enough, pressure is being brought to bear upon us from most unexpected quarters, by what is popularly known as "big business" and by philanthropies sustained and directed by the owners and leaders of this same big business And the radical among us point with glee at this anomalous situation

The adoption of the Workmen's Compensation Laws suddenly threw an immense burden upon the shoulders of industry To make matters worse, physicians generally shared the attitude of the public, and looked upon the corporations as dragons and monsters to be prodded and jabbed at any opportunity There is of course a limit to the ability of even a corporation to disgorge its seemingly enormous wealth, so they were compelled to enter the businesss of surgery in self protection And at this we cannot complain, for certain qualifications and equipment are needed in industrial surgery as well as a fair stabilization of costs In fact certain industries such as the railroads, steel plants and mines, have had their own surgeons for many years without exciting any unfavorable comment It has become necessary for most companies to require a superficial physical examination of applicants for employment, to discover any defects that might later be attributed to the occupation The examining and much of the surgery must be done by men who are interested in the welfare of the company and who are willing to subscribe to the policy pursued throughout industry of accepting a somewhat lower unit return for quantity production

There seems to be no great objection to this purely industrial portion of their program, but there has been a distinct inclination on the part

of corporations, to extend their efforts to the treatment of sickness not of occupational origin, some going so far as to treat not only their employees but also their families.

A notion of the magnitude of this tendency may be best conveyed by quoting from a paper on the subject "Medicine in Industry from the Standpoint of the Executive," written by the vice-president of a utility company employing twenty-five thousand persons. He says "Right here may I confess that there is financial motive in medical work with us. We do not do it from any eleemosynary sense; we do not carry paternalism quite that far. We are in industrial medicine, if that is what you want to call it, because we think it is profitable to ourselves and to others." Another passage reads "Right here may I say that we share the doubt that exists in general society as to how far industry should go in handling the medical affairs of its employees and we do not do so except in certain emergencies. On the other hand we are inclined to believe that possibly because the State continues to fail adequately to do its entire job in this respect, we may sometime be forced into extending the scope of our medical work." This statement, coming from an executive of an enterprise that is at this very time striving to avoid further government regulation seems strangely to indicate the thought that medicine must be the servant either of the State or of industry. This gives the Golden Rule a somewhat warped appearance.

Among the figures presented by this officer are ten thousand one hundred examinations for employment, four thousand six hundred voluntary examinations, two thousand one hundred X-ray and fluoroscopic examinations, seven thousand six hundred laboratory examinations and the handling of nine thousand cases of minor illness.

A passage in the paper says "Personal consultations with employees and families also numbered about six thousand eight hundred. For instance Johnny Doe, a lineman, who has been with us only a short time, who makes perhaps only thirty-five or forty dollars a week, and who has several children, hasn't much saved and perhaps has no family doctor. He thinks something is wrong with one of his children and he comes to the medical office and says, 'will you look the kid over.' We make it clear that we will be delighted to look the child over, not with any idea of prescribing medicine or treatment, but rather to determine the cause of the derangement and suggesting to the employee a certain form of treatment, that may be provided of course by a physician of his own selection. This is an important element of the work which is tremendously appreciated by the employee." This last statement is true and highly significant, and gives the most probable reason for the continuance and gradual extension of the work. It is the most effective and least expensive way that an employer has, of demonstrating his interest in the employees. And not only the forty dollar man but the one hundred and fifty dollar man is using this service. Nor is the service always a purely advisory one.

From this approximate idea of the work done by a single organization, one may, by multiplying many times, gain some conception of the vast amount of medicine and surgery, entirely beyond the requirements of the compensation act, that has been taken over by industry. This means not only an immense loss in revenue, but a diminishing prestige and an increasing potential danger of being submerged in a system in which we will be mere puppets.

To stay in our little corner sulkily complaining and nourishing a grudge toward the present system will get us nowhere. The concentration of wealth is necessary for the development of our resources and for the distribution of benefits and by taking a forthright attitude we need work neither under nor against industry but with it. To accomplish this we must have a program to offer. Before this can be done our house must be put in order by finding answers to the several problems that now disturb us.

It may be said that our problems resolve themselves into two groups, those of finance and those of ethics. Any equitable solution of the first, however, will render the second group non-existent. Our financial question, like all subjects of dispute, has two aspects; first that seen by the laity who believe that they are being exploited, and second that seen by our members who regard the rewards of service as very unsatisfactory when considered in the light of the large expenditure of time and money in preparation for this service. And it is true that it does involve many years of work and an investment that has recently been estimated at about twenty-eight thousand dollars. But we must not place to much importance on this item for there are many others who spend long years of preparation. Teaching for instance is an outstanding example of a profession offering a very low dividend return. The educational requirements of many vocations are approaching those of medicine.

We are the victims of the same evils that afflict industry; overproduction and unbalanced distribution. The first is being cared for by the sharp reduction in the number of medical schools and the elevation of their requirements. The problem of distribution on the other hand becomes more and more involved. It is of two kinds, first geographic distribution and second distribution among the various departments of the profession. One factor looms large as a cause of this unbalance. This is the lure of specialization which means less work,

greater remuneration and more leisure. The depletion of the country-side is perhaps only proportionate to, and a part of, the general shift of population from rural to urban life that has been under way since the introduction of steam-power and the beginning of the so-called industrial revolution. It is said that the tide is on the turn and that the increasing use and wide availability of electric power is tending to attract industry, and with it population, to the less congested areas. Thus, in the course of many years, may one phase of the difficulty be remedied. In the meantime there remains much to de done.

With most of us trying to be specialists and only about twenty per cent of the patients requiring special attention, it looks as if there would have to be a retreat to the field of general practice; and why not. Slogans and sayings often repeated come to be looked upon as indisputable facts. One of our most rigid fixations is the thought that no one mind can possibly comprehend and use the enormous amount of knowledge that has been brought to bear on the science of medicine. Therefore the field must be divided and redivided until we become as the physicians of Ancient Egypt and each treat a very limited anatomical area and have narrowly defined methods of treatment. It is true that we cannot have a first-hand knowledge of all the chemical and biological studies that are contributing so much to our work. Yet this is no reason why we cannot intelligently use their findings. Unlike the men of former times, we know little of botany and pharmacy. It cannot be said that on this account our use of drugs is inferior to theirs. We cannot read all the medical literature, and it is neither necessary nor desirable that we waste our time doing so. Owing to the insistence by institutions that their members publish papers as well as to the widespread individual desire for publicity, our journals are being packed with quantities of material that has little or no value. Most of us have time or could make time to read the worth-while articles by writers who have a background of experience or research.

Far from being made more complex and difficult by the added knowledge, the practice of medicine should have become more simple and decidedly more interesting. The graduate of twenty years ago, saw little in the practice of internal medicine to inspire him. He had a pharmacopœia full of drugs but had learned that only about seven of them had any value and that he must rely mainly upon the healing power of nature and a good nurse. He quite naturally turned to surgery which offered definite results. Then too there was something spectacular and heroic about surgery and an element of adventure, an attraction not altogether appreciated by the patient. And so we have pushed and crowded into surgery and the surgical specialties until it seems that we must almost outnumber the patients.

The new-type specialist requires no apprenticeship. He just steps out of his internship into a large, well-equipped, luxuriously-furnished office, with nurses and secretaries and other psychological accessories. This has all tended to put surgery on an extremely competitive basis, and has carried the overhead to a level so high, that we suspect that, in observing from these heights, it is difficult to detect the appendix that is not chronic, the tonsil that is not flooding the system with poison, or the pelvic organ that causes no headache.

The inflation is not so much a result of greed as it is a response to popular demand. These recent spendthrift years have brought to the top, great hordes of families, inexperienced and totally unprepared for the affluence that has been poured upon them by the turn of Fortune's Wheel. In the choice of a tailor or of a doctor they have no standard of value other than the dollar. High costs and much display are the outward and visible signs of intrinsic worth. Yet the ever increasing volume of criticism that is being directed at us, has as its principal theme, the excessive cost of medical care. Fee-splitting and unnecessary surgery hold a very secondary place in the complaint of the public. That these evils do exist is undeniable, and they are traceable back to the overcrowding of the specialties. General overproduction is now being largely corrected by the reduction in the number of medical schools. Further efforts at limitation could be accomplished, not so much through higher standards of scholarship, as through greater emphasis on character. Efforts are now in the making for the control of premature specialization through the establishment of special bodies to pass upon the fitness of candidates for particular specialties.

The family physician could again be made the foundation upon which the structure would stand. The crumbs that are now being offered him from the tables of the masters are in no way going to satisfy his appetite. To periodically see his patients and to route them on to others offers no particular thrill. The broad general training given in the schools and hospitals prepares him to carry on fully three quarters of the medical care and to do it in a more satisfactory manner than is possible under the much divided and standardized system toward which we appear to be aiming. The methods of Henry Ford are not applicable to the human economy.

We storm and rage at the rise and spread

of pay clinics and commercial laboratories but make no rational effort to meet the competition. All of this work would go to the so-called ethical laboratory if the fees were anywhere within the same range; but there is a real reason why the rank and file of family physicians are unwilling to spend, for a routine urinalysis for example, more than they ordinarily receive as an office fee. The disproportion is recognized by the patients themselves. Of course, if special consideration is asked it is usually granted, but often grudgingly and in such a manner as to make one feel like a petitioner for alms. All of this becomes more or less irksome and turns the practitioner to those who welcome his patronage. The growth of the clinics may also be largely attributed to the same cause. Innumerable upright, self-respecting citizens, to whom the word charity is altogether distasteful, are compelled to resort to the clinics, in fact many of them are referred there by the family physician because of his inability to bring the necessary investigation within reach of their purses. It could be done and with profit, by some of our own number, who really need the work. But there is an undercurrent of insincerity, false pride and assumed dignity that prevents us from putting our cards on the table and dealing openly with one another.

To many, this discussion of economic questions is uninteresting and almost sordid. They are little affected and find the present situation entirely satisfactory. But, far from being a minor question, of concern to only a small number of unfortunate and dissatisfied doctors, it is an important item in a broad national problem. We must find our own way out of the dilemma and not look to the government for much assistance, or we shall some day find that we have been made the entering wedge for a sweeping system of parentalism. We have seen it occur in one after another of the European Nations, even to Great Britain, the stronghold of conservatism. Let us not have too great a feeling of security. The most glaring example, of the ability of an earnest minority to suddenly impose its will upon us, was the adoption of the Eighteenth Amendment. We are approaching a fork in the road where we shall be called upon to decide whether we are to turn to the left toward the Russian Experiment, or to go straight ahead, carrying to its utmost state of perfection, our own American Experiment.

This is a capitalist nation. The hateful, envious and malicious accuse us of it. We admit it and have no reason for being ashamed of it. Therefore instead of trying to combine elements of two systems, that mix no better than oil and water, let us, in solving the problems of medicine, follow the usage of a benign capitalism, and adopt the principle of co-operation by agreement.

A striking example of the success of this method is furnished by the recent satisfactory arrangement arrived at between the Economic Committee and the insurance carriers, the latter conceding the right of the patient to choose his physician from among the members of the County Society, while the companies are to be given the support of the society in seeking a fair adjustment of costs.

That our organization and its officers are wide awake and fully aware of the need of political and economic thought and action is undoubted. Their most difficult task is to jostle the rest of us out of our state of inertia.

Among several laudable projects under way or in the making, the move for a central registry for dispensary patients promises to be the most immediately helpful. It will not only prevent misuse of the dispensary privilege and end reduplication of effort, but it may even be hoped that it will make unnecessary the maintenance of out-patient departments by some of the hospitals so that they can devote their efforts to the ward services. Patients requiring free treatment could be directed to the teaching clinics where they are needed for demonstration purposes. The teaching institutions could then discontinue their pay-clinics and the foundations would find an outlet for their funds through contributing to the support of these school clinics. This would centralize research and place it in the hands of the more competent.

Other suggested undertakings are bureaus for the collection of delinquent accounts, for credit rating and even an insurance organization and a finance corporation so that the public could pay for its health service as it does for other things; on the partial payment plan. All of these would seem to merit serious consideration. But they should be undertaken, not as independent medical enterprises, but in conjunction with existing commercial agencies having an unimpeachable reputation and a nationwide scope. Just as we resent the intrusion of corporations in our field, so should we avoid trespassing on their territory.

With these agencies in operation, it is conceivable that a system of rating for patients could be developed, based upon income and number of dependents. This could be arrived at through a frank questioning of the patient and confirmed, if necessary, by consulting the credit-rating bureau. A standard card could be devised to be filled in by the family physician for each of his patients, giving the rating and his own fee in the particular case. In addition the card might carry all facts that would

be useful to the collection bureau in case of necessity. When referring the patient for special investigation or treatment, a copy of this card would be mailed to the consultant who could then base his fee on the rating of the patient and on the fee of the family physician. If this became the universal practice, the public could in no way resent what might otherwise be looked upon as idle curiosity.

For all these reactionary jottings, one might easily be sent to Siberia. After all, any hope that we may have of arriving at a satisfactory settlement of our difficulties, depends upon unity of purpose and action. There may be some necessity for militant efforts. Some will say that we must not act like a labor union. But let us not be smothered by our own dignity; let us not be too proud to fight.

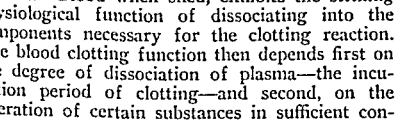
THE DETERMINATION OF BLOOD CLOTTING FUNCTION

By I. NEWTON KUGELMASS, M.D., NEW YORK, N. Y.

From the Department of Pediatric Research, Fifth Avenue Hospital, New York.

HEMORRHAGIC disorders manifested by the tendency to bleed or to clot are first recognized either by symptom or by routine clotting and bleeding time determinations. The clinical diagnosis of hemorrhagic problems is thus based on active expression of a disordered clotting function. An attempt has been made to recognize the early manifestations of potential bleeding or clotting tendencies. The clotting time determination of occasional significance in frank bleeding problems may nevertheless be normal though spontaneous bleeding be present or may be delayed though there be no hemorrhage. It is this paucity of procedure for the evaluation of the presence of a bleeding or clotting problem that simple methods have been developed for the determination of each of the individual factors involved in the clotting process.[1]

Physico-chemical studies reveal that blood plasma, so long as its constituents are not dissociated by extraneous forces, is a single complex in equilibrium, rather than a mixture of substances. Blood when shed, exhibits the striking physiological function of dissociating into the components necessary for the clotting reaction. The blood clotting function then depends first on the degree of dissociation of plasma—the incubation period of clotting—and second, on the liberation of certain substances in sufficient concentration to form a gel—the actual clotting. The dissociation of shed blood adequate to yield a clot is a determining pre-clot function. A graphic presentation of this process would be as follows:



The quantitative determination of the dissociated compounds involved in blood coagulation offers a basis for evaluating the clotting function of blood. And the value of each of the clotting substances of a patient gives us an insight into the nature of the clotting deficiency and hence the hemorrhagic status of the child. All of the determinations given below may be carried out in an hour.

1. *The Value of the Clotting Time:* The blood-clotting time is essential, but not conclusive for determining the hemorrhagic tendency of a patient. The clotting time may be normal though spontaneous bleeding be present, i.e., in purpura and jaundice, and clotting may be delayed although there be no hemorrhage.

The determination of the clotting time of blood passing through skin is no criterion of the true clotting status of blood and hence no indication of what might be expected in the operative field of other tissues. All injured tissues, as well as blood when shed, dissociate into substances conducive to their coagulation. This contributory tissue factor may be eliminated by taking the clotting time by vein puncture.

Clotting Time (Vein Puncture): Draw one cubic centimetre of blood, transfer to a test-tube eight millemetres in diameter (the greater the diameter of the tube, the slower the clotting). Place the tube in a water-bath at 38°. Coagulation is complete when the tube can be inverted without displacing the clot. (Normal, five to eight minutes.)

Clotting Time (Skin Puncture): Touch the end of a capillary tube (3 cm. x 0.6 mm.) to the first drop of blood issuing from a stab in the finger or ear. Place in the creases of the palm and cover by closing the hand to maintain a fairly uniform temperature (34°-35° C.). The clot initiation time (latent period) is the first visible departure from fluidity. The clot formation time is the first fibrin thread seen between the ends when the capillary is broken by bits every half minute. (Normal, three to five minutes.)

2. *Properties of Antithrombin:* Antithrombin is the substance maintaining the stability of the

plasma complex. When blood is shed the dissociation of the plasma produces clotting components which, by mass action, decrease the stabilizing effect of the antithrombin. Its content is directly proportional to the colloid stability of the blood. High antithrombin values indicate a hemorrhagic tendency and low values indicate accentuated coagulability of blood.

Antithrombin Index:[2] Blood obtained by skin puncture is drawn into a Wright tube, allowed to clot and then centrifuged, 0.1 cubic centimetre serum is drawn off into a small test-tube by means of a capillary pipette and heated in a water-bath at 60° C. for ten minutes. (Prothrombin is thus destroyed.) A control blood is carried through the same procedure. The heated serums are cooled and to each is added 0.3 cubic centimetre prepared thrombin solution. The tubes are placed in a water-bath at 38° C. The antithrombin index is the ratio of the clotting time of the patient's blood to that of the control.

TABLE I.

Antithrombin Test

Heated Serum	Thrombin	Fibrogen	Clotting time at 38°	
c.c.	c.c.	c.c.	Control	Patient
0.1	0.3	0.5	5 minutes	x

Incubation time, 15 minutes

Preparation of Fibrogen: Blood from the slaughterhouse is drawn into a vessel containing sufficient sodium citrate to give a final concentration of 0.5 per cent. The plasma is collected by centrifugation and to each twenty-five cubic centimetres are added four grams of sodium chloride. The precipitate fibrogen is collected, washed several times in 15 per cent sodium chloride containing 0.5 per cent sodium citrate.

Preparation of Thrombin: Twenty-five cubic centimetres of the plasma, collected by the above procedure, are precipitated by ten grams of ammonium sulphate and filtered by means of a Buchner suction funnel. The ammonium sulphate is expressed as completely as possible to obviate the necessity for dialysis. The precipitate containing the plasma prothrombin may be preserved for weeks as a moist paste. The thrombin solution is prepared by dissolving 0.25 grams of the paste in ten cubic centimetres of water, adding two cubic centimetres of a one per cent solution of $CaCl_26H_2O$. This thrombin solution remains active for several hours.

3. *Properties of Prothrombin.*[3]: Prothrombin is a protein substance identified with albumin and globulin and is electro-negative in blood. It acts as a nucleus of electrical condensation of the clotting components in the formation of a gel. Its concentration is directly proportional to the clotting activity of blood. High values indicate accentuated coagulation of blood and low values indicate a tendency to bleeding.

Prothrombin Index: Blood obtained by skin puncture is drawn into a Wright tube containing 0.1 cubic centimetre of 1 per cent sodium oxalate and centrifuged. One-tenth cubic centimetre of the plasma is placed in three tubes (6.8 x 1.3 c.m., flat bottom) in a water-bath at 38°C. and to these are added in series 0.1, 0.2 and 0.3 cubic centimetres of 0.5 per cent calcium chloride. The shortest clotting time in the series is the prothrombin time. The prothrombin index is the ratio of the clotting of the control to that of the patient's blood.

TABLE II.

Prothrombin Test

Oxalated Plasma C.C.	0.5 per cent $CaCl_2$ c.c.	Clotting time at 38° Control 3 minutes	Patient x
0.1	0.1		
0.1	0.2		
0.1	0.3		

4. *Properties of Fibrinogen:* Fibrinogen of body fluids is a globulin formed in the liver and coagulable by thrombin. It constitutes the potential clot structure dispersed in the plasma in the most readily precipitable form. Its transformation into soluble fibrin completes the clotting reaction. High fibrinogen content accelerates clotting and synaeresis or retraction of the firm fibrin clot from the gel. Low fibrinogen content gives a non-resistant skein inadequate for retraction in arresting hemorrhage.

Fibrinogen Value[4]: Blood is drawn into a tube containing 0.2 cubic centimetres of 3.5 per cent sodium citrate and centrifuged under albolene. The refractive index of one drop of the plasma at 38° is estimated by means of a Pulfirish Refractometer. One-tenth cubic centimetre of 1.5 per cent $CaCl_26H_2O$ is added to the tube to coagulate the fibrinogen, and is then centrifuged. The refractive index of a drop of the serum is then determined. The percentage of the blood fibrinogen is the difference between the indices of plasma and serum multiplied by the factor 0.187.

5. *Properties of Platelets:* Platelets are lipoidal protoplasmic separations from megakaryocytes in the bone marrow. They are protein-phosopholipin complexes containing 70 per cent protein, 15 per cent lipoids, 5 per cent cholesterol and 5 per cent basic salts. Clotting of blood takes place, other factors being equal, when there is an adequate platelet content and a rapid platelet disintegration, liberating phosphatides. In fact, platelets which do not agglutinate rapidly are functionless for clotting.

Platelet Count: Draw blood with a red blood count pipette and dilute with a 3 per cent citrate (1.200) without adding any stain as a dilutent. Allow the cell to stand for ten minutes before counting the platelets in the customary counting chamber.

Platelet Lysis Percentage[5]: Blood is collected into a short paraffined tube and platelet counts are made at fifteen-minute intervals, counting

TABLE III

Blood Analysis of Clotting Components (Normal Values)

Name	Diagnosis	Clotting Time	Bleeding Time	Prothrombin	Fibrinogen Per cent	Antithrombin	Platelets	Platelet disintegration Per cent	Clotting Index
B B	Post-auricular abscess	5 15	1 30	1 0	0 56	1 04	240,000	40	0 5
D B	Chronic appendicitis	3 30	2 30	1 0	0 54	1 0	300,000	50	0 5
C G	Cysto-pyelitis	4 30	1 30	1 0	0 54	1 0	350,000	71	0 5
R L	Perineal repair	4 15	2 0	1 0	0 60	1 0	225,000	59	0 6
M C	Recto vaginal fistula	5 0	2 0	1 0	0 64	1 04	185,000	45	0 6

TABLE IV

Blood Analysis in Disease with Altered Clotting Function

Name	Diagnosis	Clotting Time	Bleeding Time	Prothrombin	Fibrinogen	Antithrombin	Platelets	Platelet disintegration	Clotting Index
	BLEEDING CASES								
M L	Hemophilia	10 0		1 00	0 64%	1 11	95,000	15%	0 008
B N	Hemorrhagic disease newborn	11 15		0 66	0 19%	1 5	165 000	20%	0 04
S S	Hemophilia	5 0	4 0	0 66	0 54%	1 57	250 000	24%	0 2
B B	Nutritional bleeder	4 30		0 87	0 46%	1 25	240,000	62%	0 3
	CLOTTING CASES								
L F	Mesenteric thrombosis	2 30	1 30	1 54	0 93%	0 75	440 000	67%	1 9
G S	Gall stones gastric polyp complication-thrombosis	3 30		1 54	0 93%	0 75	300 000	50%	1 9
O P	Cardiac with embolus in popliteal artery	3 15	4 30	1 7	1 12%	0 46	275,000	83%	4 1

only those which are single and not agglutinated into clumps The platelet lysis percentage is the fraction of the platelets which disintegrates within one hour

Calculation of the Index of Blood Clotting Function Normal blood shows on analysis that the clotting components are contained in fairly constant concentrations Typical normal values are given as representative of determinations made on patients with normal blood clotting function

The constancy of the values in blood clotting functions is evident from the above data on some of the patients studied as controls The variation in platelets is within the accepted normal range We have come to believe that high platelet counts are associated with chronic infection The rate of platelet disintegration at the end of one hour is over 40 per cent, the low normal level

A composite value of the ability of a blood to clot may be calculated from these determinations Certain of the blood substances, i e , prothrombin, fibrinogen and platelets tend to favor clotting, and other (antithrombin) tend to reverse this process, i e , favor bleeding In this chemical mechanism the activity for clotting or bleeding is proportional to the concentration of each interactive substance

$$\frac{\text{Prothrombin} + \text{Platelets}}{\text{Fibrinogen}} + \frac{}{\text{Antithrombin}}$$

Expressing this reaction in terms of the law of mass action we have

$$\frac{(\text{Prothrombin}) \times (\text{Fibrinogen}) \times (\text{Platelets})}{(\text{Antithrombin})} = 1$$

Introducing normal values for these substances,

Prothrombin Index	= 1
Fibrinogen	= 0 5 per cent
Platelets	= 200 000
Platelets Lysis	= 50 per cent in 1 hr
Active Platelets	= 100,000
Antithrombin Index	= 1 0

The normal index of clotting function of blood is therefore, 0 5 ± 0 2 Values over 1 0 indicate a marked tendency to clot and values below 0 2 indicate a marked tendency to bleed

The clotting function index has been a more accurate clinical criterion of the condition of the patient than has hitherto been available by laboratory methods In certain chronic diseases, however, in which the platelets have been markedly increased, no direct relation has been observed between the unusually high clotting index and the possibly increased blood coagulability We have therefore evaluated the clotting function from the limiting factors

$$I = \frac{(\text{Prothrombin}) \times (\text{Fibrinogen})}{\text{Antithrombin}}$$

The normal index thus becomes 0 5 ± 0 2

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FIVE YEARS AFTER

A Résumé of the Remote Effects of the Treatment of Hay Fever and Asthma with High Frequency Electricity.

By WILLIAM GRANT LEWI, M.D., NEW YORK, N. Y.

IN the June 1st, 1926, issue of THE NEW YORK STATE JOURNAL OF MEDICINE there was included a paper on Hay Fever and Asthma that I had read the previous March before the Medical Society of the County of Albany. This paper embodied the method employed and results of treatment in 132 of these cases treated with high frequency electricity at the General Electric Plant at Schenectady during the season of 1925.

Our records at the end of the season disclosed that:

25	of	these	patients	had	improved	from	90 to	100%
33	"	"	"	"	"	"	70 to	80%
28	"	"	"	"	"	"	50 to	60%
27	"	"	"	"	"	"	25 to	40%
6	"	"	"	"	"	under	25%	
12 had shown no improvement								

I am presenting this in the belief that those who read that article at the time of its publication will be interested to know the remote effects of the method of treatment described therein.

In drawing my "Conclusions" I said: "From experience of the past we shall expect that the cases that were benefited last season (1925) will maintain that improvement during the coming and subsequent years: and that a large proportion of those who were not benefited last year (1925) will show improvement during the coming season (1926).

It is, as a rule, hazardous to make medical predictions: but this one has proved prophetic!

In the fall of 1926 questionnaires were sent to all of these patients asking as to their condition during the season of 1926 as compared with 1925 and previous years. Inasmuch as the personnel in an industrial plant like the G. E. is ever shifting, we were very much gratified to receive 82 replies, 65% of the total. We feel that the results reported by this percentage may be taken as an indication of the results of the entire group.

(A) Thirty-five (35) reported that their condition had been better in 1926 than in 1925. These had all improved under treatment the previous year.

(B) Five (5) who had shown no improvement in 1925, the year they had been treated, reported that their hay fever had been much better the following season:—in 1926.

(C) Twenty (20) who had shown improvement in 1925 reported a maintenance of the same condition of improvement during the season of 1926.

(D) Twenty-one (21) who had shown improvement in 1925 reported that their condition in 1926 was not as good as it had been the previous year under treatment.

6 reported attacks milder than in years prior to 1925, but not as mild as in 1925.

12 reported attacks just the same as prior to 1925.

3 reported attacks more severe than in previous years.

(E) One (1) who had shown no improvement in 1925 reported the same condition of unimprovement during 1926.

An analysis of these replies shows that:

50% (A and B) were better as to their hay fever during the season following treatment *(1926) than they were during the season* they had been treated (1925), indicating in A, a still more normal condition of the structures involved—a continued improvement—: and, in B, a remote effect on these structures that was not manifest at the time of treatment.

25% (C) maintained the improvement manifest during the season they were treated:—1925.

25% (D) failed to maintain the improvement manifest during the season they were treated and the symptoms recurred.

One case (E) failed to show any improvement, either near or remote.

Having in mind the remote effects of this treatment, and especially in those cases where there had been no amelioration of symptoms during the time of treatment in both hay fever and asthma, I recall the case of a professional man of standing and intelligence whom I treated in 1927 and whose hay fever was *not* improved under treatment. The following winter he joined a relatively new religious cult:—and has had no hay fever since. He, and his fellow neoreligionists, attribute his relief to his having adopted the new cult. In the light of many such cases, I believe it is due to the remote effects of the treatment he received in 1927.

I would not elaborate on the foregoing if it were an isolated instance: but it is a very usual occurrence to learn of a case that had not improved during the season of being treated but who the next season finds himself free of all symptoms: and who attributes his relief to something he has done, or taken; perhaps deep breathing; perhaps bicarbonate of soda; perhaps joining a new cult; but always something that has never been known to relieve hay fever, but the latest thing the patient tried.

In order to learn of the more remote effects of this single season's treatment, administered in 1925, letters were sent to all of these patients in the fall of 1930, inquiring regarding their condition as to hay fever and coincidental asthma during the intervening years. Due to changes of

addresses and other causes more than half of these letters were returned as undeliverable.

Twelve replies were eventually received, less than ten per cent. But the reports were so overwhelmingly uniform that they are deemed worthy of recording.

Six report entire freedom from hay fever—and asthma where that symptom was present—since 1925.

Four report attacks of little consequence, lasting but two or three days.

Two report that they still have hay fever but "much better" and "less troubled each year."

History and details of the cases where the patients answered the letter of 1930:

Case 1, Mrs. L. D.—Hay fever and asthma for 20 years or more. Some symptoms, especially asthma, all year, but worse in summer. Age, 55.

Symptoms: Sneezing, cough, itching of eyes, headache, asthma.

Treated in 1925 from July 18 to Sept. 15. 19 treatments.

Improvement in 1925; 100%.

Letter of 1926: No hay fever or asthma since taking treatment in 1925.

Letter of 1930: "I have not had the Hay Fever or Asthma since your treatment in 1925."

Case 19, J. P. O.—Hay fever for ten years. Age, 35.

Symptoms: Sneezing, itching of eyes, running of eyes and nose.

Treated in 1925 from Aug. 14 to Sept. 28. 16 treatments.

Improvement in 1925: 90%.

Letter of 1926: Hay fever not as good as in 1925: not as bad as in previous years.

Letter of 1930: "I am happy to say I am greatly improved. Had no return of it with the exception of one or two days."

Case 57, G. E. F.—Hay fever for 12 years. Age, 50.

Symptoms: Sneezing, cough, itching of eyes and ears, headache.

Treated in 1925 from July 28 to Sept. 25. 23 treatments.

Improvement in 1925: 75%.

Letter of 1926: "Had none this year."

Letter of 1930: "Have been free from hay fever since 1925."

Case 61, L. N. M.—Hay fever for 7 years. Age, 28.

Symptoms: Sneezing, some cough, itching of eyes and of ears, running of eyes and ears, general weakness.

Treated in 1925 from Aug. 22 to Sept. 28. 16 treatments.

Improvement in 1925: 60%.

Letter of 1926: "Practically no trace this year."

Letter of 1930: "Treatment was very beneficial the first year; had a trace the next year, although it did not affect me in any way as it did previously. Last summer was not bothered appreciably and have had none this year."

Case 66, E. S.—Hay fever for 15 years. Age, 37.

Symptoms: Sneezing, cough itching of eyes, asthma.

Treated in 1925 from July 20 to Aug. 31. 19 treatments.

Improvement in 1925: Little improvement of general symptoms: Improvement of asthma, 60%. Rated as 60% improved.

Letter of 1926: "Hay fever about the same as last year. Not as bad as in former years. No asthma up to time of writing."

Letter of 1930: "Am waiting to see if my hay fever will return, but it has not although the other boys are sneezing nicely."

Case 68, R. V. G.—Hay fever for 17 years. Age, 35.

Symptoms: Sneezing, itching of eyes and ears, asthma.

Treated in 1925 from July 30 to Aug. 31. 11 treatments.

Improvement in 1925: 50%.

Letter of 1926: "Much better than in 1925. Asthma also much better."

Letter of 1930: "My hay fever has been with me every year since (1925) but in what I feel a more moderate form. Early in 1929 I moved to Philadelphia (from Schenectady) and during the summers of 1929 and 1930 I felt that my hay fever was not nearly as bad as in former years."

Case 88, F. A. H.—Hay fever for 49 years. (Since infancy.) Age, 49.

Symptoms: Sneezing, itching of eyes and of ears, headache.

Treated in 1925 from July 22 to Sept. 1. 11 treatments.

Improvement in 1925: 50%.

Letter of 1926: "Not as severe or annoying as last year. Decidedly milder than in previous years."

Letter of 1930: "I am delighted that for the past three or four years I have been comparatively free from my old enemy. Although I am NOT entirely free from it, I have suffered so very little from it, that I have regarded the mild attacks as a mere matter of fact."

Case 90, J. C. W.—Hay fever for 20 years. Age, 29.

Symptoms: Sneezing, itching of eyes, a light asthma.

Treated in 1925 from July 22 to Sept. 30. 18 treatments.

Improvement in 1925: 40%.

Letter of 1926: "Slightly better than last year and previous years."

Letter of 1930: "I am not having much trouble from hay fever except when I go south or west."

Case 105, D. K.—Hay fever for 27 years. (Since infancy.) Age, 27.
Symptoms: Sneezing, itching of eyes, asthma.
Treated in 1925 from Aug. 25 to Sept. 28. 14 treatments.
Improvement in 1925: 25%.
Letter of 1926: "Better than last year."
Letter of 1930: "Outside of a cold in the head at different times I am O.K. Pleased to say no more from hay fever."

Case 114, W. C. W.—Hay fever for 29 years. Age, 35.
Symptoms: Sneezing, cough, itching of eyes, a little asthma.
Treated in 1925 from July 18 to Sept. 28. 21 treatments.
Improvement in 1925: 25%.
Letter of 1926: "About the same as last year: possibly a little worse. Difficult to compare with previous years as condition has been so variable."
Letter of 1930: "It is my impression that on the average I am less troubled with hay fever each year."

Case 49, I. M. D.—Hay fever for 19 years. Age, 49.
Symptoms: Sneezing, itching of eyes and ears.
Treated in 1925 from July 23 to Sept. 19. 17 treatments.
Improvement in 1925: 75%.
No reply in 1926.
Letter of 1930: "Was disturbed only three or four days this season. Has been of short duration since 1925."

Case 81, J. W.—Hay fever for 5 years. Age, 43.
Symptoms: Sneezing, cough, running and itching of eyes and ears, asthma.
Treated in 1925 from Aug. 1 to Aug. 25. 10 treatments.
Improvement in 1925: 50%.
No reply in 1926.
Letter of 1930: "Slight cold at times in the summer, but no more hay fever, bad cough or asthma."

As far as I have been able to learn, in no case where asthma had been present as part of the seasonal attack prior to 1925, has there been a return of that symptom.

In my paper of 1926, previously referred to, it is mentioned that careful records were kept of all of these cases. These records, with the replies to the questionnaires of 1925 and 1930, are still available for examination.

In administering this treatment I employ a type of high frequency apparatus that is not in general use:—that is, in fact, obsolete: but it is a fact that with no other type of apparatus as yet devised can a current be developed that will produce favorable results in these conditions. I make this statement with the authority of experience. I have repeatedly and persistently treated cases of hay fever and asthma with other types of high frequency apparatus; but have failed to get favorable results excepting with the old type. Experts in electro-therapeutic measures have used this method of treatment with other, more modern, types of apparatus and have failed to get favorable results, as they have told me. Some of them forthwith condemned the method as of no avail. This is just what might have been expected. If we wanted to use diathermy, or do cutting operations, or fulguration, or desiccation, we would procure the apparatus that develops a current adaptable to the particular procedure, or we should. There are many kinds of high frequency apparatuses and currents. And if it is desired to treat bronchial asthma and kindred conditions with high frequency electricity the proper apparatus, that develops the proper current, should be employed. The technique is simple, as has been fully described: but—the procedure must be carried out with the indicated apparatus, otherwise the results will be negligible.

Inasmuch as the apparatus I use develops a current of over 3,300,000 cycles I have been tempted to designate it as *higher* frequency electricity.

I want to take this occasion to repeat and emphasize what I have said before, in private and in open meeting, namely, my willingness to demonstrate, at any asthma clinic in New York City, the comparative values of this method of treatment and the treatment regularly employed at such clinic.

I am ready to install an apparatus at no expense to clinic or hospital: to attend regularly: to divide a group of fifty or more patients with asthma, or hay fever, or both, into two equal groups: the clinic to treat one-half by its method or methods: I to treat the other half by my method: and compare results: in the cases of hay fever, as the season advances: in cases of bronchial asthma, at the expiration of four months' treatment.

I am still hopeful that this proffer may be accepted by one of the large clinics of the City and that the physicians of that clinic, and any others who are interested, may be in a position to judge of the effectiveness of this method of treatment in relieving, and in most cases permanently relieving, bronchial asthma, hay fever and kindred conditions.

PUPILLARY REACTIONS IN HEALTH AND IN DISEASES OTHER THAN OCULAR

By W. H. HOLZAPFEL, M.D., NEW YORK, N. Y.

THIS subject covers many volumes, but for the sake of brevity I will confine my remarks to reactions caused by other than ocular diseases.

The behavior of the pupils in health and disease affords a valuable and interesting study to any one who understands the impulses controlling the phenomena of pupil contraction, expansion and rigidity. If the pupil reacts normally, it does not necessarily mean that the patient possesses good health, but if the pupils do NOT react normally, we are sure of some abnormality, either in the eye itself or in the nervous or vascular system.

Let us consider briefly the anatomy of the parts with which we are dealing. The iris is the anterior segment of the tunica vasculosa, composed of structures partly ectodermal and partly mesodermal in origin, and affords valuable data open to naked eye inspection in cases of diseased states and congenital abnormalities of other parts of the tunica vasculosa which are concealed from direct unaided inspection (the ciliary body and choroid), and also in states referable to the nervous coat of the eye (the retina).

The iris has sensory and motor nerves, and for the sake of avoiding confusion, I will limit my remarks to the motor nerves.

The ciliary branch of the motor oculi supplies the circular or contracting fibres, and the sympathetic supplies the radiating or dilator fibres.

To work out the various pathways of the afferent and efferent fibres, and the various arcs, would be like attempting to unravel the meshwork of a multiplicity of diagrammatic cobwebs.

My purpose is to give a few helpful points in diagnosis rather than attempt to cover the field.

Budge's Ciliospinal Center. This name has been given to the neuronic collection of cells that constitute the origin of the pupil-dilating fibres. It is situated in the cord between the exits of the fourth dorsal and sixth cervical nerves. Stimulation of the cilio spinal center or any part of the sympathetic system will cause dilation of the pupil, while paralysis of the sympathetic system will inhibit dilation.

Motor Oculi. If the ciliary branches of the motor oculi going to the circular fibres are stimulated, the pupil will contract; if paralyzed, the pupil will NOT contract.

Light Reflexes. To trace light reflexes, we must keep in mind the paths through which the impulses travel. Microscopic examination of the optic nerve reveals coarse and fine bundles of nerve fibres. The coarse bundles contain the pupillo-motor fibres, while the fine bundles contain the visual fibres.

The pupillary light reflex arc consists of a system of nerve fibres which have their origin in the retina, and traverse the optic nerve along with the visual fibres, semi-decussating in the chiasm, and ending in the pupil center, viz: the anterior corpus quadrigeminum, and from this, connecting neurons give off other neurons which enter the third nerve, passing thence to the ciliary ganglion in the orbit finally reaching the sphincter pupillae.

Width of Pupil. In health, the width of the pupil varies with age. In the new-born infant the pupils are very small, due to the fact that the sensorium still slumbers. The new-born infant cannot see until its nervous system has developed sufficiently to receive and convey impressions. During youth pupils are frequently very large, due to developed sympathetic nerves and elasticity of iris tissue. During adult life, the pupil again becomes smaller, due to a gradual loss of elasticity in the iris tissue.

The Dilated Pupil in Disease. There are three types, viz:—

Dilated and responsive.
Dilated and sluggish.
Dilated and fixed.

The dilated and responsive pupil is found in cases of cortical blindness, as from bilateral hemorrhage in the visual areas in the cuneus. Advanced sinuisitis with scotoma. Reflex from intestinal disorders in infants and children through spinal irritation. Catalepsy and acute mania. Rare central tumors of the brain, and in certain cases of effusion in the brain meninges or the ventricles.

The dilated and sluggish pupil is found in many cases of paresis in which we often notice inequality of pupils (anisocoria). Also in many cases of cerebral syphilis and basilar meningitis. Also in tuberculous meningitis, and epidemic cerebro-spinal meningitis.

The dilated and fixed pupil is found in cases of third nerve paralysis, usually in one eye, cerebral neoplasm, abscess, cyst, meningitis, internal hydrocephalus. Any pressure sufficient to paralyze the nuclear center controlling the sphincter pupillae, any condition in or near the orbit that will stretch the optic nerve, such as bulging of the orbital wall of the ethmoid sinus,—occasionally seen following scarlet fever. A tumor or cyst of the hypophysis pressing on the chiasm. Transitory cerebral states, as syncope, epilepsy, transitory irritation of the spinal cord from convulsions due to teething or intestinal fermentation.

We should keep clearly in mind that paralysis

of the sympathetic nerve will cause the pupil to contract to pinpoint, and paralysis of the brain will cause widely dilated and fixed pupils, while stimulation of the spinal cord will cause dilation, and stimulation of the brain will cause contraction of the pupils.

In general anaesthesia we must decide whether the sudden dilation of the pupils is due to spinal irritation from gastric disturbance, or paralysis of the brain.

In suspected poisoning we must decide whether the contracted pupil is due to opium or uremic poisoning. We must note the "Hippus" or bounding pupil in hysteria, chorea or mania; the widely dilated pupils due to brain pressure or brain abscess; the dilated pupil on one side in hemorrhage in one hemisphere of the brain, the Argyll-Robertson pupil of spinal syphilis; the unequal deformed and more or less fixed pupils in general paresis or cerebral syphilis, and normal pupils in sham fits.

Let us differentiate between the small pupil in uremic poisoning, and the small pupil in morphine poisoning. In uremia, the poisons within the brain produce irritation to the contracting centers causing a spastic contraction of the circular fibres of the iris, and strong light thrown into the eye cannot produce further contraction, because the circular fibres of the iris are already stimulated to their utmost by the irritations of poisons in the brain. A dilated pupil due to alcohol poisoning will not contract because there is no vision. However, a dilated pupil in the last stages of uremia will react to light because there is vision.

Morphine poisoning. The pupil in morphine poisoning is similar to the pupil in uremic poisoning, very small, the contraction being due to paralysis of the sympathetic, which in turn, permits relaxation of the radiating or dilating fibres, thereby permitting the circular or contracting fibres to function without resistance. The differential point to stress is the contracted pupil in morphine poisoning can be made to contract still further under strong illumination, whereas in uremic poisoning, the extreme intracranial irritation has caused a spastic contraction upon which illumination will have no effect.

Coma from increased cerebral pressure will cause dilation of the pupils due to pressure paralysis of the nerves controlling the circular or contracting fibres of the iris, while uremic coma causes contracted pupils that will not respond to illumination. However, just before death, in uremic coma, the pupils, relax, indicating paralysis of the brain and oncoming death.

Argyll-Robertson pupils, or reflex iridoplegia, is a condition in which both the direct and indirect reactions of the pupil to light are lost, but reflex contraction remains intact which is brought about by the associated actions of accommodation for near vision and the convergence of the visual axes. If the accommodation-convergence reflex arc is not intact, there will be no further contraction.

Reflex iridoplegia is most frequently associated with tabes, but is occasionally found in cases of multiple sclerosis, railway spine, and congenital feeble-mindedness.

Although the presence of Argyll-Robertson pupil declares for syphilis in the majority of cases, yet it is conceivable that a person possessing symmetrical lesions which disorganize the cilio spinal centers, or non syphilitic symmetrical lesions of the pupil-dilating centers in the medulla near the floor of the fourth ventricle, could present typical Argyll-Robertson pupils.

Dilated pupils. In subconscious states, as mesmerism, hypnotism, somnambulism, etc., the pupils are dilated and fixed. However, the opposite is true in normal unconsciousness (sleep), viz: pupils are small.

Traumatic neurosis and medico legal cases. In true traumatic neurosis, the pupils are rarely found to be affected. Occasionally a mydriatic is used in one eye for the purpose of fraud. However, the use of eserine will assist in making the diagnosis. "Hippus," if present, in a case of Traumatic Neurosis would assist in establishing the patient's claim for damages, for "Hippus" is to be regarded as being due to an unstable nervous system or prolonged shock.

Rabies. Not infrequently the family physician is asked if a pet dog has rabies, and if you find a pinhole contraction of the pupils, you are safe in making a diagnosis of rabies. This peculiar symptom does not occur in other diseases common among cats, dogs and rabbits.

Before closing, let us consider unilateral pneumonia. Statistics reveal that 75 per cent of these cases show a dilated pupil on the affected side. The explanation remains a question.

After all is said and done, we must remember two fundamental principles, viz: That irritation of a nerve will stimulate, and paralysis will retard its action. It will be well to remember also that pupillary reactions in diseases other than ocular, are not pathognomonic, but simply a link in the chain of evidence.

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CHARLES H GOODRICH, M D *Chairman* . . ...Brooklyn CHARLES GORDON HEYD, M D . . ..New York
DANIEL S DOUGHERTY, M D... .. .. .New York

Editor in Chief—ORRIN SAGE WIGHTMAN, M D New York *Executive Editor*—FRANK OVERTON, M D..... .. .Patchogue
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For list of officers of County Medical Societies, see this issue, advertising page XXVI

THE NEW ADMINISTRATION

This issue marks the transition of the Medical Society of the State of New York from one administration to another. The list of officers for the coming year appears on the upper part of this page, but the changes are so few that a casual reader might not notice them Only a very few officers and chairmen have retired from active service, but some have been promoted to broader duties; while those who appear on the list for the first time have won recognition by their excellent work in their District Branches and County Societies

The administration affairs of the Medical Society of the State of New York are conducted by men whose wisdom and experience have been demonstrated in actual service

REPORTERS OF COUNTY SOCIETY NEWS

The New York State Journal of Medicine is maintained for the purpose of recording the activities of the Medical Society of the State of New York and its component organizations—the eight District Branches and the sixty County Societies. It is the natural source from which information regarding these sixty-nine societies may be obtained. The official minutes of each society are not generally available for general reference, for only a copy or two are made; but the Journal makes twelve thousand copies available.

The House of Delegates, on June first, considered methods of obtaining more complete reports, especially from the County Societies; and voted to suggest to each County Society that it appoint a reporter, who may be either the secretary or any other member interested in medical reporting. Each Society is therefore expected to appoint a reporter who shall supply items for the news section of the Journal.

Every periodical has its standards regarding the substance of the articles which it publishes, and the methods of forwarding the items. *The New York State Journal of Medicine* conforms to the following standards regarding its medical news items:

1. They shall be of permanent value, as distinguished from the ephemeral and merely personal.

2. They shall be of interest to physicians and public health workers throughout the State.

3. They shall represent the action and opinions of the Society, rather than those of individual physicians.

There will naturally be wide variations in the interpretation of these standards by the reporters of the sixty-nine societies from whom news items are expected. All items will therefore be subject to editorial action; but this action is always collective as distinguished from that of one managing editor. The staff which conducts the Journal is organized on the most democratic basis possible, and the chain of authority and responsibility is as follows:

1. The Executive Editor, employed on a full-time basis to attend to the details of editorial work, publication, and printing.

2. The Editor-in-Chief, whose duties are largely supervisory.

3. The Publication Committee, whose duties are similar to those of a board of directors.

4. The Executive Committee of the Council, which is charged by the By-Laws of the State Society with the duty of superintending all publications of the Society.

5. The Council.

6. The House of Delegates.

All news items, except those of a routine nature, are submitted to the Editor-in-Chief, who is in almost daily contact with the editorial office. Many items are also referred to members of the Publication Committee, who must often give decisions and authorizations promptly by telephone. Frequently, too, items are referred to the Executive Committee, which meets monthly.

In addition to all this, every account of an important conference, or committee meeting reported by the editorial staff is submitted to the presiding officer or chairman of the acting committee for his approval. Every effort is therefore put forth to make the news items truly representative of the policies of the Medical Society of the State of New York.

Bearing these principles in mind, how shall the reporter or secretary send the news of his County Society? The editors appreciate a report in a form ready for the printer; but the important thing is to *send the news*. The items come in all sorts of shapes—beautifully typed, roughly scrawled, or clipped from newspapers. The Executive Editor will put the items in proper shape, no matter in what form they are received.

Only fifty per cent of the counties have heretofore sent news items. Let us make that percentage one hundred, through the appointment of a reporter in every county.

THE NEW YORK STATE DIETETIC ASSOCIATION

The modern service of medicine is given not only by physicians but also by groups of workers in allied fields of science. The first group to be affiliated with physicians was that of nurses, and then the laboratory technicians. Psychologists and welfare workers were next added. Physical trainers also entered the field with so much publicity that the popular idea of keeping fit is that it depends on muscular exercise. Finally there has sprung up a new group, the dieticians, who have only recently organized as a separate entity with the probability of acquiring the dignity of a profession.

The New York State Dietetic Association was organized in Rochester on May 24, 1930, by representatives from six cities. It now has 110 members, and is rapidly developing an important sphere of influence. It has branch associations in several parts of the State, and is itself a branch of the American Dietetic

Association It held its second meeting in Syracuse on Tuesday and Wednesday, June 2 and 3, of this year, at which a representative of the Medical Society of the State of New York was present by invitation The program began with a luncheon, and after dinner speaking. There were papers on diet in different diseases, and a moving picture on 'Standards of Tray and Dining Room Service' There were also social teas and trips to several institutions Altogether the program was one of sociability and recreation as well as instruction

The officers elected at the Syracuse meeting were as follows

President Blanche Bohach, Rochester General Hospital

Vice-President Virginia Howard Ray, Albany Hospital

Secretary Anne Padget, Crouse Irving Hospital, Syracuse

Treasurer Ursula Senn, Buffalo City Hospital

There is a definite field for the New York State Dietetic Association in evolving standards for the practice of dietetics At present a dietician may be a glorified cook, or a saleslady for the manufacture of food A dietician is in fact a cook who may be expected to make food tasty and attractive with regard for the individuality of those whom she serves Every dietician should be compelled to eat the food which she prepares

But a dietician has her own troubles with doctors who prescribe diets as they would pills They are also in frequent conflict with hospital managers who do not permit the dieticians to come in contact with patients Food is the first thing which a patient talks about on leaving a hospital If the dietician who makes up the trays came into contact with the patients, she would adapt the food to their tastes and add immeasurably to the prestige and reputation of the hospital

The Dietetic Association also has a place in the field of popular health education where talks and writings are often conventionalized People get tired of being told that they must eat a leafy vegetable every day and drink a quart of milk, and that every child must take his spinach whether he likes it or not There is more to the subject of diet than such statements as "Lettuce is good for you" To practice dietetics successfully, one must have the broad knowledge of human nature and a sympathy that would do credit to a doctor

The physicians of New York State approve the aspirations of the Dietetic Association, and wish its members success in developing methods of feeding both the sick and the well

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LOOKING BACKWARD

THIS JOURNAL TWENTY-FIVE YEARS AGO

Modern Medical Practice This Journal of June, 1906, contains the following editorial comments on some of the modern conceptions of diseases and their treatment, which are still applicable in these modern days

"The saddest spectacle in all the practice of medicine is that of the doctor dealing out medicine to a patient who does not need it, but who does need to be told how to live

"The practice of medicine has not yet been cured of its drug addiction Do you remember what your professor of materia medica and therapeutics taught you outside of the products of the drug store? Very little The best things in our therapeutic armamentarium he scarcely mentioned Fresh air, the bath, food, proper clothing, proper breathing, exercise, proper eating, sleep, rest as a therapeutic agent, the curative power of work, the care of the mind, the training of the child,—how little really well formulated knowledge we have of these most vital things compared with our well formulated knowledge of the uses of drugs The charlatan steps in and masters one of these subjects and scores many a triumph over the doctor of medicine

"I have seen a man dying with pneumonia in a room so close that the nurse had a perpetual headache, but the poor man was taking oxygen from the drug store Why? Because the use of oxygen from the drug store was taught by the professor of materia medica and therapeutics, but not the use of the oxygen of the free and open air which can be secured without the mystic scroll which means recipe

"Dr Treves has emphasized the beneficence of diseases, and he has gone so far as to allege that we should all have been dead long ago had it not been for diseases What Dr Treves refers to is that the symptoms of disease, the suffering of disease are but a manifestation of an effort on the part of the body to throw off some offending and harmful foreign substance Whether it is ptomains or cucumbers that are causing the trouble, the symptoms are but an evidence of a salutary effort of the organism to rid itself of the noxious invader This we know full well to be true Peritonitis has saved more lives than all the drowsy syrups of the East"

MEDICAL PROGRESS

The Hypoglycemic Symptom Complex.—In the opinion of Reinwein hypoglycemic symptoms in diabetic patients are easily overcome provided they are correctly diagnosed. This author has observed that a diabetic coma is much oftener assumed erroneously than a hypoglycemia. Incorrect diagnoses are unfortunately due to the fact that the physician forgets to examine a catheter specimen of urine, and the further fact that the hypoglycemic state is not very familiar to most physicians. There is also an erroneous idea prevalent that hypoglycemia begins with convulsions. As a matter of fact these are seldom seen in experimental hypoglycemia in animals. Three illustrative cases show impressively that if injection of glucose does not at once restore the patient this does not militate against the assumption of hypoglycemia. Animals of course awake very quickly after small doses of glucose, but one must also reflect that the amount of metabolism is also much smaller. In most cases intravenous glucose acts promptly, but a uniform relation between hypoglycemia—as presented in the lowering of blood sugar and in the clinical symptoms—and the amount of glucose injected is difficult to draw up, since we do not know the content of the tissues in blood sugar. If all these points are borne in mind, the recognition and treatment of hypoglycemic symptoms are not difficult, provided further that the physician remains consistent in his therapeutic management and does not shift back to insulin in a panic over a possible mistaken diagnosis. It is still too little understood that in these attacks the psychic behavior is changed, and may in fact be the chief symptom of the threatening or actual hypoglycemia. In one case cited a man on a well-established diabetic regimen was seized with diarrhea which by interfering with resorption of food upset the relation between insulin and diet, and led to violent delirium from hypoglycemia. By dividing the insulin dosage and changing the diet the patient was restored. The patient must be made to understand clearly that insulin treatment will be successful only under properly tested conditions, and that any tampering with the prearranged insulin dosage is dangerous.—*Deutsche medizinische Wochenschrift*, April 3, 1931.

The Mode of Action of Intravenous Injections of Glucose.—W. S. Collens, M. Goldzieher, and H. Koster describe in the *Klinische Wochenschrift* of March 28, 1931, the studies in which they engaged with a view to determining (1) the fate of intravenously injected sugar in the body, and (2) whether objectively demonstrable changes exist which can be attributed to the favorable action of sugar. In the belief that glucose injected intravenously is readily accepted by the body as fuel and that its presence is revealed by changes in the respiratory quotient, they carried out a series of tests in patients who were about to undergo abdominal operations for various conditions, all of whom had been fasting for 14 to 18 hours. After determination of the respiratory quotient, each patient received an intravenous injection of 250 c.c. of a 20 per cent glucose solution. Determinations of the respiratory quotient were made again 30 minutes later and glucose determinations before and after injection. Immediately after operation and at intervals during the next 16 days the same determinations were made. As a rule no increase of respiratory quotient could be obtained, or at most only a very slight one. In other words, it was found that glucose in the body of a patient operated upon is not burned up in the usual manner. This disturbance of metabolism was observed for approximately a week, that is, during the period which may be termed critical clinically. It seems to point to lack of resistance to the operative trauma, which is the more worthy of note in view of the fact that both physically and psychically conditions were such as of themselves to produce an increase of metabolism without glucose administration. It was also noted that there was no increase of lactic acid in the first 4 hours after operation, as might have been expected, but on the contrary there was a clear decrease. The injected glucose was therefore not transformed into lactic acid. The result could clearly not be attributed simply to a supporting of the liver or heart muscle function, but evidently had to do rather with an activation of mesenchymal cell functions. To prove this a small bit of liver was taken from each patient immediately after opening the abdomen and before the glucose injection, and another bit was removed 30 minutes later. Histologic examination revealed changes in the Kupffer cells following the glucose injection, which could be regarded as the expression of a cell irritation and of increased cell function. They point to an activation of the reticulo-endothelial system, which seems adapted to explain the therapeutic effects of intravenous glucose injections.

Acute Mercury Poisoning: Report of Twenty-One Cases with Suggestions for Treatment.—B. I. Johnstone tabulates the data in 21 cases of acute mercury poisoning treated at the Henry Ford Hospital from 1918 to 1928. The majority of the patients were young adults, with an average age of 30.8 years. The

mortality was 14 3 per cent Two of the deaths followed vaginal douches The amount of mercury ingested (usually the bichloride), in so far as it was possible to estimate it varied from 0 75 to 27 grams From the practical standpoint more depends upon the amount of the drug absorbed than upon the quantity ingested In the treatment an early start is the important feature Efforts should be chiefly directed toward prevention of absorption, as we have not as yet any effective antidote after the drug has reached the circulation Before the physician arrives repeated vomiting has already removed a considerable portion of the drug, and possibly protein has been given in the form of eggs and milk If so, the stomach should be immediately washed out with a saturated solution of sodium bicarbonate, at least two quarts being used Immediately after the gastric lavage a duodenal tube is passed and transduodenal irrigation carried out with sodium bicarbonate until the patient expresses a desire to defecate This occurs after one or two quarts has been given In this way the whole intestinal tract is washed out One ounce of a saturated solution of magnesium sulphate should be left in the duodenum before withdrawing the tube The patient is kept on a high carbohydrate, maintenance protein, low salt diet Six ounces of milk, alternating with 2 ounces of lactose in 6 ounces of fruit juice are given every two hours An effort is made to administer at least 5,000 c c of fluid every twenty-four hours Within a few hours after ingestion, the salivary glands, gastric mucosa, and large intestine begin to excrete mercury To prevent reabsorption, stomach and colon lavage are repeated twice a day and duodenal lavage once daily In addition, biliary drainage is carried out for several hours until 500 to 600 c c of bile has been drawn off If the food and fluid intake becomes low with increasing toxicity, fluids should be given parenterally with glucose to maintain the carbohydrate intake Sodium thiosulphate is taken frequently by mouth and also is given intravenously Intensive therapy should be continued so long as an appreciable excretion of mercury occurs —*Canadian Medical Association Journal*, April, 1931, xxiv, 4

Glycerin Injections in Treatment of Varices by the Sclerosing Method—F Maignon, Ch Grandclaude, and M Lambert, writing in the *Bulletin de l'Academie de Medecine* of March 7, 1931, report that injections of 3-5 c c glycerin, slightly diluted for convenience, if necessary, into the saphenous vein of the dog have a sclerosing effect In 2 of 17 animals injected, there was complete obliteration of the vein after the first injection in another 2, incomplete obliteration, and in 7, a slight thickening of the walls with lymphocyte infiltration, in 6 there was no reaction But two such injections, with an interval of 7 to 10 days between, caused obliteration of the vein 7 times in 7 The first injection apparently serves to sensitize the walls of the vein for the second, which results in induration of the tunics, with formation of an organized thrombus at the level of which metamorphosis of the fibrin into collagen takes place over a certain tract around the point of injection It is as if a local anaphylaxis were produced, but the authors think that the glycerin acts not as a sensitizing substance *per se*, but as one capable of exerting a mortifying effect upon a part of the protoplasm of the cells it contacts, with the result that the dead proteins have all the effect of a sensitizing injection The glycerin should be considered a nutritive element, existing normally in the economy of the body, since it represents a product of fat reduplication It owes its indurating properties solely to its concentration Diluted in the blood, it loses all its injurious properties and becomes a food, which is not the case with quinine, urethan, sodium salicylate, etc, when used for varices These substances not only do not produce perfect obliteration with the same dependability as glycerin, but they sometimes cause unfavorable constitutional symptoms immediately after injection, and, later on, large necrotic areas around the veins Attempts to carry out the glycerin procedure on human beings have confirmed in every way the results obtained in dogs The injections are entirely painless and have never produced any functional disturbances

The Study of Symptoms—In the diagnosis of disease John A Ryle is persuaded that with the growth of experience the first place is often given to symptoms, which may not only be earlier but more eloquent than signs Symptoms express a disturbance of function While not specific for diseases they are specific for functional errors, and these errors, for the most part, depend upon an exaggeration, a depression, or an inhibition of normal reflex phenomena The question which one should constantly ask is *"What does this symptom mean?"* not *"What is it a symptom of?"* As a guide to the investigation of subjective phenomena Ryle reviews the methods employed in a study of the significance of colonic pain, nausea, and the feeling of impending dissolution In the case of colonic pain the queries concern the character of the pain, its degree, its situation, its localization or extent of diffusion, its paths of reference, frequency, time of occurrence, duration, and its aggravating and relieving factors These are correlated with associated symptoms, such as constipation, diarrhea, dysmenorrhea, urinary frequency, and "dead fingers" in cold weather The chief objective finding is a readily palpable and firmly contracted colon due to tonic rigidity Sigmoidoscopic and roentgenologic examinations may add confirmatory evidence of spastic colon This method diminishes the margin of error in differentiating an important neurosis from appendicular disease,

duodenal ulcer, diverticulitis, carcinoma coli, renal and biliary colic, ovarian and tubal disease, and hypochondria. In the case of nausea the method is to consider common experience, the physiological and pathological provocatives of the symptom, the various disorders in which it is prominent, and the factors common to these. Finally aid is obtained from *x*-ray studies of the stomach during bouts of natural and induced nausea. With the "sense of dying" symptom the method is to consider the known conditions in which it occurs, to record and correlate associated phenomena in each of these, to advance the hypothesis that the symptom can best be explained as being due to some disturbance involving the neighborhood of the vagal nuclei, the realm that governs the functions of life itself. A practical outcome of these considerations, apart from their contribution to diagnosis, is that, excepting in angina pectoris of organic origin or in disease of the medulla itself, the alarming sense of dying has no prognostic significance. The methods in brief are those of observation, record, and analysis. While the results lack the finality of successful experiment, they are, nevertheless, scientific and serviceable.—*The Lancet,* April 4, 1931, ccxx, 5614.

Early Diagnosis and Immune Therapy of Neoplasms.—According to Francesco Figaro, the enzyme reaction discovered by certain Italian workers (Sivori, Rebaudi and Menniti) has made it possible to establish the presence of specific defensive ferments in the blood of subjects who are carrying tumors. It consists in placing in contact with the serum of the patient a protein antigen, not in its integrity as in the Abderhalden reaction, but after it has been subjected to hydrolysis, up to the point at which all it has to overcome is the last stage of disintegration from polypeptids into amino-acids. It is based on the new principle of the conservation of the biologic specificity of the albuminoid molecule even in its last stages of disintegration. All that it has in common with Abderhalden's method is its use of ninhydrin. The name *disintegrates* or *ultrapeptones* has been given to the antigens thus prepared. When a very small quantity of serum from a cancerous subject is placed in contact with the disintegrate coming from a neoplasm of the same type and site, in the state of ultrapeptone, a digestive process is observed in the mixture, which transforms the ultrapeptones into amino-acids, whereas this does not occur in control serums of healthy subjects or of those affected with other diseases. The more recent the neoplastic formation, the more pronounced was the reaction toward the tumor. Conversely, when the organism was profoundly intoxicated by the tumor, and a prey to cachexia, the diminution of specific ferments was demonstrated by a weaker or even a negative enzyme reaction, the neoplastic toxemia having overcome the patient. It has been demonstrated experimentally that ultrapeptones obtained from sarcoma of the Norwegian mouse inoculated into the rat in advance of a graft of sarcoma inhibit development of tumors in the animal. Previous inoculations of the pulp of non-disintegrated sarcoma, however, do not in any way modify the course of the grafted tumor. Treatment of sarcoma with ultrapeptone slows down the development of such tumor. Injection of neoplastic ultrapeptones into healthy animals causes production of ferments that are specific against the corresponding tumors. If, for example, they are obtained from a mammary cancer, the enzyme reaction is strongly positive for mammary cancer, less intense for cancer of the stomach, uterus, etc., and vice versa. These results in animals led to tests of the therapeutic effects in human beings. Results may be said to be very encouraging in 9 cases of skin epitheliomata, in one of which cure has persisted for over a year. Improvement is also observed in 3 cases of mammary cancer, 2 of gastric and 1 of rectal cancer which are receiving the treatment.—*Riforma medica,* March 16, 1931.

Mumps Meningitis.—This not altogether infrequent complication of mumps finds its incidence chiefly in young children according to Karl Holtz, and becomes increasingly rare with advancing years. So polymorphic is it that some cases pass unnoticed until severe sequels and an accompanying inflammation of the central nervous system cause a review of the history. Holtz reports what is a most unusual case occurring in a peasant woman, 39 years of age. Beginning with swelling of the right cheek and with headache, its most striking symptom was the rapid loss of speech, followed by somnolence and unconsciousness. The temperature never rose above 37.8°C. (100°F.), and the pulse was always 70-80. There was slight rigidity of the neck, with such other indications of a cerebral process as pupillary disturbances, ptosis, and spasms of the masseter. A lethargic-ophthalmic encephalitis was excluded by absence of sleep disturbances, of increased salivation, etc. Characteristic symptoms of epidemic meningitis, such as perspiration, articular swelling, etc., were also lacking. Lumbar puncture gave exit to a purulent fluid exhibiting first a polynucleosis, then for the most part a lymphocytosis, and finally a pure monocytosis. This finding, however, cannot be regarded as excluding a parotid meningitis. The fact that in mumps a lymphocytosis is so frequently found in the cerebrospinal fluid leads the author to conclude that here the meningeal reaction is in most cases so rapid and runs such a favorable course that the preliminary polymorphonuclear stage escapes notice. Possibly it is found only in the first stage as in this case. A warning is uttered against judg-

ing the etiology of meningitis from the cell reaction of the spinal fluid without due regard to its phase, which changes just as is the case with regard to the blood. The punctate examined on 4 occasions in this case never contained any microorganisms, thus easily excluding a cerebral abscess. There could be no doubt that this was a parotid meningitis, although the source of infection remained unknown. The case resulted in cure, with gradual return of faculties requiring a period of several months.—*Deutsche medizinische Wochenschrift*, March 27, 1931.

Activated (Irradiated) Fluorescein in the Treatment of Cancer.—In a paper by S. Mockton Copeman, Frank Coke, and Dr. Gouldesbrough, published in the *British Medical Journal* in August, 1929, a method of treatment was described which had afforded satisfactory results in certain cases of cancer. It consisted in the use of a slightly alkaline solution of the sodium salt of fluorescein sprayed or painted widely over the surface of the growth and followed by the application of radium or *x*-rays of moderate penetration. Copeman now reports the results of this treatment in a total of 120 patients with carcinoma treated at the Royal Northern Hospital. Of these 33 have died and 23 have recovered and remained well, some for more than three years. Excellent results have been obtained in certain cases of cancer of the breast. In some cases the superficial application of fluorescein sufficed, but for more deeply seated growths, in which there was reason to suspect dissemination of the disease, the fluorescein was also given orally or intravenously. Owing to the extremely low toxicity of the drug, considerable quantities may be administered in one or the other of these ways. The ordinary dose by mouth is two capsules of 7½ grains each (15 grains or 1 gram in all). For intravenous use 20 c.c. of a sterilized 5 per cent. solution of sodium fluorescein is slowly injected. The object of giving the drug internally is to bring under its influence, on irradiation, outlying cells which may have become affected, or an organ like the liver, which may be suspected of harboring secondary deposits. There is reason to hope that by giving the fluorescein internally as well as by local application, together with proper distribution of the subsequent irradiation, recurrence of cancer may be prevented, not only locally but generally. That the results are not entirely due to the radium or the *x*-rays is indicated by the fact that success has been attained in cases that were considered inoperable, and in which radium and the *x*-rays had failed. Encouraging results with this treatment have been reported from a number of London hospitals. A preliminary investigation of salts of the rhodamine group and the sodium salt of dichloroanthracene·disulphonic acid affords some evidence that the anthracene salt, when irradiated, is capable of exerting a lethal effect on malignant cells exceeding that of fluorescein.—*British Medical Journal*, April 18, 1931, i, 3667.

Cardiac Hormone Therapy with a Muscle Extract in Angina Pectoris and Essential Hypertension.—On the basis of 70 cases treated, Korach says that he has had excellent results from the use of an extract of muscle, in severe cases both of true angina pectoris and pseudoangina. In every case all other forms of medication were laid aside in order to give the new treatment a thorough test. To secure as prompt action as possible, subcutaneous or even intravenous administration was employed. Within 15-20 minutes after subcutaneous and even more quickly after intravenous injection, the agonizing spasm with pain radiating into the back and left arm was relieved, and with astonishing promptness there was a diminution of the dyspnea proceeding from the visceromotor reflexes of the chest musculature. Patients who just before the treatment had dreaded to make any least movement were shortly afterwards in a condition to leave the bed and walk about the room without pain. Objectively the effect of the muscle extract was shown in a slowing down of the tachycardia and a fall of systolic blood pressure amounting to 1030 mm. Hg in cases where an increase had appeared during the attack. There was a markedly good effect also on the so-called "chronic stenocardia" in long-standing cases of effort angina in which attacks were excited by movements, by going from a warm room into a cold one, facing a strong wind, etc., in patients accustomed to the use of nitroglycerin tablets for quick relief. In such cases the effects of an injection of 2 c.c. lasted on an average for 24 hours. When the pains returned, they were not, according to the patients, so severe. Prophylactic evening injections prevented night attacks more effectively than nitroglycerin tablets. Complicated cases should have absolute rest in bed, with intramuscular injections twice a day of 1½ to 2 c.c. each. These are reduced to 1 c.c. after 2 weeks have passed without an attack, and at the end of 3 weeks 1 injection daily suffices; finally treatment is peroral. The hypotonic effects observed induced the author to make use of the remedy in cases of essential hypertension, with astonishingly good results in some cases, but with occasional failures.—*Münchener medizinische Wochenschrift*, March 20, 1931.

LEGAL

SUPREME COURT RULES ON FREEDOM OF THE PRESS

By LORENZ J. BROSNAN, ESQ.
Counsel, Medical Society of the State of New York

One of the most recent rulings handed down by the Supreme Court of the United States seems to your Counsel to be of such general interest that it is appropriate to devote to it space in these columns. That is the decision just rendered declaring the so-called Minnesota "gag law" unconstitutional. The opinion of the majority of the Court was delivered by Chief Justice Hughes. Concurring with him in the opinion were Justices Holmes, Brandeis, Stone and Roberts, the other four Justices dissenting.

The statute in substance provided for the abatement as a public nuisance of the business of publishing a "malicious, scandalous and defamatory public newspaper, magazine or other periodical." A weekly newspaper was brought under the operation of this law upon charges that it had published articles concerning certain local public officers and concerning certain other newspapers, charging among other things in the allegedly objectionable articles that the said public officers were guilty of neglect of duty, were associated with gangsters, indulged in grafting, and the like. There was no question as to the fact that the articles made very serious accusations against the named persons and that, if untrue, the newspaper could have successfully been made the defendant in actions to recover damages for libel for injury to reputation. It, on the other hand, seems clear that under the statute it would have been a complete defense to such a legal proceeding if the newspaper established to the satisfaction of the tribunal that the charges printed by it were both true and published with good motives and for justifiable ends.

The prosecution under the statute proceeded on the theory that even though the matter published might have been true, the newspaper was legally liable to be suppressed on grounds that it was malicious, scandalous and defamatory. This theory was challenged as an invasion of the rights of the freedom of the press as guaranteed by the United States Constitution.

The proceedings taken against the newspaper finally resulted in a decision by the highest Court of the State of Minnesota determining that the judgment was valid which declared the newspaper a public nuisance and perpetually enjoined its owners "from producing, editing, publishing, circulating, having in their possession, selling, or giving away any publication whatsoever which is a malicious scandalous, or defamatory newspaper as defined by law" and also "from further conducting said nuisance under the name and title of said 'The Saturday Press' or any other name or title." From the judgment thus affirmed, an appeal was taken to the Supreme Court of the United States.

As the Court pointed out, "It is no longer open to doubt that the liberty of the press, and of speech, is within the liberty safeguarded by the due process clause of the Fourteenth Amendment from invasion by State action. It was found impossible to conclude that this essential personal liberty of the citizen was left unprotected by the general guaranty of fundamental rights of person and property." With that as a premise, the Court proceeded to clearly point out the manner in which the fundamental rights of freedom of the press had been invaded.

As to the object of the statute, Mr. Justice Hughes speaking for the majority said: "The statute is not aimed at the redress of individual or private wrongs. Remedies for libel remain available and unaffected * * * It is aimed at the distribution of scandalous matter as detrimental to public morals, and to the general welfare, tending to disturb the peace of the community and to provoke assaults and the commission of crime."

That the Court felt that the means adopted by the statute to achieve such an end were improper and unsuited to their purpose, is clear from the words of the opinion: "If we cut through mere details of procedure, the operation and effect of the statute in substance is that public authorities may bring the owner or publisher of a newspaper or periodical before a judge upon a charge of conducting a business of publishing scandalous and defamatory matter—in particular that the matter consists of charges against public officers of official dereliction—and unless the owner or publisher is able and disposed to bring competent evidence to satisfy the judge that the charges are true and are published with good motives and for justifiable ends, his newspaper or periodical is suppressed and further publication is made punishable as a contempt. This is the essence of censorship. * * *

"The fact that for approximately 150 years there has been almost an entire absence of attempts to impose previous restraints upon publications relating to the malfeasance of public officers is significant of the deep-seated conviction

that such restraint would violate constitutional right Public officers, whose character and conduct remain open to debate and free discussion in the press, find their remedies for false accusations in actions under libel laws providing for redress and punishment, and not in proceedings to restrain the publication of newspapers and periodicals * * *

'The fact that the liberty of the press may be abused by miscreant purveyors of scandals does not make any the less necessary the immunity of the press from previous restraint in dealing with official misconduct Subsequent punishment for such abuses as may exist is the appropriate remedy, consistent with constitutional privilege * * *

"Equally unavailing is the insistence that the statute is designed to prevent the circulation of scandal which tends to disturb the public peace and to provoke assaults and the commission of crime Charges of reprehensible conduct, and in particular of official malfeasance unquestionably create a public scandal, but the theory of the constitutional guaranty is that even a more serious public evil would be caused by authority to prevent publication

"To prohibit the intent to excite those unfavorable sentiments against those who administer the Government, is equivalent to a prohibition of the actual excitement of them, and to prohibit the actual excitement of them is equivalent to a prohibition of discussions having that tendency and effect, which again is equivalent to a protection of those who administer the Government, if they should at any time deserve the contempt or hatred of the people against being exposed to it by free animadversions on their characters and conduct"

This decision will undoubtedly provoke criticism on the supposition that it paves the way for unrestrained yellow journalism and gives the tabloids a chance for more sensationalism than ever, but such an argument is unfounded for, as the Court pointed out, the remedies to check the dissemination of untruths are still present and can be called upon to check such evils

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ALLEGED NEGLIGENT TREATMENT OF FRACTURE OF ARM

A patient consulted the defendant doctor complaining of an injury to his arm, stating that he had fallen heavily upon it

The doctor examined the arm by manipulation and failed to find any evidence of a fracture and suggested that the patient have X-ray pictures taken The next day the patient returned to the doctor with the X-ray pictures and the following report

"Incomplete comminuted fracture through the head of the radius Fragments present good ap position"

The doctor then applied to the arm a Plaster of Paris splint, both anterior and posterior immobilizing the arm in a right angle position

The patient returned to his home and three days later again consulted the doctor, at which time the swelling of the arm was down considerably and the splints loosened The doctor reinforced the splints with adhesive plaster on that occasion and on subsequent occasions A few days thereafter when consulted by the patient the treatment given by the doctor was removing the splints and heating the arm with a lamp, massaging it and re applying splints

Sixteen days after the first treatment the doctor finally removed the splints and stayed the patient's hand in his vest From time to time, for about six weeks from the removal of the splints, the doctor continued to treat the patient, giving him massage, heating his arm by lamp, and passive motion, and at the end of that time suggested that the patient consult a masseur When the doctor saw the man last his arm was much improved and he then was able to extend his arm about 155 degrees At that time the patient provided the doctor with an X-ray picture which showed perfect union

The doctor did not again see the patient, as he left for his vacation, referring the patient to another doctor who attended his practice in his absence The patient, however, did not return to the doctor for treatment again, and instituted an action in the Supreme Court against the doctor to recover on a claim of malpractice A notice of appearance was served on behalf of the doctor, but no complaint was ever served in the action After some time, through the efforts of your counsel, the attorney for the plaintiff was persuaded that the doctor had in no way departed from the proper and approved practice and obtained the consent of the plaintiff's attorney to discontinue the action Thus the matter was terminated in favor of the doctor without trying the case

BURN CLAIMED CAUSED BY NEGLIGENT PHYSIOTHERAPY

The doctor who was the defendant in a recent case, specialized in physiotherapy. A patient consulted him complaining of rheumatism, and after examination the doctor advised a certain form of physiotherapy. The machine used by the doctor was a standard make machine which may roughly be described as resembling an ordinary bed with a canopy attached over it. On the underside of this canopy were thirty-two electric bulbs of 20-watt strength. The treatment table was designed so that it could be drawn from under the canopy for the patient to be placed on or removed from the table. When in place for treatment, the apparatus enabled the body of the patient to be treated by radiation from the bulbs, extending from the patient's feet to his neck. The patient's body, disrobed, was a distance of twelve to eighteen inches from direct contact with the electric bulbs.

This patient received a series of treatments by means of the said machine, which were each of twenty minutes duration. On one such occasion, after the patient had received about a five minute application, he called to the nurse standing nearby that he had burned his toe. The doctor examined the patient's foot but found no evidence of a burn. A few days later when the patient called for his next treatment he had a blister on his foot which the doctor opened, and dressed with a wet dressing. The patient continued to undergo the light treatments and when last seen by the doctor appeared to be practically healed. The doctor contended that the machine was in perfect order and that the only way the patient could possibly have received the burn was by raising his leg so as to strike one of the electric bulbs. The patient had been cautioned against this.

Some time later a suit was commenced charging that the doctor was negligent in his treatment of the plaintiff, and attempting to recover large damages for the burn sustained by the patient, claiming that amputation of the toe had become necessary.

Before the case could be reached for trial the plaintiff died, however, and the action was marked abated, thereby closing the matter.

ALLEGED NEGLIGENT TREATMENT OF INJURY TO CHILD'S FINGER

A child, two years of age, was brought to the office of the defendant doctor, and the mother of the child informed the doctor that while playing with a lawn-mower he had cut his right thumb.

The doctor found that the tip end of the thumb had been pinched off and was hanging by a shred. The doctor took a 2% solution of mercurochrome and cleansed and sutured the wound with two horse-hair sutures, and applied a dry sterile bandage. When the doctor treated the wound it showed a clean cut with no signs of dirt or infection present.

Two days later the child was brought back to the doctor and again the wound was found clean and no infection present. The sutures were holding, but the extreme tip of the finger was dry. Mercurochrome was again applied and the finger dressed and the child taken home. Two days subsequent to said treatment the child was again brought to the doctor and conditions were the same and the same treatment was given.

The following day when the child was brought to the doctor a small amount of pus was found in the suture line. The sutures were removed and a necrotic piece of the extreme end of the finger was clipped off. The finger was dressed with 8% aluminum acetate and a gauze bandage applied. The next day the wound was again cleaned and found to be granulating nicely, and balsam of Peru was applied with a bandage.

The mother at that time stated that the child complained of a sore throat, which the doctor examined with the aid of a tongue depresser, but nothing abnormal was found and the child was not running a temperature. The following day the doctor was informed that the child had been taken to a hospital where he subsequently died from tetanus.

On the doctor's first examination no dirt was found in the wound and there was not present any indication that tetanus might levelop. The wound had bled freely and the sutures used did not shut off free drainage, nor hermetically seal the repair.

A suit was instituted against the doctor, charging that the treatment he had administered to the child was responsible for death of said child. The case was duly brought on for trial before a Judge and Jury, and after the issues in the case had been submitted to the Jury they returned a verdict in favor of the defendant.

NEWS NOTES

THE ANNUAL MEETING

The annual meeting of the Medical Society of the State of New York was held on the first three days of June in the Hotel Syracuse, Syracuse, N. Y., according to the plans and programs announced in this Journal of April 15th. It is always desirable to house all the features of the annual meeting under one roof and on one floor. The ideal place was formerly the Waldorf-Astoria Hotel in New York, for there all features of the meeting were accommodated on the second floor; but since that hotel has been discontinued, few other hotels in the State can be found suitable. The Hotel Syracuse approached the standard closely, and the managers put forth every effort to serve the visitors courteously and efficiently.

The registration was a little over 750 which is somewhat smaller than usual, owing to the near approach of the meeting of the American Medical Association, and the sessions of the National Ophthalmological Society and other organizations. However, those who came to the State meeting took a deep interest in the proceedings as was shown by the well filled rooms of the general sessions and the scientific sections. Possibly the reduction in the number of those in attendance was also due to the absence of many physicians who sought pleasure principally.

HOUSE OF DELEGATES

The annual meeting of the State Society opened with a session of the House of Delegates at two o'clock on the afternoon of the first of June, with the Speaker, Dr. John A. Card, of Poughkeepsie, presiding. The harmony and expedition with which the business was conducted were largely due to his decisions, which were given promptly, humorously and on a broad, liberal basis.

The House is composed of about two hundred members, consisting of one hundred and fifty delegates elected by the county societies, and the officers of the State Society and past-presidents. The attendance was exceptionally good, only about a dozen badges prepared for the members not being used.

The proceedings of the House of Delegates were conducted with harmony and entire good feeling. While there had been suggestions of protests from some county societies, the subjects were of a minor nature and were usually settled with a frank admission of their debatable character which required future study. The satisfactory settlement of these problems, or their future study, was due largely to the inclusion of the officers and past-presidents of the State Society in the membership of the House of Delegates, thereby combining the representative character of the county societies with the mature wisdom and experience of the State officers.

Practically every subject in dispute had been considered by some committee of the State Society, and the discussions had been published in the Journal at intervals throughout the year.

A further incentive to harmony was the publication of the reports of the officers and committees, and also of the personnel of the reference committees, in the Journal of May first, a full month in advance of the meeting. Seventy-five delegates had been appointed to fifteen reference committees, and only five changes in personnel were necessary, all because of unavoidable absences. The result was that the members had a month to consider the reports and recommendations of the officers, and were therefore prepared to make definite suggestions for action as soon as the House of Delegates convened.

The House showed its confidence in its officers and committees by adopting nearly all their recommendations. The harmony and wisdom shown by the delegates were due largely to three committees whose activities, and even existence, began scarcely five years ago. These committees —that on Public Health and Medical Education, that on Public Relations, and that on Economics —had been continuously active throughout the year, and had given serious consideration to subjects which had previously come up only in the House of Delegates and had been sources of discord among delegates who had little experience in the solution of the problems.

An action of major importance was the approval of the suggestion of President Ross that the State Society take steps to organize the work of popular medical publicity through the newspapers, the radio, and the lecture platform, as Indiana, Minnesota, and other States have done successfully. (Reports of the work of popular medical publicity in the other States will be found in the Journal in the Department of "Our Neighbors," the articles being listed in the annual indexes under the title "Popular Health Education.")

The election of officers was unusually har-

monious, not a single contest taking place. The new officers will be found listed in the Journal on the first editorial page where they will appear in every issue throughout the year, as in previous years. It is probable that the members consult this page more frequently than any other, as they frequently have occasion to ascertain the identity of an officer or committee chairman.

The sessions of the House of Delegates were held on the afternoon and evening of June first, with a social supper in between. The House finished its deliberations on the morning of the second day. The full minutes of the proceedings, including brief outlines of the debates, will be printed in this Journal of July first.

The House of Delegates also approved the suggestion of President Ross that each County Society should appoint a reporter whose duty would be to represent the *New York State Journal of Medicine* in collecting and forwarding medical news, particularly that of the meetings of the societies. The matter of printing news of county societies were also brought up independently by a delegate from a large city who complained erroneously, that news from his society was not published. Dr. Orin S. Wightman, Editor-in-Chief of the Journal, replied that all news received from county societies was published, subject only to the usual editing; and that the Editors and Publication Committee were putting forth every effort to secure and print the news from every county society. (See page 768).

THE ANNIVERSARY MEETING

The charter of the Medical Society of the State of New York requires it to hold an anniversary meeting each year. This year the meeting took the form of a banquet and after-dinner speaking, on the evening of the second day of the sessions. The occasion was successful to an unusual degree. The banquet room was filled to its capacity, and the speaking was of peculiar interest. The toastmaster was Dr. Frederick H. Flaherty, of Syracuse, Chairman of the Committee on Arrangements.

The first speaker was Dr. William Gerry Morgan of Washington, President of the American Medical Association, who gave a paper on the subject "Are the Widespread Criticisms of the Medical Profession Justified?" This paper is printed on page 739 of this Journal.

The annual Presidential Address was given by Dr. William H. Ross who discussed "Medical Responsibilities" from the standpoint of his broad experience as President during the past year. This address is printed as the leading article in this issue of the Journal.

Dr. Wingate Todd, Professor of Anatomy in the Western Reserve School of Medicine, Cleveland, Ohio, gave an address on the subject "Comings and Goings," illustrated with lantern slides taken from classic pictures. The subject referred to the development and the death of human beings, and consisted of a discussion of the relative influence of heredity and environment in the growth of the child. While Dr. Todd was thoroughly scientific, he was also literary and artistic in his presentation of his subject. The form and substance of his address were ideal for an after-dinner address to an audience of doctors and their wives.

The anniversary meeting closed with felicitous greetings from the new President, Dr. William D. Johnson, of Batavia, and the President elect, Dr. Charles Gordon Heyd, of New York, Past Treasurer of the Society.

THE SCIENTIFIC SESSIONS

While the administrative business of the Medical Society of the State of New York is transacted in a formal way in the House of Delegates by delegates regularly chosen, the great majority of those attending the annual meeting come for the purpose of attending the scientific sessions in order that they may learn about the newer methods of practice and gain inspiration from the presence of outstanding practitioners of medicine. Following the successful precedent of last year, the Committee on Scientific Work, under the chairmanship of Dr. Arthur J. Bedell, of Albany, arranged a program for general sessions on the afternoons of the second and third days of the meeting. That on Tuesday afternoon was a symposium on Psychopathology and Psychotherapy, with the following speakers:

Dr. Frankwood E. Williams, New York, "In Childhood and Adolescence."

Dr. Abraham A. Brill, New York, "In Neuroses and Phychoses."

Dr. Smith Ely Jelliffe, New York, "Internal Medicine."

The program of Wednesday afternoon was a symposium on "Head Injuries" with the following speakers:

Dr. Wells P. Eagleton, Newark, N. J., in "Injuries to the Frontal and Temporal Region from a Physiological and Anatomical Standpoint and Their Relation to the Development of Meningitis."

Dr. Albert G. Swift, Syracuse, "Treatment of Head Injuries."

Dr Foster Kennedy, New York, "Treatment and After Effects"

The mornings were given over to meetings of the eight scientific sections which are listed, together with their officers, on the first editorial page of each issue of the Journal In addition the special committee on Physical Therapy held a scientific session on the morning of June third, with the chairman, Dr Richard Kovacs, of New York, presiding

In accordance with the rules of the Medical Society of the State of New York, the papers of the scientific sessions will be published in the Journal during the coming year Since seventy-two papers are listed, an average of three papers will appear in each issue of the Journal

THE TECHNICAL EXHIBITS

No meeting of a State Medical Society is complete without an exhibit of the manufacturers who supply the tools with which a physician works The practice of modern medicine differs from that of a half century ago, principally in the use of instruments of precision, and of drugs, chemicals and foods of known potency All the available floor space was occupied by thirty-four exhibitors whose names and products are listed in the April fifteenth issue of this Journal

It has been the policy of the officers of the Medical Society of the State of New York, and of the members of the editorial staff of the Journal to establish friendly relations with the exhibitors, and so, following the example of past meetings the members of the exhibitors staffs, some seventy-five in number, were tendered a dinner and entertainment given on the evening of June first in a room adjoining the exhibit booths There was also after-dinner speaking under the direction of Dr Orrin Sage Wightman, editor-in-chief of the Journal The speakers included Dr W H Ross, retiring President of the State Society, Dr W D Johnson, incoming president, and Dr Charles Gordon Heyd, President elect, Dr Frank Overton, executive editor, and Mr J B Tufts, advertising manager

Replies were given by Dr Lillian B Storms, representing the Gerber Products Company, maker of strained vegetables for children, and by Mr H Brandon, President of the Anglo French Drug Company, New York

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GRADUATE FORTNIGHT OF THE NEW YORK ACADEMY OF MEDICINE

The disorders of the circulatory system, which have in the last decade placed "heart disease" in the forefront of the principal causes of death, will constitute the theme of the Fourth Annual Graduate Fortnight of The New York Academy of Medicine

This graduate course of instruction will consist in a series of lectures and clinical demonstrations, concentrated in a period of two weeks from the 19th to the 30th of October, 1931

Lectures will be delivered evenings in the auditorium of The New York Academy of Medicine, 2 East 103rd Street, New York City Clinical demonstrations will be held during afternoon in twelve of the leading hospitals of the city The demonstrations will be in charge of teaching clinicians and will be organized so that those participating will have the full benefit of individual contact with both demonstrator and patient

An outstanding feature of the 1931 Graduate Fortnight will be the anatomical, bacteriological, and pathological exhibition of specimens and research material bearing upon the subjects dealt with in the evening meetings and clinical demonstrations

This exhibit will be housed in the Academy and will be open for leisurely study A number of the exhibited items will be demonstrated on schedule and subjected to group discussion

The profession of the country is invited to attend and to participate in the Graduate Fortnight There is no charge for attendance at any of the clinics or meetings, but registration for the clinical demonstrations is required

A complete program and registration blank for the clinics and demonstrations may be secured by addressing the New York Academy of Medicine, 2 East 103rd Street, New York City

COMMITTEE ON PUBLIC RELATIONS

A meeting of the Public Relations Committee was held in the Albany office on Thursday, May 21, 1931. Those present were Drs. Sadlier, Johnson, Fisher, Hambrook, Ross, and Lawrence.

Under "unfinished business" Dr. Sadlier reported that he had received replies from five deans of medical schools to the letter he had written, asking their interest in informing the medical students upon the provisions of the public welfare law. Two of the deans—Dr. Ordway of Albany, and Dr. Burrett of Homeopathic—asked him to lecture to their students upon the subject. Appreciation was expressed by the committee on the responses, and it was recommended that Dr. Sadlier arrange to have a lecture deliverel upon the subject to the students of these two schools. If there is not sufficient time to prepare for such lecture this year, then it should be made a part of next year's program.

Dr. Lawrence reported that during the last two weeks he has visited with the presidents and secretaries of several County Societies and discussed with them the affairs of their Societies. These conferences have been exceedingly valuable; the presidents and secretaries invariably have expressed their appreciation of an opportunity to discuss with the Executive Officer their programs of activities. They have all shown a keen interest in developing work along the lines suggested by the Public Relations Committee, but in several instances the committees have not been as active as they should, owing, it was discovered, to the fcact that they did not have a clear conception of what they might do; for instance, in Greene County the chairman had not named other members to his committee, but being present at the conference he was so convinced of the opportunities presented that he immediately named a committee which received the approval of the president and secretary, and outlined a program of activities for the next year.

In most instances the administration of the public welfare law is the feature that is engaging their attention at this time. One chairman of a Public Relations Committee expressed dissatisfaction with the report of minutes of the meetings of the State Committee on Public Relations. He suggested that, in his opinion, those minutes should contain more specific suggestions as to what the county committees should do and how they might go about it. This criticism was accepted by the committee as fair and it was recommended that the chairman communicate with the county chairmen individually, making some suggestion to those who have already submitted surveys or reports of activities as to ways in which they might further advance their work, and a special request should be made of the chairmen from whom no survey or statement of activities has been received, asking for a statement as to what their committee has done and what future plans of activity they contemplate.

Dr. Fisher moved, seconded by Dr. Hambrook, that the county societies should be urged to have occasional meetings of their committees, and the chairmen be asked to report to this committee the minutes of their meetings. The state committee would like to keep in closer touch with the county committees, realizing a mutual value in closer contact, but is unable to do so except by more hearty cooperation on the part of the county chairmen.

It was also suggested that by this time all county committees should have had a conference with their county and city welfare commissioners with regard to the promotion of welfare work along the lines outlined in the new law. The regulations under which welfare activities are conducted in cities differ from those provided for the rural districts.

In discussing the advantages of a general conference of the county chairmen, it was recommended that next year the committee should hold regional conferences in addition to the general conference. Last year thirty-two county societies were represented at the general conference. In developing new work such as the public relations program, it is difficult to inspire chairmen by means of correspondence alone and it is thought wise that the state committee should make a great effort to give every chairman an opportunity of discussing the subject with the state committee and other county chairmen.

The committee had invited the General Secretary of Associated Industries to the conference, for the purpose of discussing matters that are of mutual interest to the two organizations. The two organizations have been together on previous occasions through the medium of our Economics Committees. On this occasion, however, we tried to limit ourselves to questions of general relationship. His organization, he reported, is very appreciative of the efforts the physicians are making to advance health conditions in industry. He regretted to report that there are still sources of annoyance arising from selfish and careless work done by a few physicians. The number is exceedingly small, but their disregard of the ethical standards of the profession is at times very annoying. He is thoroughly convinced—and he says that his organization is in accord with him—that the Department of Labor should have the benefit of advice from representatives of the Medical Society. He feels that much of what appears to be a lack of cooperation is due to insufficient knowledge of all those involved in the care of injured persons, both on the part of the physicians and the employers. The employer might take a greater interest in securing medical care for his employees and the Medical Society might

take a greater interest in seeing that those who engage in industrial work observe the Principles of Practice as strictly as do other physicians. Industrial management recognizes that it is good business to take the best care of its employees, but it also is aware of the many possibilities and the expensiveness of malingering. There are bound to be certain persons who will enjoy bad health and, unfortunately, such persons will usually find physicians who are willing to assist or encourage them in their delinquency. It was generally recognized that industrial medicine and surgery today have developed to the point where they are almost specialties; certainly many conditions arising often in industry have developed special types of treatment and care. This is demonstrated in the programs of the New York State Society of Industrial Medicine.

Dr. Ross reported that these questions would receive considerable attention from the sub-committee on medical care of the Governor's industrial investigating committee. It has been suggested to the sub-committee that there should be in connection with the Department of Labor a Supreme Court of Review of Cases, and he thought that an advisory council might meet the conditions better.

The next meeting of the committee will be held in Albany on Tuesday, June 30th, at which time the subject and date for the annual conference of the chairmen of the County Chairmen of Public Relations Committees will be selected.

SUFFOLK COUNTY

The semi-annual meeting of the Suffolk County Medical Society was held in the Kings Park State Hospital, on April 30th, beginning at noon, with the President, Dr. William J. Tiffany, Superintendent of the Hospital in the chair. There were present forty-two physicians, twenty nurses, and fourteen other guests, mostly wives of the doctors. A business session was first held, followed by a social dinner, and a scientific session in the afternoon.

The Secretary, Dr. E. P. Kolb, reported that the Comitia Minora had held four meetings since the annual meeting in October, and had attended to the routine business of the Society, as was reported in the monthly News Letter of the Society.

The following physicians were elected to membership:

L. Cody Marsh, Kings Park.
Carl W. Cahoon, Bay Shore.
Wilbur S. Stakes, Patchogue.
Patrick L. Smith, Babylon.
D. Farquhar Currie, Shelter Island.
Myron W. Brown, Babylon.

Dr. Frank Overton, Chairman of the Committee on Public Health and Graduate Medical Education, reported that the South Suffolk Chapter of the Red Cross proposed to reestablish a nursing service in the southwestern section of the county, comprising the district from Patchogue to Amityville, and asked for the advice and assistance of the doctors. On motion, the Society approved the plans of the Red Cross, and referred the details of the plan to the Southwide Clinical Society for action. (Later this society, which is practically a district branch of the county society, voted to appoint a committee consisting of one doctor from each village, to advise and cooperate with the Red Cross).

Dr. Overton was also authorized to protest against the application of the Better Health Foundation before the New York State Department of Social Welfare, for permission to establish a clinic and laboratory in Huntington, Suffolk County, for giving the Coffey-Humber treatment for cancer. (Later this permission was denied).

Dr. W. H. Ross, chairman of the Economics Committee, reported on agreements reached with the County Welfare Commission regarding medical treatments given under the New Welfare Law (see this Journal, April 15, 1931, page 426).

Dr. G. A. Silliman, Chairman of the Legislative Committee, reported on the action of the members regarding medical bills before the Legislature.

A committee was appointed on obituaries of Dr. J. S. Ames, of Babylon, Dr. W. S. Bennett of Patchogue, Dr. Charles E. Gibbs of Kings Park, and Dr. Frederick Peterson of Smithtown, all of whom had died since the last annual meeting.

At the scientific session Dr. James N. Vander Veer of Albany explained the plan of the Liaison Committee of the Medical Society of the State of New York, and the State Department of Health, in regard to the cooperation of the county societies in the control of venereal diseases. (This plan is outlined in this Journal of June first, page 712).

Dr. G. C. Matthews of the Kings Park State Hospital Staff, gave a paper on mental hygiene with particular reference to children.

Dr. Patricia Steen also of the Hospital staff, read a paper on mental deterioration following encephalitis.

SENECA COUNTY

The regular semi-annual meeting of the Seneca County Medical Society was held at the Elks' Temple, Seneca Falls, N. Y., May 14, 1931. The business meeting convened at 10 A.M. and the usual routine business was transacted.

Mr. Raymond B. Wells, the Seneca County Commissioner of Public Welfare, was present by invitation, and spoke regarding welfare work in the county. Many questions were asked the Commissioner by the physicians present, in regard to the various phases of welfare work, and were answered by him.

Officers were then nominated for the ensuing year.

After a shad dinner, served at the Gould Hotel at 12:30 P.M., the Society reconvened at 2 P.M. for the scientific session. In compliance with the request of the special committee on Cancer Prevention of the Medical Society of the State of New York, it had been decided to have the scientific session at this meeting devoted to the subject of cancer. The program was as follows:

"The Present Conception of the Etiology of Cancer," by Burton T. Simpson, M.D., Director, New York State Institute for the Study of Malignant Disease, Buffalo, N. Y.

"The Early Diagnosis of Cancer," by John M. Swan, M.D., New York State Executive Secretary American Society for the Control of Cancer, Rochester, N. Y.

The second paper was illustrated by lantern slides, and both papers were received with the greatest attention and interest. In the discussion which followed the reading of the papers, Dr. G. B. Adams, Chief of Cayuga County Laboratory, Auburn, N. Y., helped to bring out some of the important facts by his own familiarity with research work on the subject.

The interest taken by the members in the subject of cancer was shown by a rising vote of thanks which was given to Dr. Simpson and Dr. Swan for their unusually interesting papers, and the meeting was adjourned until the annual meeting in October, at the Willard State Hospital.

WOMEN'S MEDICAL SOCIETY

On June 1, 1931, the Twenty-fifth annual meeting of the Women's Medical Society of New York State convened at Hotel Syracuse, Syracuse, New York.

Officers for 1931 and 1932 were elected as follows:

Honorary Presidents: Mary T. Greene, M.D., Helene Kuhlmann, M.D.
President: Marion S. Morse, M.D.
Vice-Presidents: Mary J. Kazmierczak, M.D., Adelaide Dutcher, M.D., Harriet F. Coffin, M.D.
Treasurer: Anna P. Walsh, M.D.
Secretary: Sophy Page Carlucci, M.D.

Councillors.

1st Dist. Branch—Marie L. Chard, M.D.
2nd Dist. Branch—Mary E. Potter, M.D.
3rd Dist. Branch—Emily A. Pratt, M.D.
4th Dist. Branch—Annette Barber, M.D.
5th Dist. Branch—Ruth D. Moore, M.D.
6th Dist. Branch—Edith M. Wheeler, M.D.
7th Dist. Branch—M. Louise Hurrell, M.D.
8th Dist. Branch—Katherine E. Cornevale, M.D.

Committee Chairmen.

Scientific Program—Isabel Borden, M.D.
Legislative—Florence Sherman, M.D.
Medical Education—Mary T. Greene, M.D.
Public Health—Daisy M. O. Robinson, M.D.
Public Relations—Mary N. Sloane, M.D.
Membership—Clara H. Pierce, M.D.
Resolutions—Alta Sager Greene, M.D.

The business session was followed by a paper on "Priodic Health Examinations" by Dr. C. Ward Crampton. This so interested the members that a Committee on Periodic Health Examinations was established, with Dr. Marion Craig Potter of Rochester as Chairman.

Short addresses were made by Dr. Ross, President of the New York State Medical Society, and Dr. William D. Johnson, President-elect; and also by Dr. Albert Pfeiffer, Director, Division of Social Hygiene, State Department of Health.

The following scientific papers were read:

"The Ascheim Zondek Test for Pregnancy." Ida Holzberg, M.D., New York.

"Allergy." Katherine Bayliss McInnes, M.D., Binghamton.

"Breast Tumors." Margaret Warwick, M.D., Buffalo.

"The Influence of Membranes Upon Action Currents." Jane Sands Robb, M.D., Syracuse.

"Ketogenic Diets in the Epilepsy of Childhood." Florence Warner, M.D., Binghamton.

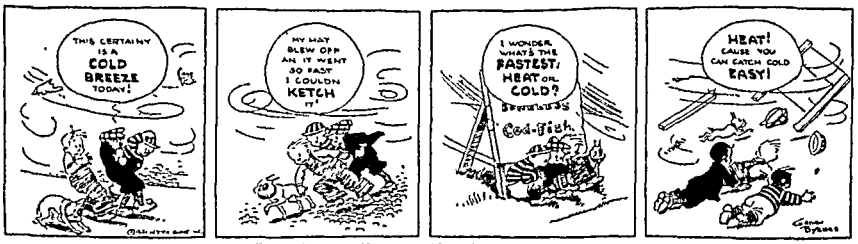
"Child Guidance Problems." Jennie Klein, M.D., Buffalo.

Social events enjoyed by members and their guests included an open house at the home of Dr. Clara H. Pierce, Syracuse, New York, Sunday afternoon, May 31st, and a banquet Monday evening, June first.

SOPHY PAGE CARLUCCI, *Secretary.*

THE DAILY PRESS

Reg'lar Fellers — A Hot Discussion — By Gene Byrnes



From the New York Herald Tribune, April 17, 1931

WOAD

Most well-read doctors will recall woad simply as a dye stuff with which the ancient Britons dyed their faces, but an editorial in the New York *Sun* of May 13 describes its economic importance as the principal source of indigo to Europeans up to a few centuries ago when indigo was introduced from India. The editorial reads:

"Dr. Jamieson B. Hurry of Reading, England, was an inquiring student of natural history as well as an accomplished practitioner of the healing art. He prepared a study of woad and the dye derieved from it—the source of the blue dye with which ancient Britons decorated themselves much as their descendants decorate themselves with rouge. Dr. Hurry's book is posthumously published; it tells the story of economic eclipse of two once important natural dyes.

"Woad was unrivaled as the source of blue dye until the seventeenth century, when importation of indigo from India threatened to supplant it. Indigo triumphed over woad and ruled for years. But in the latter part of the nineteenth century synthetic indigo was produced in the laboratory, and about 1900 economic industrial production became a fact. The indigo men made a strong but losing fight; they introduced improved practices but the chemist got the better of the planter.

Woad and indigo and synthetic blue! What will succeed the aniline as the aniline succeeded the vegetable after one vegetable had succeeded another?"

Woad and indigo are cultivated plants, grown from seed. It is of interest that the American colonists obtained indigo from a wild plant, Baptisia tinctoria, or wild indigo, which decorates the waste lands of Long Island with its two-foot globes of yellow flowers during the summer. When either of the three plants are subjected to watery extraction and fermentation, they yield indican, which is then converted to indigo by processes like the indican test of urine.

SUGAR AND FATIGUE

Professor D. A. Laird, who holds the chair of psychology in Colgate University, has been investigating the effects of food on fatigue with results that are described in the New York *Herald Tribune* of May 8, as follows:

"Sugar had been shown by the Colgate experiments to be the quickest mitigator of fatigue, Dr. Laird said. It also has unsuspected powers, he added, of stimulating gastric juices, thereby aiding digestion. The flow of the gastric juices, experiments showed, tends to fall off before a meal is digested fully. Dr. Laird, therefore, recommends a "second dessert" of candy or cookies about an hour after eating.

"And the old custom of having a sherbet with the heavy meat course was scientifically sound," he said. "The sweet in the sherbet aids in digesting the heavy proteins.

"Dr. Laird's student helpers performed prodigies of industry in studying the flow of saliva, in charting the contractions of the stomach under the influence of the four primary tastes—sweet, sour, salt and bitter—and in testing the effect of nutrition upon fatigue.

"They hiked miles and climbed mountains, munching sweets by the way, in order to explore the scientific variations of that tired feeling—which, they discovered, is not one feeling at all, but fifty-six different tired feelings. They include, it was announced:

Itchiness or creepiness of skin.
Difficulty in relaxing.
Faintness or haziness.
Jumpiness or fidgets.
Inability to recall the name of the man from Seattle.
Wanting not to talk.
Inability to draw a straight line.
Loss of sensitiveness to electric shocks.

"The students ran up hundreds of flights of stairs, swallowed thousands of minute balloons, gulped down Rehfus tubes like spaghetti, and ate the standard "Ewald toast and tea" meal as though they liked it, all for sweet science's sake.

The tests, which still are in a preliminary stage, have dealt primarily thus far, with elementary tastes and foods. In these tastes a standard of intensity, ranged from zero (no taste) to 100 (as strong a taste as the human palate can register).

HEREDITY AND ENVIRONMENT

The relative effects of heredity and environment are discussed editorially in the New York *Times* of May 23, under the title "Nature & Nurture," which says:

"In the debate between hereditarians and environmentalists there is the least disagreement on stature and weight. That both are greatly affected by environment, notably by nutrition, has won sufficiently wide acceptance to be recorded in the elementary textbooks on biology. The case for environment is strengthened by a new set of figures from Harvard and Vassar. An examination of 2,000 pairs of fathers and sons and 500 pairs of mothers and daughters shows a marked gain in height and weight for the children over the parents. In the case of Harvard this is the continuation of a trend already revealed in the case of the contemporary fathers over their own fathers. Every thirty-two years at Cambridge add an inch in height and eight pounds in weight to the student average.

"The same forces operating in the Harvard stock Professor Boas years ago found at work among the children of the immigrant foreign-born in New York. Again there is room for debate whether the influence of better food, better housing and out-of-door exercise is more positive or negative; that is to say, whether a favorable environment actually stimulates changes in stature or removes hindrances toward full physical development.

"There is very good reason for believing that the difference in stature usually noted between a dominant and a subject race, as between Aryan and Dravidian in India, or between Manchu and Southern Chinese, is not entirely due to the fact that a taller race of invaders imposed their rule upon a physically inferior indigenous population. Along with the powers of Government the invader naturally asserted a prior claim on the best food in the country and on the greater amount of leisure and recreation, thus accentuating any existing differences between a tall ruling class and a medium-height subject class."

CARRYING COALS TO NEWCASTLE

The following editorial from the New York *Times* of May 14 tells of National variations of a well-known saying:

"There have been sayings in many languages to suggest the folly of carrying things to places where they are already to be found in profusion. The one in most common use is 'carrying coals to Newcastle.' But centuries before the coal mines of Newcastle were worked, there was an adage in Greek about carrying owls to Athens. In the orient it was transporting pepper to Hindustan or oil to the city of olives. In France it was selling shells to those who came from San Michel; in Denmark sending fir trees to Norway; and in London casting water into the Thames.

"To these has now been added 'oats to Scotland.' A year and more ago there was great alarm because there was a 'dumping' of German oats upon the Caledonian coasts. Now it is reported to be a superior brand of American oats that menaces the native product. But will the oats from our fields produce the same sort of keen intellectuality and thriftiness that the porridge of home-grown oats has given (or have given, for 'porridge' is plural in Scotland) to the Scot through generations?

"Sydney Smith should rise from his grave to protest against the importation of the American avena, however palatable. When the Scot sits over a dish of foreign oatmeal instead of standing with his back to the wall as his ancestors did with their porridge, or takes to the steel shaft for his golf club instead of the native hickory, one may well ask: 'Stands Scotland where it did?'"

BOOKS RECEIVED

Acknowledgment of all books received will be made in this column and this will be deemed by us a full equivalent to those sending them. A selection from this column will be made for review, as dictated by their merits, or in the interests of our readers.

SURGICAL CLINICS OF NORTH AMERICA. Vol. 11, No. 2, April, 1931. (Lahey Clinic Number.) Published every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues). Cloth, $16.00 net; paper, $12.00 net.

INTERNATIONAL STUDIES on the Relation between the Private and Official Practice of Medicine with Special Reference to the Prevention of Disease conducted for The Milbank Memorial Fund. By SIR ARTHUR NEWSHOLME, K.C.B., M.D. Volume I. Octavo of 248 pages. Baltimore, The Williams & Wilkins Company, 1931. Cloth, $4.00.

CLINICAL DIAGNOSIS BY LABORATORY METHODS. A Working Manual of Clinical Pathology. By JAMES CAMPBELL TODD, Ph.B., M.D., & ARTHUR HAWLEY SANFORD, A.M., M.D. Seventh edition. Octavo of 765 pages, illustrated. Philadelphia and London, W. B. Saunders Company, 1931. Cloth, $6.00.

NUTRITION AND DIET IN HEALTH AND DISEASE. By JAMES S. MCLESTER, M.D. Second edition. Octavo of 891 pages, illustrated. Philadelphia and London, W. B. Saunders Company, 1931. Cloth, $8.50.

HANDBOOK OF PHYSIOLOGY. By W. D. HALLIBURTON, M.D., LL.D. & R. J. S. MCDOWALL, M.B., D.Sc., Nineteenth edition. Octavo of 842 pages, illustrated. Philadelphia, P. Blakiston's Son & Co., 1930. Cloth, $4.75.

THE TREATMENT OF BEHAVIOR DISORDERS FOLLOWING ENCEPHALITIS. An experiment in re-education. By EARL D. BOND, M.D., and KENNETH E. APPEL, M.D. Octavo of 163 pages, illustrated. New York, The Commonwealth Fund Division of Publications, 1931. Cloth, $1.75.

THE HARVEY LECTURES. Delivered under the auspices of the Harvey Society of New York, Series 25, 1929-30. Octavo of 225 pages. Baltimore, Williams & Wilkins Co., 1931. Cloth, $4.00.

MEDICINE: An Historical Outline. By M. G. SEELIG, M.D. Second edition. 12mo of 205 pages, illustrated. Baltimore, Williams & Wilkins Co., 1931. Cloth, $3 00.

A MANUAL OF TUBERCULOSIS FOR NURSES. By E. ASHWORTH UNDERWOOD, M.A., B.Sc. 12mo of 272 pages, illustrated. New York, William Wood & Company, 1931. Cloth, $2 50.

THE TREATMENT OF ASTHMA. By A. H. DOUTHWAITE, M.D., F.R.C.P. 12mo of 164 pages. New York, William Wood & Company, 1931 Cloth, $2.50.

PRACTICAL ANAESTHETICS for the Student and General Practitioner. By CHARLES F. HADFIELD, M.B.E., M.A. Second edition. Octavo of 336 pages, illustrated. New York, William Wood & Company, 1931. Cloth, $3.50.

THE INTERNATIONAL MEDICAL ANNUAL: A Year Book of Treatment and Practitioner's Index. Editors: CAREY F. COOMBS, M.D., and A. RENDLE SHORT, M.D. Forty-ninth Year, 1931. Octavo of 551 pages, illustrated. New York, William Wood and Company, 1931. Cloth, $6.00.

BACKACHE. By JAMES MENNELL, M.A., M.D. Octavo of 199 pages, illustrated. Philadelphia, P. Blakiston's Son & Co. Inc., 1931. Cloth, $3.00.

A SYNOPSIS OF THE UNITED STATES PHARMACOPOEIA AND NATIONAL FORMULRY PREPARATIONS. By H. J. FULLER, PH.C., PHM.B. Octavo of 247 pages. Philadelphia, P. Blakiston's Son & Co., Inc., 1931. Cloth, $2.00.

RECENT ADVANCES IN CARDIOLOGY. By C. F. TERENCE EAST, M.A., M.D., and C. W. CURTIS BAIN, M.C., M.B. Second edition. Octavo of 353 pages, illustrated. Philadelphia, P. Blakiston's Son & Co., Inc., 1931. Cloth, $3.50. (The Recent Advances Series.)

SURGERY, ITS PRINCIPLES AND PRACTICE, for Students and Practitioners. By ASTLEY PASTON COOPER ASHHURST, A.B., M.D. Fourth edition. Octavo of 1189 pages, illustrated. Philadelphia, Lea & Febiger, 1931. Cloth, $10.00.

THE COMMON SENSE OF DRINKING. By RICHARD R. PEABODY. Octavo of 191 pages. Boston, Little, Brown, and Company, 1931. Cloth, $2.00.

COLLECTED PAPERS, 1904-1929. By EDWIN BEER, M.D. Octavo of 827 pages, illustrated. New York, Paul B. Hoeber, Inc., 1931. Cloth, $7.50.

WHITE HOUSE CONFERENCE 1930 ADDRESSES AND ABSTRACTS OF COMMITTEE REPORTS. White House Conference on Child Health and Protection called by President Hoover. Octavo of 365 pages. New York, The Century Company, 1931. Boards 50c.

THE VITAMINS. By H. C. SHERMAN and S. L. SMITH. Second edition. Octavo of 575 pages. New York, The Chemical Catalog Company, Inc., 1931. Cloth, $6.00. (American Chemical Society Monograph Series, No. 6.)

CRIPPLED CHILDRCN: Their Treatment and Orthopedic Nursing. By EARL D. MCBRIDE, B.S., M.D. Octavo of 280 pages, illustrated. St. Louis, The C. V. Mosby Company, 1931. Cloth, $3.50.

THE SCIENCE AND PRACTICE OF SURGERY. By W. H. C. ROMANIS, M.A., M.B., and PHILIP H. MITCHINER, M.D., M.S. Third edition. Two octavo volumes totaling 1868 pages, illustrated New York, William Wood & Company, 1930. Cloth, $12.00.

THE CRIMINAL, THE JUDGE, AND THE PUBLIC. A Psychological Analysis. By FRANZ ALEXANDER, M.D., and HUGO STAUB. Translated from the German by Gregory Zilboorg, M.D. 12mo of 238 pages. New York, The Macmillan Company, 1931. Cloth, $2.50.

THE DIAGNOSIS AND TREATMENT OF BRAIN TUMORS. By ERNEST SACHS, A.B., M.D. Quarto of 396 pages, illustrated. St. Louis, The C. V. Mosby Company, 1931. Cloth, $10.00.

PRACTICAL CLINICAL PSYCHIATRY, for Students and Practitioners. By EDWARD A. STRECKER, A.M., M.D., and FRANKLIN G. EBAUGH, A.B., M.D. Third edition. Octavo of 553 pages, illustrated. Philadelphia, P. Blakiston's Son & Co., Inc., 1931. Cloth, $4.00.

BOOK REVIEWS

ORAL DISEASES: A Practical Treatise Offering Diagnostic and Therapeutic Aid to the Practitioner of Medicine and Dentistry. By JAMES J. ZEMSKY, D.D.S. Octavo of 402 pages, illustrated. Brooklyn, New York, Physicians and Surgeons Book Co., 1930. Cloth, $8.00.

"That he who runs may read" might sufficiently describe this book of 414 illustrations within 335 pages of terse reading matter. This volume it seems was definitely written for the busy practitioner so that by spending the least amount of time he might see and read of the many diseases encountered in the oral cavity. A book so complete in itself that there is nothing to be critical of, a book that reads so easily that it is pleasurable, a book so well printed and illustrated, that there is nothing left but to congratulate the author for having conceived it and to thank his publishers for the splendid production of so beautiful a volume.

LEONARD KOHN.

THE DRAMATIC IN SURGERY. By GORDON GORDON-TAYLOR, O.B.E., M.A., F.R.C.S. Octavo of 88 pages, illustrated. New York, William Wood and Company, 1930. Cloth, $4.00.

A small volume, intended to entertain rather than instruct. The author recounts the very numerous operations he has knowledge of or has himself performed, which, owing to their magnitude and to the displayed surgical skill, are unusually impressive thus bordering on the dramatic. Technical considerations are entirely omitted. The value of the book is historical only.

GEO. WEBB.

HANDBOOK OF THE VACCINE TREATMENT OF CHRONIC RHEUMATIC DISEASES. By H. WARREN CROWE, D.M., B.Ch., M.R.C.S. Octavo of 52 pages. London and New York, Oxford University Press, 1930. Boards, $.80. (Oxford Medical Publications.)

This brief monograph on a subject of universal interest leaves the reader in a contented state of mind. Here we have a method of treatment influencing all forms of chronic rheumatism in a *specific* manner by the use of *stock* vaccines. Admitting that changes are taking place in the treatment of these conditions they have not yet reached that stage of simplicity nor that degree of efficacy which the author records with such emphasis and assurance.

S. R. B.

TRAUMATOTHERAPY: The Treatment of the Injured. By JOHN J. MOORHEAD, B.Sc., M.D. Octavo of 574 pages, illustrated. Philadelphia and London, W. B. Saunders Company, 1931. Cloth, $7.00.

This new edition of "Traumatotherapy or Treatment of the Injured," by Dr. Moorhead, is most complete in all details of the treatment of traumatic surgery, and includes practically every traumatic injury from contusions to complicated fractures, besides containing special chapters on after care, also medico-legal and allied aspects as applied to traumatic wounds.

In reading this book it is clearly evident that the author has presented to the medical profession a systematic method of treatment from the knowledge which he has gained by personal application and long contact with this type of surgery. There are 625 illustrations which are very helpful to the reader. This volume should prove an interesting addition to the library of any physician engaged partly or wholly in the treatment of traumatic wounds.

RALPH F. HARLOE.

CANCER: Its Origin, Its Development and Its Self-Perpetuation. The therapy of operable and inoperable cancer in the light of a systemic conception of malignancy. A research. By WILLY MEYER, M.D. Octavo of 427 pages, illustrated. New York, Paul B. Hoeber, Inc., 1931. Cloth, $7.50.

The primary aim of the author in publishing in book form a series of articles, which have appeared in various medical journals, was to show that cancer is the expression of a systemic disturbance. This aim seems to be in accordance with the general opinion of today. This opinion succinctly expressed is that cancer is a local expression of a general poisoning, and that the removal of the cancer by any means leaves the causal factor or factors at play in the body, so that a new cancer develops or the same causal agencies express their activities in a different form. As far as the primary aim of the author was concerned he failed to present data to demonstrate his conception.

The author reviews cancer literature to a very large extent, and feels that a type of acidosis is the cause of cancer formation. The exact status which causes the acidosis is not brought out. Alkalosis is recommended as a method of combating the systemic cause. No adequate method of accomplishing this result is given.

The essential value of this book rests in its complete survey of cancer knowledge. The interest of the book wanes after the first few chapters, and it is in these chapters that the most significant information is to be found.

J. ARTHUR BUCHANAN.

ANAESTHESIA AND ANAESTHETICS. By F. S. ROOD, M.B., and H. N. WEBBER, M.A. Octavo of 292 pages, illustrated. New York, William Wood & Company, 1930. Cloth, $4.50.

Simple, practical, individualistic—an English Flagg. Viewpoint, practice, apparatus necessarily trans-Atlantic. Queer how they like to issue books. We peg away, experiment and lead the way, and they tell us about it. The reviewer is going to write a book some day, and when he does it will be after the fashion of this one. He was delighted with the account of the work of these Londoners when he took his first dip into their book; he still likes it and better now that he has read it through carefully. It is not a dogmatic pronouncement but a personal revelation of how and why they came to learn what they now advise others to do. A carefully made index, just about enough illustrations (several rather oversize), a delightfully new arrangement of the subject matter, some lack in the newer methods and agents, maybe; but there you are, a well arranged, thoughtful narrative, properly illustrated and finely printed.

See how this is—Respiratory Aspects come first in 18 pages; Choice of Agents and Preliminary Medication, the same number; Preliminary Details, almost as many; A Typical Ether Case, 29 pages; Endo-Tracheal Insufflation, 16 pages; now notice—Chloroform, only 11 pages; Nitrous Oxid, 24; Ethyl Chloride, 10; Difficulties, 50 pages; the 40-odd pages given to injectional methods might have well been omitted or extended: Evans, Labat, deTakats and others have written books on that.

It can be seen easily that the book is intended for those who are relatively unused to the giving of anaesthetics. But we all can read it with profit. What with filtration methods, carbon dioxid stimulation, oxygen and CO_2 therapy and resuscitation, avertin and other agents, to say nothing of the encroachments of techni-

cians, we are all learners. Rood and Webber have written an attractive text-book. A. F. E.

THROUGH THE ALIMENTARY CANAL WITH GUN AND CAMERA: A Fascinating Trip to the Interior. By GEORGE S. CHAPPELL. 12mo of 231 pages, illustrated. New York, Frederick A. Stokes Company, 1930. Cloth, $2.00.

This book is not designed to teach science by the devices of personification, dialogue, travel and adventure. The author, a layman, uses his meager scientific knowledge as the excuse for vaudeville puns and funny page cartoons. The adventurer, for example, explores the mines in the Molar Mountains, and says that more gold is sunk in them than is ever extracted. Also St. Pancreas is identified as the Egyptian god, Osmosis, "the secretive one."

Never once is the medical profession mentioned. The humor of the book is always good natured and will be enjoyed by doctor as well as layman. F. O.

PHILOSOPHY OF A BIOLOGIST. By SIR LEONARD HILL, F.R.S. 12mo of 88 pages. London, Edward Arnold & Company: New York, Longmans Green & Company, 1930. Cloth, $1.40.

This little volume holds one's interest from the first to the last page. The author has expressed many ideas in so few pages. His deductions are quite plausible, many may not appeal to some of his readers, yet it surely will stimulate all to think. On page 50, there is a misprint, The Spinal-accessory nerve, instead of The Musculo-spiral nerve. GAETANO DE YOANNA.

THERAPEUTICS, MATERIA MEDICA AND PHARMACY: The Special Therapeutics of Diseases and Symptoms, the Physiological and Therapeutical Actions of Drugs, the Modern Materia Medica, Official and Practical Pharmacy, Prescription Writing, and Antidotal and Antagonistic Treatment of Poisoning. By SAM'L O. L. POTTER, A.M., M.D. Fifteenth edition, Revised by R. J. E. SCOTT, M.A., M.D. Octavo of 997 pages Philadelphia, P. Blakiston's Son & Company, Inc., 1931. Cloth, $8.50.

The general form of this edition remains the same as in previous ones, the early chapters giving a description of the constituents of drugs, their classification, methods of administration and dosage. The various drugs are arranged alphabetically, which is often a convenience. New material has been added and a number of the older prescriptions removed. The official preparations of the Materia Medica have been made to conform with the Tenth Revision of the United States Pharmacopoeia and the Fifth Edition of the National Formulary.

It is one of the good books on the subject and its arrangement is such that it is very convenient for quick reference. W. E. MCCOLLOM.

A TEXT-BOOK OF HYGIENE. By J. R. CURRIE, M.A., M.D. Octavo of 844 pages, illustrated. New York and Edinburgh, William Wood and Company, 1930. Cloth, $8.50.

This work covers the subject of sanitation very completely. It not only goes into detail from a general standpoint but covers each subject in a minute way.

We like the comprehensive treatment of each subject and the explicit way that it is covered.

It is definitely a text-book for students of sanitation and should be especially valuable to medical students. J. J. WITTMER.

CARE OF THE INFANT AND CHILD: A Book for Mothers and Nurses. By HARRY R. LITCHFIELD, M.D., and LEON H. DEMBO, M.D. Octavo of 138 pages, illustrated. Baltimore, Waverly Press, Inc., 1930.

This is a monograph of 132 pages written as a reference for mothers and nurses. It well serves the purpose for which the authors intended. The usual subject matter of the ever-increasing number of such books is taken up in orderly manner. T. B. G.

A SYSTEM OF BACTERIOLOGY IN RELATION TO MEDICINE. By Various Authors. (Prepared under the direction of the Medical Research Council.) Volume VII. Octavo of 509 pages. London, His Majesty's Stationery Office, 1930. Cloth, £8-8-0 a set; £1-1-0 each.

This volume is devoted to viruses, virus diseases and to bacteriophage. Probably in no other work in English is there such an exhaustive discussion of filterable viruses and the diseases they cause. About 450 pages are given to this subject. Each chapter is written by one with special experience in the subject. After discussing viruses and cell inclusions there are chapters on virus diseases of plants, insects and animals and then the long list of virus diseases in man, including smallpox, encephalitis, poliomyelitis, rabies, trachoma, measles, typhus, trench fever, Rocky Mountain spotted fever and the interesting group of filterable tumors and infectious anemia and leukemia.

The bacteriophage phenomenon is thoroughly discussed in the last 50 pages of the volume.

E. B. SMITH.

ABDOMINO-PELVIC DIAGNOSIS IN WOMEN. By ARTHUR JOHN WALSCHEID, M.D. Quarto of 1000 pages, illustrated. St. Louis, The C. V. Mosby Company, 1931. Cloth, $12.50.

The book written by Walscheid entitled "Abdomino-Pelvic Diagnosis in Women" is profusely illustrated with many original drawings, and consists of some 1,000 pages.

The book is very interesting reading and covers the subject fairly well. PHILIP OGINZ.

PRIMARY SYPHILIS IN THE FEMALE. By THOMAS ANWYL DAVIES, M.D. Octavo of 111 pages, illustrated. New York and London, Oxford University Press, 1931. Cloth, $4.00. (Oxford Medical Publications.)

As will be noted from the title, the author has made an unusual contribution to the study of primary syphilis in the female. The book contains 104 pages covering detailed descriptions of luetic lesions occurring on the various external and internal genitalia together with their differential diagnosis. The author goes far in correcting erroneous teachings and writings to the effect that primary lesions are rare in the female or that the lesions are essentially different from those occurring in the male.

The work is based upon a case study of 3,972 female acquired cases at St. Thomas' Hospital of which 578 showed primary lesions with an incidence of 44% on the cervix. It is worthy of note that the spirochaeta were found in the majority of cases on the dark field test. This indicates the great step forward in the early diagnosis of lues and the greater incidence of cure resulting from treatment in this stage.

The various lesions are vividly illustrated by colored photographs.

The author pays tribute to the success of the venereal clinics under the Ministry of Health in showing that the incidence of fresh cases in England and Wales from 1921 to 1927 was reduced 50%.

Practitioner and specialist alike would do well to review this book. AUGUSTUS HARRIS.

SURGICAL EMERGENCIES IN PRACTICE. By W. H. C ROMANIS, M.A., M.B., and PHILIP H. MITCHINER, M.D., M.S. Octavo of 608 pages, illustrated. New York, William Wood & Company, 1931. Cloth, $6.00.

A book written by experienced surgeons for beginners in the craft. Well planned, lucidly written, adequately illustrated and thoroughly up to date. The volume fills a gap in surgical literature and will be welcomed by every house-surgeon. GEO. WEBB.

OUR NEIGHBORS

ANNUAL MEETING IN TENNESSEE

The May Journal of the Tennessee State Medical Association contains the following editorial on the annual meeting which was held April 14-16 in Knoxville:—

"In many respects the recent meeting of the Tennessee State Medical Association held at Knoxville was one of the most successful the Association has ever experienced. It is starting off the second century of its existence in a glorious way. Four hundred and fifty-five doctors registered. There were fifty of the sixty-seven component societies represented.

"Only one number was absent (from the scientific program); this was due to the death of the essayist, Dr. E. B. Bowery, of Johnson City. This is a most creditable showing for the men who were given places on the program. A vast majority of those listed to discuss the papers were present. Papers as a whole were exceptionally good. A wide variety of subjects was discussed. Regardless of one's particular interest or specialty in medicine, there were numbers on the program of interest. The attendance on the scientific sessions was good.

"The Knox County Medical Society did an exceptionally fine job as host of the meeting. It took work and it took money for the members of the Knox County profession to entertain the Association as we were entertained at Knoxville. Those committees are entitled to a great deal of credit for a lot of hard work.

"The only unfortunate incident was the fact that all in attendance at the banquet could not be seated, but this was not the fault of the committee on arrangemens, nor of the hotel. It was due to the fact that one hundred men presented themselves for plates at the banquet who had not registered at the desk. There are few institutions that can accommodate one hundred people who are not expected at a banquet and who fail to buy tickets beforehand.

"The House of Delegates did some very important work. Of first importance was the passage of an amendment to the by-laws creating a Liaison Committee with a membership of five. This committee has very important duties to perform in the maintenance of that state of harmony which should exist between health departments and the medical profession.

The Liaison Committee was described in an editorial in the May issue of the Tennessee Journal as follows:

"In 1928 the chairman of the Committee on Public Health recommended the creation of a Liaison Committee. The committee used the following language:

"'Your Committee further finds there is no official means of approach between the health agencies of the State and the State Medical Society. The president, vice-president, secretary, nor even the councilors, have authority to speak for the organized profession; and in view of this condition, we would therefore recommend that the House of Delegates create a liaison committee composed of three representative men, one from each grand division of the States, clothed with the authority to council with the health agencies and speak with authority for the State Medical Association upon any subject of Public Health and Preventive Medicine, which alike concern the public health agencies and the profession as a whole, especially policies and practice in the State's endeavor to control contagious and communicable diseases to the end that there may be maintained a mutual understanding and a cooperation between the two in handling the questions which are getting so much attention from the people as a whole.'"

CALIFORNIA JOURNAL TWENTY-FIVE YEARS AGO

California and Western Medicine, like the NEW YORK STATE JOURNAL OF MEDICINE, has a column of quotations from its issue of twenty-five years ago. The present May number contains the following editorial introduction to the quarter century quotations:

"On April 1, 1906, the great San Francisco Catastrophe took place. In the great fire which devastated the city, the office of the *California State Journal of Medicine*, the official publication of the Medical Society of the State of California, was burned to the ground. The May issue of the *California State Journal of Medicine* became a simple four-page leaflet without a single advertisement, which was gotten out under great stress and strain at a printing office at Oakland, by the late Dr. Philip Mills Jones, founder of the State journal and the then editor. The excerpts which appear in this month's Twenty-five Years Ago column are taken from this little four-page leaflet."

(*Continued on page 790—adv. xii*)

CORRECTING AN ERROR

In the Journal of the A. M. A., March 28th, 1931, page 30, we inadvertently stated the iron content of Mead's Cereal to be 68 milligrams per hundred grams. (This figure was confused with .0068 gms. iron per ounce.)

The correct content is 24 mgs. iron per 100 gms. But even so, Mead's Cereal contains —

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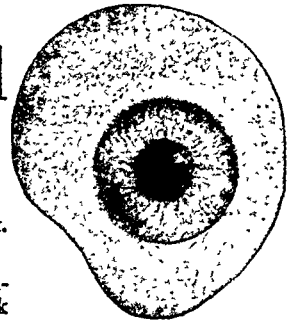
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(*Continued from page 788*)

The California Journal of May, 1906, contained the following editorial greeting:

"A Sad Greeting:—It was a very different sort of May issue we had planned. But, as all the world now knows, our beautiful city of San Francisco has been almost wiped out of existence. The editor has been able to confer with but one member of the Publication Committee and a few of the delegates living in Oakland, and these have authorized the bringing out of this number in its present form. There is not a business house of any sort left standing in San Francisco—no paper house and no printer—so this number is printed in Oakland. The mailing list of the Journal has also vanished, so that many exchanges and subscribers will not at once receive this issue. However, enough copies will be printed to supply all regular recipients in the course of time. Correspondents are respectfully warned, however, that their letters may not be answered immediately, for almost all typewriters have been destroyed and the whereabouts of our stenographer is an unknown quantity."

The annual meeting of the Medical Society of the State of California was in session when the earthquake occurred, and was described in the May, 1906, Journal as follows:

"Undoubtedly the annual meeting of the Medical Society of the State of California for 1906—its semicentennial—will remain forever the one most generally remembered. The registration book unfortunately is not at hand—one can only say that it once existed—but it is known that about 4 P. M. on Tuesday, April 17, the first day of the session, nearly three hundred members had registered. The program was unusually good; at least one copy is known to exist, and there may be others.

"Everything promised an unusually harmonious and profitable meeting. Unfortunately our plans were not well adapted to those of the remainder of the universe. At 5:14:48 on the morning of the 18th, the city was wrecked by an earthquake which lasted but forty-eight seconds. This, to those in other places, is now but ancient history, but to those of us who went through that and all the following days of horror, it will never become ancient. Fire broke out in unnumbered places immediately after the shock, and as nearly all the water supply mains had been broken, what the shock began the fire completed.

"Shortly after 9.30 A. M. on Wednesday, the president, Dr. R. F. Rooney, the secretary, Dr. Philip Mills Jones, and Drs. James H. Parkinson and H. Bert Ellis gathered on the steps of the wrecked Y. M. C. A. building and declared the society adjourn *sine die*. The secretary made

(*Continued on page 791—adv. xiii*)

(Continued from page 790—adv. xii)

three trips to the Association office, on the third floor, and saved the account books, minutes of the Council and minutes of the House of Delegates, together with some miscellaneous papers hastily gathered together. All advertising contracts, current vouchers, etc., are in a safe deposit vault, perfectly intact. When, or where the next meeting of the society will be held, no one knows; probably a meeting of the delegates will be called in due time. Even the whereabouts of the president, Dr. Rooney, is unknown to the secretary."

BASIC SCIENCE LAW IN OREGON

The May number of *Northwest Medicine* contains the following editorial on the manner in which the Basic Science Bill was received by the Legislature of Oregon:—

"In order to place a check on licensing practitioners of inadequate medical education and deficient qualifications, the basic science law has been established in a number of States, as a result of which there has been an immediate and striking reduction in the number of objectionable irregulars who have hitherto been licensed in large numbers by their respective examining boards. An attempt has been made at several sessions of the Oregon Legislature to enact such a law. While these have failed in the past, it was believed that the effort would be successful at the legislative session of last winter. A committee of leading practitioners from many cities of the State worked zealously in preparation for such legislative action. A physician was elected to the Senate and two to the House, who were appointed on their respective committees dealing with medical affairs.

"The contest on this bill centered in the Senate Committee on Medicine, Pharmacy and Dentistry. A Portland senator, who is an optometrist and optician with a fixed antipathy against the medical profession, was a member of this committee. Apparently his chief purpose was to block this bill. It had a stormy existence both in committee and before the Senate by reason of the activities of this man and other antimedical sympathizers. When it finally reached the floor of the Senate a prolonged and exciting controversy ensued. The leading opponent of the measure with vindictive vituperation assailed the medical profession, alleging many mendacious charges which, however, were successfully met and disproven by Dr. Booth, the medical senator. While the bill had been presented for passage as a majority report from the committee, the optometrist senator succeeded in getting his minority report for disapproval before the Senate for

(Continued on page 792—adv. xiv)

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WOMAN'S AUXILIARY IN THE NORTH CENTRAL STATES

An outline of the Woman's Auxiliary in the Eastern States was abstracted on page 310 of this Journal of March first. The Auxiliary in the North Central States is described in the following abstract from the April issue of the *Journal of the Iowa State Medical Society*:

"From Indiana we know we are to have constructive work during this year. Physicians as a class are not prone to participate in legislative matters, but when four distinctly separate bills, which affect the profession directly are presented during one session of a State's Legislature, it is time to be up and doing. The Indiana Journal never fails to give the Auxiliary space, and it is little wonder the Indiana women are up and coming when they have such editorial notes to enlighten and guide them in their constructive program work, as one finds in this same Journal.

"Kansas is slowly getting a few things accomplished. A world-wide depression has rendered prophets quite fameless abroad as well as at home, but the doctor's wife in Kansas is coming into her own, and we prophesy that the Auxiliary will climb to the top due to the indomitable spirit of the leaders in that state.

"In Illinois the motto might well read, 'Builders we are, and builders we must ever be. Builders, not in stone that shelters life, but builders in life.' We find good constructive programs of well-balanced educational value, we find a journal ever ready to broadcast Auxiliary news, and, best of all, we find a healthy organization line-up and an advisory board from their Medical Society. Several of their County groups are having their members get busy with the 'Health Audit Program.' One project worthy of mention comes from Vermillion County on the eastern boundary of the state. The County Auxiliary put on the Health Institute in Danville last November. A member from every agency in the County working out any kind of a health program was included in the personnel of the speakers.

"Wisconsin, Iowa and South Dakota are among the latest States to join the National Auxiliary. Organization is the keynote for their work, and the National Study envelopes are offered as program material.

"Montana and North Dakota are debating pro and con, but as Mrs. Hoxie said in her Detroit report, 'I believe it will be a mistake from now on to organize a new state auxiliary unless it appears reasonably certain that there is interest enough among the doctors who want the auxiliary, so they will foster it and

(Continued on page 795—adv. xvii)

(Continued from page 794—adv. xvi)

stand back of it.' And so we leave Montana half-hearted about forming an auxiliary, and North Dakota in the air.

"We find Michigan giving intelligent co-operation with state and county officials. Women, like men, are interested in the improvement of civic affairs and healthful living and are realizing that they need to be armed with a definite knowledge of health laws and public health practices.

"Missouri is in a very healthy condition. We find that Mrs. A. B. McGlothan, the President-elect of the Woman's Auxiliary to the American Medical Association, attended President Hoover's White House Conference for Child Health and Protection, held in Washington, D. C., February 19 to 21.

"Mrs. A. W. McAlester tells us the women of Missouri are finding the study envelopes, published by the Education Committee of the Woman's Auxiliary to the American Medical Association, most interesting and instructive.

"Minnesota, the North Star State, has had a busy and successful year in organization. The President and Organization Chairman have visited over the state and planned meetings and educational programs with many County groups. In October the International Medical Assembly met in Minneapolis, and at this time the Hennepin County Auxiliary celebrated its twentieth anniversary by being hostess for five days to the visiting doctors' wives.

"Hennepin County is having a year with a definite program. Each month a speaker is scheduled, and one meeting during the year is reciprocity day and each Auxiliary in the state is invited to send visitors. This group features philanthropic work for tuberculosis patients at Glen Lake and do much for the library at the Sanatorium. They have helped the Medical Society furnish their library and club rooms, spending $1,000."

THE STATE JOURNAL OF NEW JERSEY

Which State Medical Journal is the best, and why? This question is answered in the May issue of the *Journal of the Medical Society of New Jersey* in which the editor says in his annual report:

"In 1924 the *Journal of the Medical Society of New Jersey* was practically a replica of all other state medical society journals; that is to say, it regularly consisted of about 6 sections, or departments, covering original articles, editorials, an occasional special article or case report, county society reports, obituaries and news items. The

(Continued on page 796—adv. xviii)



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COUNTY SOCIETY REPORTS IN MISSISSIPPI

The *New Orleans Medical and Surgical Journal* is the organ of the Louisiana State Medical Society and the Mississippi State Medical Association. The April issue contains the following appeal from the editors of the Mississippi section to the County Societies to report their activities more fully:

"Your editors for Mississippi have sent to each President of our County Medical Societies the following letter, which is self-explanatory:

"'A real journal means a great deal in the success of a medical society. Aside from the publication of scientific papers, one of its chief functions is to stimulate interest in the society and to keep the members in touch with each other and with their various activities. To do this effectively it is necessary to have notes of what is going on in every part of the State in every issue.

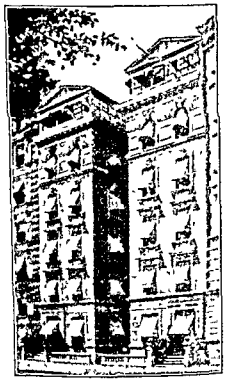
"'Three men chosen by the State Association cannot cover the State each month alone. To remedy this defect and to make the official journal of the Mississippi State Medical Association really worth while to the Association and to every member of every County Society, we are forming a Board of County Editors, this Board to be appointed by the presidents of the various County Societies.

"'The duties of the county editors will be to send in to the editors once a month all the news of the doctors and their families in their own counties. This does not let out the presidents and secretaries from furnishing reports of meetings of the societies. Our best material has come from presidents and secretaries. It is an effort to divide up the work and to cover more territory with greater efficiency.

"'Will you not now appoint an editor for your society, picking a man who will really take the appointment seriously and do something, and send to me his name and address so that I may get in touch with him personally? I would also like to publish the names in the next issue of the *New Orleans Medical and Surgical Journal.* (See Editorial on page 768.)

"'We thank you for your cooperation and assuring you of our earnest desire to make your Journal of the greatest interest to you and to your members.'"

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CRIPPLED CHILDREN'S CARE IN KANSAS

The May Journal of the Kansas Medical Society contains the following editorial description of the new law relating to the care of crippled children:—

"The provisions of the law are unusually thorough and seem to provide for every contingency that may arise in this problem. It has a remarkably broad interpretation of the meaning of the crippled child, embracing all persons under twenty-one who have a physical defect or disease that can be improved or removed by appropriate medical or surgical treatment. It provides the finances to defray the expense of such treatment, each county being assessed one-tenth mill for every taxable dollar to comprise a separate fund to be used only for the care of crippled children of that county. It includes compensation to the doctor as well as to the hospital. It provides for a commissioner to carry out the provisions of the law and to see that the afflicted child gets into the hands of none but competent specialists and in only those institutions that have fully adequate facilities to give the best service. It also provides safeguards so that only deserving indigent children may reap the benefits of this law. Furthermore, it opens the way for the care of such patients in various sections of the State as soon as adequate facilities and competent personnel become available.

"It is estimated that over 5,000 children will become eligible for this treatment. Yet there is no well-organized children's hospital in the entire State that can provide the variety of services such as can be secured in some of our neighboring States. There is at the hospital of the State medical school a children's ward with a maximum capacity of fifty patients and a similar ward in only one other hospital in the State. There should be a well equipped, specially designed children's hospital with at least three times as many beds, including a brace shop, a complete physiotherapy unit, a department of occupational therapy and a special school for the education of patients who may be kept months from school. Only with such supplementary departments and equipment can the hospital be thoroughly efficient, but this is necessarily expensive and can be erected and managed most economically where an organization of well-qualified specialists already exists, such as in the medical schools of the State universities. The States of Oklahoma, Minnesota, Wisconsin, Iowa, and Inliana have provided such children's units at their respective medical schools and the medical profession should urge that Kansas do the same with its medical school.

"Failure of the law may result from inadequate facilities rather than from the law itself or the attitude of the doctors, and all physicians should be informed of this situation and use their influence to change this lack of preparedness. The medical profession should not only be awake to the opportunities of this law but should be cognizant of the danger to this law if a few improperly qualified physicians should succeed in using the law to further their own private interests or if the cultists should succeed in their endeavors to be permitted to carry on their unrecognized practices on children under the protection of this law.

"Two obligations rest upon every physician interested in his community and in the crippled children of the State, first, to give unstinting support to the crippled children's commission in limiting the care of their wards to only those organizations that are adequately equipped and have competent specialists on their staffs; and, second, to use every influence to secure more adequate and larger facilities for such care, either at the State medical school or at some other large center or at several places."

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NEW YORK STATE JOURNAL of MEDICINE

PUBLISHED BY THE MEDICAL SOCIETY OF THE STATE OF NEW YORK

Vol. 31, No. 13 NEW YORK, N. Y. July 1, 1931

PYODERMA GANGRENOSUM

By LEE McCARTHY, M. D., and RUSSELL FIELDS, M. D., WASHINGTON, D. C.

DURING recent years there have been occasional reports in the literature by surgeons and dermatologists, as well as pathologists, of gangrenous ulceration of the skin following some chronic, debilitating infectious process of long duration. Such a case report with comments is presented herewith.

Patient, a white, unmarried, twenty-eight year old woman, was admitted to Garfield Hospital on August 18, 1930.

Chief Complaint—skin trouble and diarrhoea.

Family history entirely negative.

Past illness began with diarrhoea eight years ago that was accompanied by fainting spells. Patient thought she had summer diarrhoea and paid little attention to it, although she had blood and mucus in her stools and as many as twenty-five movements in a day. These attacks have lasted for one month or more every year since that time. She was able to be up and about during these attacks until three years ago. In June, 1928, she had an appendocostomy performed in Richmond and was discharged shortly after as considerably improved. One year ago a colostomy was done in Garfield Hospital and she was once more discharged shortly after as improved. Aside from the usual diseases of childhood there is no other history or chronic infection. The patient has never lived in the tropics or further south than Richmond.

Present illness began in March, 1930. The patient started by having ten or twelve stools daily accompanied by pain in the left lumbar region. The stools were yellowish brown, with no visible blood, but considerable mucus was present. She was treated at that time with vaccines and local applications with no appreciable result. Three weeks after the beginning of this attack, the skin was involved for the first time in the form of a small boil on the middle of the forehead. This boil broke down in the center and the ulcer thus formed gradually enlarged until practically the entire forehead was involved. In June, 1930, a similar area of ulceration appeared on the right side of the face and neck. Since that time the patient's general condition has become worse and worse and she has been confined to her bed or room continuously.

Physical Examination: On August 15th, by Dr. Fields. Head and Neck Region: The entire forehead was covered by a thick, brownish-gray crust beneath which was an extensive area of ulceration. The neck on the right side showed an area of ulceration running medially to the midline and posteriorly to the hair line in the occipital region. This lesion extended upward in the form of a band one-half inch in width just anterior to the ear as far as the hair line. In a downward direction this same band extended to the clavicle. The edges of the ulcerated areas presented a bluish, boggy appearance and were extensively undermined for a distance of one to two centimeters. Pressure along the edges brought forth a considerable amount of gelatinous pus. The base of the ulceration is covered with a moist type of pus and considerable tissue debris. A profusion of granulation tissue can be seen on the edges of the ulceration where the activity is the greatest. The mucous membranes of the mouth were pale and the tonsils appeared to be somewhat enlarged. Examination of the lungs, heart and abdomen were essentially negative. A herniated scar in the right inguinal region is noted. There is no ulceration in this area. The reflexes are normal.

Laboratory examination by Dr. Lindsay on August 19, 1930, showed the Wassermann was negative. Haemoglobin was thirty-two per cent, with 2,000,000 red blood cells and 10,000 white blood cells, of which seventy-five per cent were polymorphonuclears, twenty per cent lymphocytes and four per cent eosinophiles. The urine showed a trace of albumen with a few white blood cells and epithelial cells. The blood showed a total NPN forty-six milligrams, sugar one hundred milligrams, and chlorides five hundred milligrams. A staphylococcus albus and a hemolyticus streptococcus were found in the

stools and in the pus from the skin. About this time three blood cultures were negative. Examination for entamoeba histolytica both in the stools and in the pus from the skin were negative on several occasions. On October 15th, the compliment fixation test for amoeba by Col. Craig, at Walter Reed Hospital, was one plus, which is considered a negative reading in the absence of amoeba. However such a finding should cause further search to be made for amoeba. On the 16th of October the stools showed a pure culture of staphylococcus albus. The hemolytic strep-



Figure 1

Note extensive ulceration with production of hypertrophic granulations in the vicinity of the undermined edges. (*Nov.* 1, 1930.)

tococcus and the staphylococcus albus have been isolated repeatedly from the bowel and skin. The biopsy from the skin showed a chronic inflammatory process that resulted in a deep ulceration of the skin. The edges were markedly undermined No amoebae were found in any of the stained sections Many cocci were seen deep in the tissue below the ulceration.

On the 17th of October the protoscopic examination by Dr Warfield resulted as follows: Finger enters without obstruction but with pain Sphincter good tone. Consistency thick and granular. Instrument enters with considerable pain, but with no obstruction. Patient unable to get in exact knee chest position due to pain in neck. Mucosa red, edematous, granular. No actual ulceration. Culture taken from exudate. The oozing of blood was not local, but general. There were several small whitish areas in the mucosa. Anal region showed some bluish veins.

The *x*-ray examination of the chest on the same date shows no evidence of abnormality. The stomach and duodenal cap are normal There is ulcerative colitis involving the entire left colon distal to the hepatic flexure. There is no evidence of apical abscesses about the teeth. In other words this patient showed secondary anaemia, ulceration of the skin and chronic ulcerative colitis.

Progress of the Case. On the first admission the patient remained in Garfield Hospital eleven days. She left the hospital for one week and returned again on September 2nd and has been there continuously. Her temperature has ranged from ninety-eight to one hundred and one, her pulse from eighty to one hundred and ten, and she has been having from ten to twenty-five stools per day. Naturally with this great depletion, the patient's condition has become very bad indeed. She has been given transfusions on September third and October twenty-ninth and is to have another one this week. Her general condition was particularly improved after these transfusions. On the twentieth of October her haemoglobin had come up to forty-eight per cent, with 2,400,000 red blood cells, while on the twentieth of November the haemoglobin was fifty per cent and there were 3,400,000 red blood cells, and only 8,000 white blood cells. During the month of October and the first two weeks in November the patient was given liver with no noticeable improvement. On November fifteenth we started giving "Stovarsol," one-half a tablet daily. This brought the stools down to twelve daily. The patient is now getting one full tablet a day for a week and then a period of rest for a week. The last accurate count of the stools during twenty-four hours showed the number to be twelve. Despite this the patient has gained six pounds in weight in the last month.

The ulcerated area of the skin gradually enlarged day by day; on certain days new skin was undermined for a distance of one to two centimeters. The lesions all kept their serpiginous configuration and the undermined edges showed the bluish gray, boggy appearance noted above. The advancing edge was always preceded by an inflamed zone about one centimeter in width On October first, six weeks after admission, the patient was very bad and she was having about twenty-five bloody, mucous stools daily At this time the skin lesion had almost doubled its original size as seen on admission, and a new oval shaped lesion about four by nine centimeters in size had appeared on the anterior surface of

the neck. This was a new lesion and was not an extension from the older one. It was interesting to watch the formation and development of this new lesion. After a week of increased bowel activity, when the patient's condition appeared the worst, a crop of small discrete pustules surrounded by an inflammatory zone appeared on the neck. In four or five days the pustules softened, ruptured and the small ulcerations with bluish, boggy, undermined edges united to form a larger ulceration similar to those already present. A similar pustule formed on the left arm at the site of a veinous puncture.

At this time Stovarsol and liver extract were given internally and the fistulous tracts in the undermined portions of the skin lesion were opened up by wide incision. Continuous wet dressings of one-quarter to one per cent copper sulphate solution were applied to all lesions. Although the dressings caused considerable pain, in the course of a week a marked improvement was noted in all the ulcerated areas—the spreading edges disappeared and the lesions were healing rapidly from the borders inward. Healing occurred by the production of epithelial sprouts from the edges. The resulting scar is very thin, atrophic and pigmented a deep brown. The appearance is quite similar to that of an old tuberoserpiginous syphilis with its pigmentation and serpiginous configuration. At the same time the patient's general condition had greatly improved.

At the present time the ulcerations have been reduced to one-quarter their original size and the patient's general condition is much improved. Transfusions seemed to be of the most therapeutic value. Dyes, vaccines, bacteriophages locally or intravenously, sodium and potassium tartrate, foreign proteid therapy in the form of small doses of typhoid vaccine, *x*-ray, et cetera, were not tried as all these had been shown to be of no avail in a report of five similar cases from the Mayo clinic.

Differential Diagnosis: Such lesions as those of bromoderma, tertiary syphilis, blastomycosis, tuberculosis, sporotrichosis and coccidiodial granuloma are very similar to this type of ulceration especially when it is covered with crusts. The history of the case and the use of the pathological laboratory with particular attention to the biopsy ruled out all these diseases. The only other ulceration of a similar nature is that termed amebiasis cutis and our studies so far have failed to find any parasite of the entamoeba histolytica group.

Prognosis: Judging from the reports in the literature of the past fifteen years, most of these cases undergo periods of marked exacerbations and remission with a fatal termination after the patients have become completely debilitated by the infectious process. Recently however, Brunstring of the Mayo clinic has reported five cases in which the skin lesions were entirely healed and the bowel condition was quiescent. If the improvement in our patient continues, we may hope for a similar favorable result as far as the skin condition is concerned. Of course the patient, if she does get well, will always have loose bowel movements due to the scarring of the bowel wall and loss of power of absorption of fluid on account of this scarring.

Comment: In going over the cases reported in the literature we have found two great groups exist. The first group comprises those cases in which the entamoeba histolytica could be demonstrated in the stools and in the skin either as the motile organism from the pus or as the fixed parasite in the stained section. The second group comprises cases in which the haemolytic streptococcus and a staphylococcus albus have been regularly and repeatedly found. Common to both groups is the fact that the skin ulcerations have



Figure 2
Later photograph to show beginning of healing of lesion on forehead.

invariably been preceded by a serious infection of several months' or years' duration. Most commonly the infection has been a chronic ulcerative colitis and less often an empyema. During the progress of the disease it was invariably noted that there was a direct parallel relationship between the behavior of the skin lesions and the underlying debilitating condition; when the general condition and the colitis improved, the skin lesions often healed completely, only to break down again with a recurrence of the bowel disturbance. Exacerbations and remissions have been the rule in these cases.

In the group due to the entamoeba, the skin

ulcerations have followed some operative procedure which established a connection between an infected internal organ and the skin. Operations for removal of gall stones, the appendix or hemorrhoids, have been followed by skin ulcerations due to the entamoeba at the site of incision, while one case is on record of ulcerations on the chest following drainage of an empyema due to a liver abscess rupturing in the pleural cavity. There has been considerable doubt as to whether the entamoeba histolytica was the actual cause of the bowel and skin condition. In a recent paper read before the dermatological section of the Southern Medical Association, Engman and



Figure 3

Appearance of the large lesion on the right side of neck March, 1931, when discharged from hospital.

Meleney demonstrated beyond a doubt that the entamoeba was the true etiological agent in their cases.

SUMMARY

1. We have described a case of chronic ulcerative colitis of eight years duration that was complicated eight months ago by the appearance of an unusual type of ulceration of the skin. We believe that the gangrenous pyoderma is only a part of a generalized infection that results in a marked lowering of body resistance which in itself permits invasion of the skin by the causitive organisms. Attention is called to the fact that ulcerations did not occur in regions where operative procedure established a union between the bowel and the skin.

2. Amoebae were not found in the skin or intestines, and it is believed that we are dealing here with a staphylococcus albus and a hemolytic streptococcus acting in symbiosis as the causitive agents.

3. Transfusions, Stovarsol by mouth, and local applications of one per cent solution of copper sulphate have given the best therapeutic results.

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STUDIES IN INTESTINAL INTOXICATION III

Improved Vaccine Therapy in Intestinal Intoxication and Chronic Focal Infection

By CLARENCE W. LIEB, M.D., NEW YORK, N. Y.

PHYSICIANS who have used "autogenous" or stock vaccines in the treatment of intestinal intoxication or chronic focal infection have reported extremely variable results. Many of them are very enthusiastic, while quite as many feel that vaccines have doubtful value.

My experience indicates that most of the failures have been due to improper composition and preparation of the vaccines used or to faulty administration. The object of this paper is to show that, with better methods of selecting bacteria and by better control of the dosage both as to amount and interval the proportion of good results can be greatly increased. It is not intended that vaccines should be used as a sole measure for treating all types of infection or intoxication but that they be used in combination with other measures. In many cases, vaccines alone will effect a cure. In others it is necessary to augment the treatment with appropriate measures.

In spite of the excellent work of Crowe (1, 2, 3 and 4) in demonstrating that, for example, in arthritis vaccines can be used to great advantage, there is still persistent opposition to the use of this form of treatment. Because many of his claims have been confirmed by the use of our new methods, with even better results, not only in patients with arthritis, but also with a large number of other types of chronic focal infection or intoxication, it was felt desirable to report experience with the application of the more precise methods of selecting bacteria which Chapman outlines in his paper.

Intestinal and Other Foci: Focal infections or intoxications of the gastro-intestinal tract are intimately associated with foci in other areas, so that, while conditions in which the outstanding clinical symptoms, referable to the gastro-intestinal tract, were being treated with vaccines prepared according to our directions, it was found that distant foci were often greatly improved or completely cured. Quite often the primary focus was in the gastro-intestinal tract or, as a result of the absorption of toxins from this source, the general resistance was lowered and this paved the way for the invasion of distant foci by other bacteria. In these cases, successful treatment of the intestinal focus was followed by improvement in the distant foci. Who has not noticed the beneficial effects of colonic therapy on the progress of many cases of hypertension, diabetes, mental disease, skin lesions or arthritis? On account of this intimate association, we found it extremely difficult to confine our studies strictly to the gastro-intestinal tract. It was often tempting, while treating a patient for an intestinal complaint associated e.g., with psoriasis, to digress from his intestinal symptoms and watch the effect of the vaccine on his skin lesion. Consequently, many patients, who were referred to me for gastro-intestinal complaints and who were given vaccine therapy found that the vaccine also had a beneficial effect on their other symptoms. It became necessary, therefore, to treat a focal infection of the gastro-intestinal tract as a manifestation of tissue injury in one or several widely different parts of the body rather than to consider it as purely a disease of the intestinal tract.

Dilutions Used: We prepared our vaccines in six dilutions ranging from ten thousand per cc up to ten billions per cc. This series enabled us to confine the total volume injected to less than one cc by using a proportionate amount of the next higher dilution as soon as the amount given became too large. The unheated bacteria were suspended in 1.0 per cent phenol-saline and diluted with 0.5 per cent phenol-saline. Heating a vaccine was found to destroy much of its antigenic content and to increase its non-specificity. Our experience indicates that our unheated vaccines are much more potent therapeutically than heated ones so that it is necessary to use a much smaller initial dose than would be the case if ordinary vaccines were used and, by preparing serial dilutions, it is possible to increase the dose to a much larger amount than would be possible if the vaccine were limited to one dilution. This insures the possibility of a greater degree of immunization.

Effects of Vascularization: Where the focus is richly supplied with blood, the response to vaccine therapy should be prompt. If, on the other hand, the focal blood supply is poor, the beneficial effects will appear more slowly. The majority of chronic focal infections are due to a previous acute infection which has been followed by the production of an insufficient amount of antibodies to completely extinguish the infection. A small concentration of antibodies persists and this is sufficient to prevent an acute exacerbation unless the resistance is again lowered by exposure, vitamin deficiency, fatigue or other factors. If the focal antibody production becomes negligible, a state of hypersensitiveness persists and, under these conditions, a vaccine dosage of less than 100 bacteria will sometimes induce unfavorable symptoms.

Hypersensitiveness: It will be remembered that, when proteins are introduced into the intestinal tract, they are hydrolyzed into amino acids. These acids are absorbed through the intestinal

mucous membranes and synthesized into native proteins. If the mucous membranes allow unmodified proteins to penetrate, these proteins will produce the same effect as if they were introduced parenterally. Symptoms of protein shock or allergy may result from an infected respiratory or intestinal mucous membrane because infection modifies the differential function of these membranes. Air-borne proteins are likely to produce protein shock by penetration of the respiratory mucous membranes, while food proteins may produce intestinal distress from passing unchanged through the intestinal mucous membrane. In hypersensitive cases it is absolutely essential to inject only a very minute amount of the specific bacterial protein in the form of a vaccine, or the trace of existing focal antibodies will be overneutralized and the focus will be supplied with an excess of bacterial toxin and an acute exacerbation will result. The introduction of still larger amounts will only lead to severe reactions. Where hypersensitiveness is suspected, the patient's tolerance can usually be determined by injecting less than 1,000 of the bacterial vaccine and gradually increasing this amount until manifest symptoms of over-stimulation appear. If an amount slightly below the patient's tolerance is injected at frequent intervals until his condition is markedly improved, it will be found that he can then tolerate considerably larger doses of vaccine. It will be necessary to increase the dosage very cautiously in these cases and they may not even be able to tolerate a ten per cent increase each time. On the other hand many cases show marked improvement from the repeated injection of a constant minute amount. This indicates that they are unable to produce more than a very slight excess of antibodies. Factors requiring the greatest skill and experience are the determination of the most suitable interval and the optimal dose. A much larger proportion of our recent patients have obtained good results as compared with earlier ones, and we attribute much of this improvement to greater experience acquired in giving the vaccines and to the habit of submitting patients to a rigid cross-examination before deciding on each injection. This was found necessary because many patients experience difficulty in evaluating or describing their symptoms. Each one of their symptoms should be taken up separately and any new conditions should be carefully weighed. When the treatment has been given by local physicians, the percentage of good results has been considerably below that of those treated by the author personally and it is hoped that the publication of this paper will assist physicians who have obtained irregular results with this type of vaccine.

We have used subcutaneous or hypodermic injections as far as posible. Where the amount is large, it is necessary to inject a little deeper and, if local reactions follow, the injections should be equally distributed between two or more different parts of the body or deep intramuscular injections in the buttocks should be resorted to.

Optimum Dose: The determination of the optimum dose seems to offer many difficulties. In the first place, some physicians are poor mathematicians. Those of the older school have not been trained to use metric terms while many of the younger generation experience difficulty in distinguishing arithmetical progression from geometrical ratio. In the former, the absolute magnitude of the increase remains constant while the percentage increased becomes progressively smaller. In the latter, the percentage increase remains constant and it is this type that is used in vaccine therapy. Let us take an example. In the series 2, 4, 8, 16, 32, 64, the increase is constantly 100 per cent. In the series 2, 3, 4, 5, 6, 7, the increase is 100, 33, 25, 20 and 16.6 per cent respectively. One of our colleagues ordered a nurse to give "one-tenth of a cc and increase each time by one-tenth of a cc." Another associate gave his patient "one-quarter, one-half, three-quarters and one cc" of one dilution and then the same amounts of a dilution which contained eight times as many bacteria. In these instances they were using arithmetical progression. For example, in the latter case the increases were 100, 50, 33.3, 100, 100, 50, and 33.3 per cent respectively. With many patients it is dangerous to give more than a twenty-five per cent increase.

At this point the reader must be cautioned against any attempt to adhere to a fixed schedule as it will only lead to disaster. I have seen many decided failures when these vaccines, accompanied by suggested dosage lists, were sent to patients' local physicians. In spite of warnings these lists were often blindly followed.

Optimum Interval: The interval obviously depends on the patient's response to treatment. Where no untoward effects are noted in the early doses, it is often safe to allow an interval of two or three days and to prolong the interval to five, seven or ten days or longer as the treatment progresses. Most patients are able to detoxicate the smaller doses quite rapidly but with the increased amounts, a much longer time is required and the interval must be progressively lengthened. The majority of hypersensitive patients require at least a five-day interval. After they have begun to show marked improvement, this interval should be still further lengthened. Where patients are getting doses exceeding 200 millions, it is rarely wise to give the injections more often than every two weeks. In the absence of a hypersensitive state, in patients giving good response *without any symptoms of toxicity,* it is possible to increase the vaccine twenty-five per cent each time.

Danger of Overstimulation: Small amounts of vaccine stimulate antibody production but this is not sufficiently marked to confer a

1. Mrs. F. E. A.	Intestinal intoxication, chr. migraine	Marked imp. (stirred up by large inj.).
2. Mrs. L. A.	Hypertension	Cured.
3. Louis B.	Acne and psoriasis	Psoriasis imp. Incomplete treatment.
4. F. B.	*Diarrhea, hypotension (diagnosed as dysentery in China)*	*b.p. normal—cured?*
5. Mrs. DeW. B.	Chronic hypertension. Arthritis	Cured.
6. E. D. B.	Hypertension, hepatic insufficiency	Marked imp.
7. Mrs. F. C.	Osteoarthritis	Marked imp.
8. Miss L. T.	Jaundice, cholelithiasis, Int. toxemia	Cured.
9. Thos. C.	Hay fever	Cured.
10. Mrs. C.	Intestinal intoxication, general debility	Marked imp.
11. G. H. C.	Intestinal intoxication. Arthritis, colitis	Cured.
12. Miss S. C.	Intestinal intoxication. Hemorrhoids	Mod. imp. Not cured.
13. H. B. C.	Dead labyrinth. Intestinal intoxication	Cured.
14. Mrs. W. F. D.	Chr. cholecystiti	Greatly improved.
15. Mrs. J. E.	Hypertension.	Symptomatically cured.
16. Chas. F.	Intestinal intoxi	Improved.
17. D. F.	Intestinal intoxication, brachial neuritis	Marked improvement.
18. Mrs. F. F.	Osteoarthritis. Intestinal intoxication	Marked improvement.
19. W. H. F.	Chronic fever of unknown origin. Hepatitis. Intestinal intoxication	Cured.
20. N. G.	Intestinal intoxication. Hemorrhoids	Cured.
21. Mrs. F		Cured
22. P. G.		
23. Mrs. T		
24. Mrs. A. Z. G.	Hypertension. Arthritis. Neuritis	Cured.
25. A. F. G.	Diabetes, osteoarthritis. Duodenitis	Marked improvement. Discontinued treatment.
26. J. T. H.	Osteoarthritis. Hypertension. Chr. cholecystitis (?)	Moderate improvement, not cured.
27. Mrs. M. H.	Hypertension. Cholecystitis	Controlled but never cured. Lax in taking treatment.
28. Mrs. F. H.	Osteoarthritis. Intestinal intoxication	Marked improvement.
29. Mrs. E. H.	Myxoedema. Hypotension. Early arthritis of spine and hands	Cured.
30. E. G. H.	Chr. iritis	Cured.
31. Mrs. P. J.	ir. otitis media	Cured.
32. R. H. K.		Cured, B.P. normal.
33. F. K.	ypotension	(See footnote 1.)
34. Mrs. W. L. G.	Chr. cholecystiti	
35. R. S. L.	Gastric ulcer.	
36. Mrs. V. M.	Osteoarthritis. sion	Cured.
37. J. M.	Intestinal intoxication. Myositis	Cured.
38. Miss R. M.	Osteoarthritis	Cured.
39. H. M.	Chr. and acute cellulitis (groin). Intestinal intoxication	Cured.
40. Mrs. J. F. M.	Hypothyroidism	Symptomatically well. Frequent colds.
41. Mrs. M. M.	Hypothyroidism. Cholecystitis	Good results.
42. Mrs. W. J. P.	Chr. cholecystitis. Hypertension. Intestinal intoxication	Cured.
43 Mrs. E. D. P.	Osteoarthritis	Cured.
44. Dr. J. C. L.	Endocarditis. Intestinal intoxication	Cured.
45. Mrs. H. P	Sacro-lumbar osteoarthritis	Cured.
46. J. E. P.	Dermatitis	Cured.
47. Mrs. L. C. Q.	Osteoarthritis	Cured.
48. Mrs. A. A. R.	Osteoarthritis. Intestinal intoxication	Cured.
49. Mrs. R. Sr.	Intestinal intoxication. Glaucoma	Cured.
50. Miss M. R.	Intestinal intoxication	Marked improvement. Not cured.
51. W. W. H.	Psychasthenia. Intestinal intoxication	Cured.
52. T. W. H.	Chr. *fatigue, low resistance, frequent colds*	Cured Symptomatically. No further colds.
53. Mrs. J. C. R.	Intestinal intoxication	Moderate improvement.
54. Dr. J. C. R.	Osteoarthritis. Intestinal intoxication	Marked improvement (course not completed).
55. Morris R.	Deafness	(See footnote 2.)
56. A. S.	Chr. ulcerative colitis. Diverticulosis (diverticulitis?)	Cured.
57. F. S., Jr.	Hepatic insufficiency. Intestinal intoxication	Cured.
58. C. H. T.	Acute inflammatory rheumatism of feet	Cured.
59. Miss F.		Cured.
60. D. H. E		Cured.
61. Miss S.		Cured.
62. Mrs. F.		Cured.
63. Mrs. H. M. W.	Colitis	Improved.
64. Wm. S. M.	Anemia, Hypothyroidism. Possible malignancy	No improvement.

1. After a course of vaccine the patient's condition was greatly improved but there were still symptoms referable to the gall bladder. Cholecystectomy was advised. At operation adhesions were found and the wall was thickened but there was no evidence of active inflammation. Culture of the tissue was negative.
2. Patient's general condition was markedly improved but the vaccine had *no effect* on his deafness.

lasting immunity. Consequently, although the patient may appear to be cured after a few doses, all his symptoms are likely to return after a very brief period. With the use of larger amounts, a more lasting immunity is conferred and, when the higher dilutions have been reached the dose repeated a number of times, there is every reason to believe that the effect is permanent. If the increase in each injection is insufficient, the patient will get only a slight benefit. In these cases the antibody stimulation is not sufficiently pronounced to produce beneficial results. On the other hand, if the vaccine is given too frequently, or the *dosage is increased too rapidly, the patient's condition may also become worse.* It is this similarity of effects of over and understimulation that causes the greatest difficulty in determining the optimum dose and interval and successful results will only come from considerable study and experience. Where the patient has been progressing satisfactorily and then presents unfavorable symptoms, it is wiser to give him the benefit of the doubt and to assume that the unfavorable results have been due to overstimulation. In this way as acute surgical condition may often be avoided. We have seen a gastric hemorrhage, an acute cholecystitis, several cases of acute appendicitis and an acute pyelitis caused by overstimulation. All of these could have been avoided if the physician administering the vaccine had stopped it temporarily after manifest symptoms of a flareup of the focal infection had appeared. Where doubt exists, we feel that it is wiser to wait a week or ten days and give an amount somewhat less than the previous dose. If lowering the dose does not produce a favorable response, the effects were probably due to understimulation and the dose should be cautiosly increased. In all these cases presenting suggestive symptoms of a focal or general reaction, we must reiterate that it is as unscientific as it is careless to increase the dose until one is convinced that the injection given will not excite a focal disturbance. Adverse reactions have given vaccine therapy a bad reputation and are usually avoidable.

An important point to remember is that many individuals possess a distinct saturation point which, however, varies from time to time. Any attempt to increase the vaccine above this point will result in severe toxic symptoms or lack of favorable response. In these instances, it is desirable to reduce the dose or to temporarily discontinue the vaccine until the patient's resistance has been built up. In some patients, poor resistance is related to low thyroid function or even to a polyglandular deficiency. Small doses of thyroid extract given to those showing lowered basal metabolic rates will sometimes improve their condition. The use of multiglandular therapy has often proved successful. In general, the lower the patient's vitality and the longer the duration of his illness, the slower will be his response to vaccine therapy.

Accuracy in measuring the dose is of paramount importance. We prefer to use tuberculin syringes. Ordinary hypodermic syringes do not permit precise measurement of small quantities and their use for vaccine therapy should be discouraged. The boiling of syringes is permissible provided the parts are allowed to become dry before being assembled. If they are put together wet, there will be an error in volume due to dilution of the vaccine with the small amount of water. Baking both the syringe and the needle is preferable. On account of the more effective destruction of spore-bearing bacteria by dry heat, insuring absolute sterility, a large number of local reactions, due to infection caused by bacteria which survive boiling, are eliminated. To facilitate sterilization, needles are placed in tubes which are constricted to prevent their points from coming in contact with the bottoms. This makes it unnecessary to stuff cotton down the bottoms of the tubes to protect the points and, therefore, eliminates the nuisance of having strands of cotton adhere to them.

Although it is dangerous to suggest dosage for the general type of patient, the following suggestions will be helpful: (1) The initial dose should be about 1,000 bacteria for hypersensitive patients and 50,000 for others. (2) If a reaction occurs, the dose should be cut to one-fourth. (3) If no reaction occurs, the dose can be increased twenty-five per cent. When the volume exceeds one cc, a proportionate amount of a stronger dilution should be used. (4) When maximum stimulation has been obtained and the patient ceases to improve, the dose should not be increased. (5) After the patient is apparently cured, he should be "weaned" from the vaccine by prolonging the interval.

A properly prepared and administered vaccine should be capable of sterilizing a focus of infection or intoxication. It would not be fair to expect a vaccine to remove kinks or adhesions that have resulted from infection or to cause the complete disappearance of calcifications, neither can it be expected to restore physiological functions that have been altered through infection. Certain types of mechanical defects will persist and these are best treated by physiotherapy or, in some cases, surgery. A patient is not considered cured until the positive complement-fiction reactions have disappeared.

In conclusion, I wish to point out that success with vaccine therapy depends on the infinite care with which minutest details are carried out. Too much must not be expected of vaccine treatment. It is to medicine what drainage is to surgery. Both may be necessary in effecting a cure.

I wish to express my gratitude to George H. Chapman for his painstaking laboratory studies of my patients, for without such investigations, this paper could not have been written.

EXAMINATION OF THE SO-CALLED "BAD" OR "NERVOUS" CHILD

By FREDERICK L PATRY, M D, ALBANY, N. Y

Neuropsychiatrist The State Education Department, The University of the State of New York

THAT the so called "bad' or "nervous" child is one of the common garden varieties of school problems which the school physician is asked to examine and treat, is not news But the fact that many of these children are neglected or given inadequate attention is a fact which should stir every school officer to put into action the best that medical science has at present to offer in helping to solve these tremendously important problems To this end the writer wishes to suggest an examination outline which has proven of sound value in the examination of such children at the Phipps Clinic of the Johns Hopkins Hospital where the author was a staff member the past two and one-half years

No one doubts the importance of a systematic approach, in medical examinations However any form of procedure has its defects as well as its merits The utilization of such helps should be largely guided by the individual case at hand as well as the trained, critical, common sense and experience of the physician

In any case of a so called "bad' or "nervous" child the following minimal, essential questions should be asked and data thereform elaborated upon according to the best judgment of the examining physician

I FACTS OBTAINED FROM HISTORY

1 STORY OF CHILD DEVELOPMENT EMBODYING,

a *Facts of inheritance* (when available) nervous breakdowns, with or without hospitalization, including rest-cures, alcoholism, epilepsy, eccentricities, geniuses or deficiencies

b *Facts of developmental data*

Birth (instrumental with injuries),

Feeding (prolonged malnutrition, with or without rickets during first 2 years of life),

Convulsions,

Age of walking, sentence formation, tidiness with urine and stools, early evidences of defective attention and ability to grasp simple requirements of biological adaptation—feeding himself, dressing, avoidance of danger, play—best when alone or with other children, etc

Habits

Regularity of sleep (bed alone, time? requirements of light, mother by bed? evidence of night terrors, sleep walking, bedwetting, etc)

Regularity of meals—fussiness over food, reactions of vomiting, gagging, etc

Habits of emotional control and disposition—shy, sensitive, timid, fearful, sulking, tantrums, explosiveness, petulance, whining, cruelty, sex curiosity

2 SCHOOL FACTS

Age on entering—kindergarten (public—private), years in each grade, mental attitudes in class room, playground report (good mixer or good leader)

Development of special aptitudes and interests

3 FACTS OF PARENTAL MANAGEMENT

a Relationship to father and mother

b Interparental relationship with particular reference to policies of child management

c Home standards with respect for civic institutions

II FACTS CONCERNING PHYSICAL STATUS

General Condition Tuberculin and other special tests, as indicated with reference to nutrition, eyesight, hearing, nose and throat status, teeth

III FACTS OBTAINED FROM MENTAL EXAMINATION

Intelligence test Personality estimate of child as revealed throughout examination and from questioning about his specific difficulties

IV FACTS OBTAINED FROM STUDY OF SOCIAL AND ECONOMIC CONDITIONS OF FAMILY

Obviously the school physician himself has not time to gather all this necessary information He should therefore utilize all the helps available—visiting teacher, social service worker, school teachers, parents, attendance officers, friends, etc, for contributive, pertinent facts Moreover, the physician should realize that he cannot intelligently treat any such case until the above information has been formulated and evaluated The cultivation of dependable systematic habits of examination will do much to give these children a better chance to balance their assets and liabilities and to shape the school resources to the needs and capacity of the individual child

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For list of officers of County Medical Societies, see this issue, advertising page xxxii.

PRESERVING THE MINUTES

This issue of the Journal contains eighty-eight pages,—eight more than the usual number. The increase is caused by the minutes of the House of Delegates which will fill twenty-five pages; but the space devoted to them is well used, for they embody not only the actions taken, but also the reasons advanced by both their supporters and their opponents.

The actions of the House of Delegates are the policies of the Medical Society of the State of New York during the coming year, and are therefore of importance to every member of the State Society. It is not reasonable to expect that anybody will grasp their full meaning by a cursory reading. The minutes should be preserved by every officer of every county society.

THE AMERICAN MEDICAL ASSOCIATION

The annual meeting of the American Medical Association held in Philadelphia from Monday to Friday, June 8-12, was most successful. The seven thousand doctors who came together from all parts of the Nation were fortunate in their opportunity to take a week of one of the most comprehensive graduate courses ever opened in all phases of medicine. Making the plans for the extensive series of meetings and exhibits was a monumental piece of work, for which credit is due to Dr. Olin West, Secretary and General Manager of the American Medical Association, Dr. Paul Leech, Director of Scientific Exhibits, and Mr. Will C. Braun, Director of Technical Exhibits.

The meetings received a large amount of notice in the newspapers of every state, for the Associated Press featured every phase of the events, especially those of a spectacular nature. If the reporters erred on the side of enthusiasm and over-statement, they at least conformed to the general facts related to them by the physicians and research workers. For example, the description of the effects of an extract of the cortical substance of the adrenal glands reported by Dr. Rowntree of the Mayo Clinic, as a remedy for Addison's disease, was printed by the Philadelphia *Public Leader* under the headlines "New Cure for Fatal Malady revealed by Scientists. Doctors astounded by the description of mysterious substance routing Addison's disease. Funds for further research urged." But the disease and the remedy were described in terms of scientific clearness and modesty. Every day the newspapers carried news of the results of researches which educated the general public regarding methods of medical investigation and progress. No medical meeting ever received a greater amount of recognition or more truthful notices.

The American Medical Association meeting was housed in the new Municipal Auditorium of the City of Philadelphia, which opened its doors just in time for the sessions. The Auditorium is located on 34th Street beside the buildings of the University of Pennsylvania. Each of its two lower floors consists of a great room in which the exhibits were shown; while the scientific sessions were held in the rooms of the size of banquet halls of large hotels. Philadelphia's Auditorium was ideally suited to all phases of the meetings.

The meetings of the American Medical Association consisted of four features:

1. The House of Delegates.
2. The Scientific Sessions.
3. The Scientific Exhibits.
4. The Technical Exhibits.

The House of Delegates met in the Hotel Benjamin Franklin and discussed problems of administration, among them the old subjects of prohibition, state medicine, and the medical treatment of veterans of the late war.

New York was represented by its full quota of fifteen delegates, and Dr. John A. Card came within a few votes of being elected vice-speaker.

The scientific sessions were of special interest and were unusually well attended because pains had been taken to secure well-known speakers and to assure their being heard. The larger meeting rooms were equipped with sound amplifiers so that the speakers were heard by everybody in the halls. The acoustics of the large meeting place of the Pediatrics Section were well-nigh perfect; but there was some complaint of inability to hear well in some of the smaller halls, especially when the speakers were dull and prosy, as were a few of the impromptu discussors.

The papers read will be served in the *Journal of the American Medical Association* as medical feasts, throughout the year.

The feature of the greatest practical value was the scientific exhibits. These exhibits have always been prominent in the American Medical Association meetings, but this year the medical schools, laboratories, and research hospitals sent their best men and lecturers to explain the exhibits to any doctor who cared to stop at their booths. Moreover, the managers of the exhibits enforced the rule that every booth should have a demonstrator constantly present. Some of the most noted clinicians and research workers in the land were ready to talk informally, face to face, with any doctor who chose to stop at their booths. The effect of this intimacy will doubtless be that the great number of doctors who thronged the exhibits hall carried away friendly impressions of the medical leaders of all parts of the land.

Over two hundred exhibits were shown covering every phase of medicine, even to an abscess of the tooth of a saber-toothed tiger that lived one hundred thousand years ago.

The technical exhibits were of equal interest and value with those of the scientific departments. Here the manufacturers of everything needed in medicine showed their wares and explained their use. To see the newer instruments and apparatus and hear their use explained in the treatment of disease was of as much practical importance and value as to learn about the disease from the scientific exhibitors.

The managers of coming sessions of the

American Medical Association will doubtless repeat the up-to-date features of this year's meeting; and if they do, the glowing reports of the seven thousand medical visitors of this year will inspire an attendance of double that number next year.

THE HOUSE OF DELEGATES

This Journal contains the minutes of the House of Delegates beginning on page 820 and filling twenty-five pages. Every effort has been put forth to make these minutes complete and accurate; but back of the act of recording them was the clearness and dispatch with which the business of the House was conducted by the Speaker, Dr. John A. Card, and the Secretary, Dr. D. S. Dougherty; and this in turn depended largely on the good judgment of the reference committees. The preparation of the minutes may be said to have been begun when Dr. Card, the Speaker, announced the personnel of the reference committees in the Journal of May first. The success of printing the annual reports and the names of the members of the reference committees a month before the meeting is an effective answer to the hesitation of most State societies to publish their annual reports and the committees in advance of the meeting.

The minutes of a deliberate body, such as the House of Delegates, may be written from either one of two points of view:

1. They may be literal transcripts of every remark and technical action.
2. They may be descriptive, and record only summaries of what was said and done.

The minutes this year combine the two features. Many debates are published nearly in full in order to record the sentiments and views held by the members. On the other hand, the account of the election of officers is limited to the names of those elected.

The editors have followed the precedent adopted in 1927 of printing the minutes with four distinct features:

1. Separating the minutes into paragraphs, each with a descriptive title.
2. Numbering the paragraphs consecutively.
3. Making cross references to the paragraphs bearing on each action.
4. Preparing a complete index of the paragraphs.

These four features will be most fully appreciated only by those who have frequent occasion to consult the minutes. In the absence of these features, noted in most minutes recorded in State Journals, one has great difficulty in reading the minutes intelligently.

LOOKING BACKWARD

This Journal Twenty-five Years Ago

Personal Publicity: The following editorial on personal publicity which appeared in this Journal of July, 1906, could well have been written today:—

"A physician in Louisiana has brought suit against a newspaper which published the report of a case which in newspaper parlance was 'unique.' It set forth that many physicians had treated this patient's hip trouble without success until the plaintiff, who was a close student of the methods of Professor Lorenz, took hold and affected a cure. The story was a straightforward statement which had been given to the reporter by the grateful father of the patient, and was given with a feeling of gratitute and kindness towards the physician who had cured his child.

"The doctor brought action against the paper, and was decided against by the lower court. The Supreme Court, however, reversed the decision, and ruled that, while the simple matter of sentiment could not be considered, yet it was possible that the plaintiff had actually sustained damages by this publication. It is not necessary that a damaging statement shall be made in terms of defamation and slander. Words of apparent praise may often have a damaging effect. The physician in this case, the court held, had objected to having his name paraded before the public in the same manner as is practiced by quacks; and knowing that he desired that his professional work should not be advertised in this manner, the paper in question printed an adulatory statement concerning his treatment of a certain case in which the real facts were overdrawn, and in which the impression was presented to his professional colleagues that he had represented to the family that the case was 'unique' and that his cure was extraordinary, when as a matter of fact neither of these was true. He was justified in claiming damages for having the paper represent him as pursuing the policy of the quack."

MEDICAL PROGRESS

Essential Hypertension.—Marcus Backer thinks it is justifiable to state that the enthusiastic rush for the best treatment of essential hypertension has occupied a too large part of the bulky literature on this subject, that the keynote in the prevention and therapy has not yet been struck, and that little light has been thrown on the etiology of the condition. While a variety of contradictory opinions have been expressed concerning the etiology, there is no difference of opinion that increased resistance of the peripheral vessels is the essential factor in the etiology of hypertension. A review of some of the theories advanced to explain the inability of the arterioles to relax leads to the conclusion that the autonomous innervation of the arterial system responds to a multiplicity of stimuli, that the nervous tracts which effect a change of the peripheral arterial resistance are manifold, and that the combination of these circumstances allows for a wide variety of physiological and pathological possibilities. These pathological possibilities depend upon the specific make-up of the autonomous nervous system, which the author believes is the dominant factor in patients suffering from hypertension. He has observed that certain individuals, who have worked most strenuously for two or more decades, and whose lives are full of worry and excitement, have at all times either a normal or a subnormal blood pressure. Similarly, the well-known occurrence of numerous instances of hypertensive disease in the same families leads to the belief that vascular resistance primarily depends upon the fundamental fabric of the particular autonomous nervous system as such. In the light of these considerations, essential hypertension is reduced to the rank of a mere symptom, and is to be viewed solely as a manifestation of a certain abnormal type of constitution. Whether this abnormality concerns the constitution of the vegetative nervous system alone, or whether it may possibly be correlated independently with other constitutional abnormalities (endocrine glands and other hormone-producing tissues), is not known. Backer offers the idea of a constitutionally increased neuro-muscular tonus of the arterial system simply as a starting point which suggests a number of questions for investigation.—*American Journal of the Medical Sciences*, May, 1931, clxxxi, 5.

Incomplete Forms of Gout Attacks.—It seems not yet to be generally known, according to L. Schmidt and E. Wohlstein, that in occasional cases where there is defective metabolism, for example in the uratic diathesis, skin changes may appear in a vicarious sense during an attack of gout. This is illustrated by the case of a man of 71 who had suffered with occasional attacks of gout for many years, and in whom repeated uric acid determinations in blood and urine had established beyond question a diagnosis of uratic diathesis. From his own account this patient had been subject at a later period to feverish attacks during which, in addition to changes characteristic of the uric acid picture, there were redness and swelling of the skin without the least symptoms in the joints. This alteration of the cutaneous tissue can only be explained as a vicarious manifestation in which for some reason or other the otherwise painful joint symptoms were lacking. In other words the attack of gout played its part externally, so to speak, in the skin. A closer pathogenetic study of the disease process finds further points of support for this opinion. The essential nature of gout consists in a faulty uric acid excretion, which is originally due to an increased affinity, chiefly of the mesenchymal tissue, for uric acid. The effort at retention must be a histogenous characteristic of the uratic organism. The so-called acute attack of gout gives the impression of being a natural defensive action on the part of the organism oversaturated with uric acid. As a result of the attack the uric acid content of the blood falls and the amount excreted in the urine rises. The liberation of the flood of uric acid evidently relieves the vegetative nervous system which has been irritated by the greatly changed blood chemistry, and one may regard this state of irritation of the autonomic nervous system as a catalytic of the gout attack. Just as states of irritation of the vegetative nervous system frequently cause skin eruptions, such as urticaria, herpes, erythema exudativum multiforme et nodosum, etc., so may they likewise in exceptional cases of gout produce skin alterations.—*Münchener medizinische Wochenschrift*, April 3, 1931.

The Etiology of Acrodynia.—To the symptoms of acrodynia, which Bilderback described under the six P's—pain, pink hands and feet, peeling, prostration, paresthesia, and perspiration—William Weston, Jr., adds a seventh,

photophobia, which he finds to be universal in this disease. With regard to the etiology there are two views: (1) It is caused by nutritional deficiency; (2) it is due to focal infection. Rodda thinks tonsillectomy is a specific cure for the disease. In the author's opinion it should be far from internists and pediatricians to advise tonsillectomy during the active stages of acrodynia, especially if it has become an infection. He believes the disease is due to nutritional deficiency, since practically all patients give a history of undernutrition and gradual loss of weight, since the onset is slow, and since most of the cases are sporadic. Breast-fed infants, whose mothers are apparently in excellent nutritional condition, develop acrodynia, but upon the addition of vitamins A and B to their diets in sufficient quantity, the disease clears up rapidly. Weston reports three cases in which the patients showed various degrees of involvement. All recovered without tonsillectomy; in only one were the tonsils diseased. All were given a well balanced diet rich in vitamins. The results in these cases strongly indicate a lack of proper diet as the cause of the condition. A laboratory study of the throat and nasal secretion in these cases showed the usual bacterial flora, with a preponderance of *Staphylococcus aureus* and non-hemolytic streptococci in the order named. Because of the lowered vitality and resistance of the patient, infection is invited, especially in the mucosa of the nasopharynx.—*Southern Medical Journal,* May, 1931, xxiv, 5.

Does Nicotine Cause Abstinence Symptoms?—Up to the present time, says Hermann Beers in the *Münchener medizinische Wochenschrift* of March 27, 1931, true abstinence symptoms such as follow the withdrawal of opium, morphine, cocaine, and to some degree, alcohol, have not been observed when nicotine is withdrawn either gradually or abruptly. The most that has been recorded in such cases has been slight motor restlessness, psychic irritability, and incapacity for concentration. A case is now reported in which a woman of 42 had a typical attack of bronchitis lasting about 14 days, after which the fever, cough, and pain in the chest disappeared, leaving no objective signs of morbid changes on repeated examination. However, the patient failed to convalesce, and exhibited prostration, muscular weakness, trembling in hands and feet when she tried to get up from bed, mimic restlessness, a sullen expression, weak tremulous voice, and cold feet. Examination of blood, urine, and feces was negative. The patient had the delusion that she was going to die, and begged for poison. The discrepancy between the objective findings and the profound depression led Beers to make inquiry as to her possible addiction to some habit-forming drug. On learning that she had been accustomed before her illness to smoke 30-40 cigarettes a day with deep inhalation, he recommended that she resume the practice. A single day brought definite improvement to mind and body, and by the third day she was back in her normal condition, stating that she had never felt better. Although a single case proves nothing, there is every reason to believe that this was an instance of abstinence symptoms following withdrawal of nicotine. It is conceivable that the widespread smoking of women, a new phenomenon, is bringing to light a greater sensitivity and a lesser inhibiting power in them than exists in men, as seems to be the case with alcohol. The subject deserves further study.

Post-Operative Vomiting.—Bessie E. Cook, writing in *The Lancet,* April 18, 1931, ccxx, 5616, presents a comparative study of 500 patients who had ether and an equal number who were given gas and oxygen. Of the first group 43¼ per cent, and of the second group 56 per cent, were not sick at all. In every case there was a slight advantage on the side of gas and oxygen. In seeking the reason for this difference, it was found that it was partly a question of the depth of the anesthesia, but since surgeons who ask for deep anesthesia are usually those whose technique would produce reflex signs in patients not quite so deeply anesthetized, probably both causes, surgical trauma and excessive anesthesia, may act at the same time. There were 20 deaths in the gas group and 30 in the ether division. The patients receiving gas left the hospital on the average a day or more sooner, and their progress was really more rapid, than those taking ether. Both the staff and patients who had previously taken ether confirm the great difference in the immediate well-being after operation when gas is used. With ether there is often a heavy stuporous nausea lasting for several days, and the taste of the drug lingers, since its complete elimination may take a week. Gas and oxygen are eliminated within a few seconds after the close of administration. Possibly some of the sickness occurring after gas may be attributed to the fact that patients are sooner able to move voluntarily in bed. Vomiting in these groups of patients was only one-third to one-half as frequent in men as in women. This is probably due to the fact that the nervous and endocrine systems in women are easily affected by both physical and psychical trauma. The stomachs of men are frequently in better training to be insusceptible

to foreign substances such as would produce nausea in digestive tracts less case hardened. Men, however, are more liable to coughs. This may be explained by the fact that they usually require a great deal more of the anesthetic than women. The figures show that with gas and oxygen there is 50 per cent less likelihood of chest complications than with ether, if given intensively. The point to be emphasized is that since trauma is of such great importance in even the minor discomforts after operation the aim should be a gentler and still gentler technique in surgery. The use of gas means that the patient's respiratory and circulatory systems do not suffer so great an upset, and with less trauma at the hands of the gas-accustomed surgeon, they recover sooner from the minimum of handling.

Treatment of Hyperemesis Gravidarum with Glucose and Insulin.—Bruno Kriss, writing in the *Münchener medizinische Wochenschrift* of March 27, 1931, says that the advantages of this method are still unknown to the majority of physicians outside the ranks of specialists. He publishes an instructive case in a woman of 32 who in the second month of her first pregnancy suffered with hyperemesis with severe toxic symptoms indicating liver injury. This was shown by the presence in the urine not only of large amounts of acetone and bilirubin but also, and more especially, of leucin crystals. The appearance of leucin in the urine is regarded by students of metabolism as extremely unfavorable in prognosis, pointing to a high-grade liver destruction. This consideration induced Kriss, who was already administering insulin and glucose, to interrupt the pregnancy. Vomiting continued, however, almost without cessation. The patient suffered with transient losses of consciousness, restlessness, and dyspnea, while large masses of leucin crystals continued to appear in the urine, with abundance of ketone bodies, albumin, and urobilinogen 1:528 positive. She was now given twice daily 150 c.c. of a 40 per cent glucose solution by rectum and 15 units of insulin subcutaneously, that is, 120 gm. glucose and 30 units of insulin per day. These large amounts were well tolerated. By the fifth day the general condition was already definitely improved; on the tenth day the bilirubin disappeared from the urine, and on the twelfth the leucin and acetone, vomiting ceasing on the eleventh day. The case shows the paramount necessity of protecting the liver from loss of glycogen. A method that can accomplish this points the way to the successful treatment of dangerous liver conditions. The starting point of pregnancy toxins is chiefly in the liver. The histologic picture of both the animal and the human liver in pregnancy shows depletion of glycogen and infiltration of fat. Glycogen serves as a protection for the liver cells. Its loss or even diminution invites injury and finally destruction of these cells, followed by fat infiltration. The organism cannot altogether protect itself; products of fat disintegration (acetone bodies) remain in the blood, from which they are only in part excreted in the urine. The case here outlined teaches that a toxic liver of very severe degree, with destruction of hepatic tissue persisting despite a therapeutic abortion, could be brought to a halt and further destruction of liver cells prevented by treatment with glucose-insulin to restore normal metabolism.

Anaphylaxis to Insulin.—It is a mistake, say A. Cade, Ph. Barral, and J. Roux, to attribute, as most authors do, anaphylactic phenomena after use of insulin to impurities in the insulin. These workers, having observed various types of reactions, local and general, carried out studies to learn the exact pathogenesis of such reactions, and to determine whether they were due to impurities in the insulin or to anaphylaxis. Three groups of guinea pigs were injected intraperitoneally, the first with 0.1 c.c. ox serum, the second with 0.1 c.c. glycerinated emulsion of ox pancreas, and the third with 4 units of purified insulin. After an interval of 30-40 days, some of the animals in each group were injected intradurally with 0.01 c.c. ox serum, some with 0.1 c.c. glycerinated emulsion of ox pancreas, and some with 2 units of insulin. All of the animals in the first two classes and one-half of those in the third presented phenomena of shock from a second injection of the same substance they had received before. But those sensitized to ox serum or ox pancreas did not suffer a shock after a second injection of purified insulin, nor did the guinea pigs which had been sensitized to purified insulin suffer shock upon a second injection of serum or emulsion of beef pancreas. Finally an attempt was made to sensitize guinea pigs by means of another commercial insulin of a type that had been systematically "incompletely purified." Five of the 6 animals so treated showed intense shock, and one of them died. From these experiments it is seen that insulin appears to behave like a specific antigen and to create sensibility in the same degree as the other antigens that have been most generally incriminated, notably foreign proteins. It is concluded that pure insulin is capable of producing anaphylactic phenomena and that it constitutes in itself a specific antigen. Insulin incompletely purified causes these in a more intense degree, because of the intervention of

foreign proteins. Clinically, however, these accidents are rare, at least with pure insulin. They teach the necessity first of using the pure article, secondly, of prescribing a desensitizing treatment, and sometimes the temporary interruption of treatment.—*Bulletin de l'Académie de Médecine*, March 31, 1931.

Reflexotherapy of Headaches.—By this term is meant, says Georges Schoengrun, the control of headache by applying suitable treatment to the trigeminal-sympathetic fibers in the nasal mucosa. It is commonly known that if the tip of the middle turbinated bone is touched with a probe a series of reactions follows instantaneously; lacrymation, reddening of conjunctivae, and a copious secretion of nasal mucus. More energetic stimulation of this region causes perspiration, dilatation of pupils, flushing of the face and even of the neck and chest, and may, if prolonged, produce tachycardia and even syncope. In short, the irritation excites nerve fibers coming from an exceptionally rich network in which the sympathetic, parasympathetic, and trigeminus all participate. The disturbances caused by exciting the sphenopalatine ganglion are vasomotor and secretory. In the light of recent theories clinically confirmed we are forced to conclude that the sympathetic is an anatomical entity that cannot be dissociated, traversed by a nervous influx from end to end. When excited, the ganglia scattered over its network seem to constitute relays which not only reinforce the initial excitation but transform it with reference to an adaptation to this or that organ. It can thus be seen that by a simple touch at a point where certain nerve fibers emerge from the sympathetic nerve we provoke reflexes that may extend for a long distance from their origin. These considerations have a bearing on the origin of certain headaches in subjects of abnormal sensitivity, of which clinical observation cannot precisely reveal the cause. Schoengrun undertook to control these headaches by introducing into the nasal cavity a substance that should be at once caustic and anesthetic. He applied to the retroturbinal region of the nasal mucosa a mixture consisting of equal parts of carbolic acid, menthol, and cocaine in order to produce simultaneously an inhibition and a regulation of the nerve centers, that would permit the organism to acquire a new aptitude for regaining its normal coefficient of stability. He has used this treatment in 55 cases, resulting in 38 cures, 4 improvements, 12 failures and 1 aggravation. Among the cures were 9 cases of periodic migraine, 7 of supraorbital and frontal neuralgia, sequels of old sinusitis, 2 of zona ophthalmica, 4 of occipital headache, and 5 of neuralgia temporally or frontally localized. In a general way it may be said that reflexotherapy seems to act in a quasi-specific manner on the element of pain in the majority of headaches associated with other functional troubles.—*Bulletin de l'Académie de Médecine*, April 21, 1931.

Ultraviolet Radiation—What, Why, and How.—George F. Crosley states that ultraviolet radiation is that having a wave length between 1700 and 4000 Angström units. Only wave lengths between 2500 and 3100 Angström units. produce effects in which the physician is interested. There are three principal effects of ultraviolet radiation in this region—direct germicidal, benign inflammatory reaction, and vitamin D production through the action on ergosterol. In general, the shortest radiations have the greatest germ killing power, which decreases in intensity with increase in wave length. Radiations between 2700 and 3100 Angström units create a noninfective benign inflammatory reaction in the tissues with all the advantages of increased blood supply, phagocytosis, and temperature without the production of the bacterial toxins incident to ordinary inflammatory reactions. The third and the most important action of ultraviolet radiation is the conversion of ergosterol found in the skin into vitamin D. As there is marked variation in the amount of therapeutic ultraviolet radiation in sunlight, the amount being small during the winter months, so is there variation in the amount of vitamin D in butter, eggs, and milk. Retention of calcium is dependent upon a sufficient amount of calcium and phosphorus in the diet, as well as of sufficient vitamin D to act as a catalyst and permit the utilization of calcium and phosphorus. Deficiency of calcium and phosphorus causes rickets, spasmophilia, osteomalacia, and tetany and predisposes to hemorrhage, to catarrhal conditions, increased anaphylactic reactions, increased muscular and nervous instability, digestive disturbances, and susceptibility to disease. Available evidence indicates that the natural avenue of absorption of vitamin D is through the skin from activated ergosterol rather through the digestive tract. Observations have shown that in two localities in which the diet is the same and rich in vitamin D there is a difference in the incidence of rickets corresponding to the difference in the amount of ultraviolet light in the sunlight. The sun is not the ideal, and during the winter months is impractical as a source of visible, infrared, or ultraviolet radiation for therapeutic use. Hence dependence must be placed upon artifical sources. Radiations from a carbon arc do not closely approximate those from the sun. The ideal source is that which will give the greatest volume in the region desired, taking into consideration the matters of safety, convenience, sanitation, economy and scientific accuracy of control of output. The best quartz mercury arc lamps make possible the accurate control of lamp voltage and therefore of ultraviolet output, and hence make possible accurate dosage. — *Physical Therapeutics*, May, 1931, xlix, 5.

LEGAL

COURT'S POWER TO VOID JURY'S VERDICT ON GROUND OF BIAS

By LORENZ BROSNAN, ESQ.
Counsel, Medical Society of the State of New York

An extremely interesting and important decision was recently handed down by one of the Appellate Courts of this State. The decision in question dealt with the right of the Court to set aside the verdict of the jury upon the ground that the said verdict did not truly represent the unanimous view of the jurors. The case arose on the following state of facts:

The plaintiff, a concert pianist, was homeward bound on one of the defendant's steamships. She claimed that she sustained injuries by being precipitated down a flight of stairs by reason of the alleged negligence of the defendant steamship company. The action was on trial for three days before a judge and jury, and after the trial court had charged the jury he ordered them to return a sealed verdict on the following morning.

At this point, it is important to explain the meaning of the term, "sealed verdict." It frequently happens that a case is submitted to the jury late in the afternoon. Under such circumstances the trial court very often directs that the jury return a sealed verdict to be opened the following morning. Instructions are left by the trial court with the officer in attendance upon the jury during their deliberations, as to the length of time that they are to be locked up, and if they do not agree upon a verdict before that time it must be so recorded in writing. If they do agree upon a verdict, each of the jurors must individually sign their verdict on the form which is then placed in a sealed envelope and given to the clerk who keeps it in his custody until the following morning when it is opened by the trial court in the presence of the jury who are instructed by the trial court to return so that they may be present when the verdict is opened.

In this case it appeared that the jurors signed and gave to the clerk a paper stating that they had found a verdict in favor of the defendant. The next morning, however, before the court convened and before the sealed verdict had been opened, five of the twelve jurors having overnight reconsidered their views as expressed in the sealed verdict, appointed one of their number to inform the justice presiding at the trial that they wished to recall their finding in favor of the defendant. By reason of the fact, however, that the trial court was busily engaged on the morning in question, this juror did not approach the trial court nor was the trial justice advised that some of the jurors wished to reconsider their previous decision. In accordance with the usual practice therefore, the sealed verdict was opened and read into the record and there was no statement made by any juror in open court at that time that he dissented from the views expressed in the sealed verdict. The plaintiff's attorney made the usual motion to set aside the verdict on the grounds that it was against the weight of the evidence, contrary to the evidence and contrary to law, which motion was duly denied by the trial justice.

On the afternoon of the same day, one of the jurors went to the office of plaintiff's attorney and told him that the verdict did not represent his views nor the views of four other members of the jury. The plaintiff's attorney immediately took this juror to the justice who had presided at the trial, but the court felt that it would be improper to speak to the lawyer or the juror in the absence of the opposing counsel. Thereupon this juror as well as four others made an affidavit in which they said in part:

> "We feel strongly that a serious wrong has been done to the plaintiff in this action in the verdict as it now stands. The said verdict at the time of its acceptance by the court did not represent our convictions in the case. * * * We are prompted in our desire to have the verdict set aside by the fact that at no time, either before or after its being read in open court, did said verdict represent our true and honest judgment of the merits of this case. We feel that said verdict is a miscarriage of justice; that a serious wrong has been done to the plaintiff, and that it is our duty to join in this application to have the said verdict set aside."

On the basis of this affidavit the plaintiff's attorney duly moved to set aside the verdict, urging three specific grounds: First, that one of the jurors, when examined as to his qualification prior to being sworn, failed to disclose the fact that he had been an investigator and adjuster of claims for upwards of twenty years; second, that this juror during the deliberation of the jury through threats rendered impossible a careful consideration of the evidence and resulted in a verdict for the defendant contrary to the honest convictions of a number of the jurors; and third, that prior to the opening of the sealed verdict and its acceptance by the court, one of the jurors in behalf of himself and several others had unsuccessfully sought to call to the attention of the court that the said verdict did not express their conscientious

views and that they desired to change the said verdict.

In regard to the conduct of one of the jurors in insisting at the outset that a verdict must be returned in favor of the defendant, the affidavit of one of the jurors in support of the plaintiff's motion to set aside the verdict contained the following statement:

"Immediately upon the taking of the said vote, said juror number 12 stated to the other jurors: 'We may as well understand right here and now that there has got to be a verdict for the defendant here.' Some of the jurors, including myself, remonstrated with him and attempted to point out to him wherein the evidence in this case showed that the defendant had been negligent in failing to have guarded against the accident which resulted in the serious injuries to the plaintiff, but said juror X stated: 'Nothing that you can say can help. We have got to find a verdict for the defendant. I have been an investigator and adjuster for shipping companies for over twenty years, and I know all about these cases. You may as well make up your minds to find a verdict for the defendant. If necessary we will sit here for three days and three nights until you do so.' The other members of the jury tried to discuss the evidence and reach a verdict in accordance therewith. Calm and deliberate discussion was rendered impossible by the belligerent talk and attitude of said juror X. He continued to insist that there was no use discussing the case because it would do no good, and that we would have to bring in a verdict for the defendant. I then told the foreman that under the circumstances no purpose would be served by continuing the session, and asked that he send word to Judge A as to the situation. This the foreman refused to do. We remained in the jury room altogether about two hours. During that time several votes were taken, and the jurors who had voted for the plaintiff, gradually yielded to the domineering and bulldozing methods of said juror X."

The trial court before whom the plaintiff's motion came, after due consideration of all the facts, set aside the verdict with the following opinion:

"The juror who sought the attention of the court before the verdict was recorded or even opened, was acting for himself and other jurors in order that it might be brought out that the sealed verdict did not express their views. I am satisfied that in the haste and confusion of the calendar I unwittingly proceeded in a way which resulted in there being recorded a verdict which at that time did not by far represent the unanimous conclusion of the twelve triers of fact. Otherwise either counsel or the court would have caused them to be polled and would have immediately discovered the true situation. Accordingly, in view of what happened at the time, and on reading the papers which have been filed, the court on its own motion and to correct a wrong for which, perhaps, the court was unintentionally responsible, will set aside the verdict."

The defendant promptly appealed to the Appellate Division where the action of the court below in setting aside the verdict was sustained by a divided court, three of the justices voting that the verdict should be set aside and two holding that it should not. The majority opinion said in part:

"It seems to me, under the circumstances of this case, that the action of the justice presiding at the trial in vacating the verdict was justified. In this case the court directed a sealed verdict, but until said verdict was actually recorded and the jurors discharged any of the jurors had the right to withdraw his consent to a verdict. A so-called sealed verdict is no more than the agreement reached by the jurors. It does not become final until it is read into the record and the jurors discharged. I know of no distinction between a sealed verdict and an oral verdict. Prior to the discharge of the jury it was the prerogative of any juror to change his mind and to challenge the verdict about to be rendered. * * *

"In our opinion there can be no question as to the right of any juror serving at the trial, notwithstanding the fact that such juror had agreed to the form of the sealed verdict prior to said verdict being actually recorded, to change his mind and to announce the same to the court. The verdict in this case, as recorded, was not the unanimous verdict of the jury. It did not correspond to the intention of the twelve jurors at the time the verdict was rendered."

There were vigorous dissenting opinions by two justices of the Appellate Court. These opinions pointed out that five jurors had signed affidavits on behalf of the defendant contradicting the allegations in the affidavits of the jurors who sought to have the verdict set aside. In one of the dissenting opinions it was said:

"This proceeding appears to be an attempt by an unsuccessful party to set aside a verdict by securing affidavits from jurors to impeach their verdict. In this case there was a sealed verdict, signed by each juror, including the jurors who are now attempting to repudiate their action in voting for a verdict for defendant. Juror No. 12 was the last one to sign the sealed verdict after the jurors who now say they were coerced by him had voluntarily signed the verdict.

"The attorney for plaintiff appears to place the responsibility for the verdict upon the trial justice or his own failure to challenge a juror who was engaged in a business that might affect his judgment. He sets forth in his affidavit: 'Ordinarily I should have excused said juror X as a juror merely because of the fact that he was engaged in a shipping business, as had been stated by him. Because of the urgings of the court, however, that the selection of jurors be completed expeditiously, I relied upon said juror X's assurances of impartiality and permitted him to remain on the jury.'

"There appears to be no merit in the statement that the juror X concealed anything. It appears that he stated he was engaged in the shipping business, and the attorney for plaintiff frankly states that he was impressed by that fact and that he would not ordinarily accept a man engaged in that business as a juror in a case of this character. This clearly emphasizes the fact that there was nothing concealed; that the attorney knew the nature of the juror's business and had an opportunity to challenge him if he believed the juror, because of such business, would be influenced in favor of the defendant.

"It is difficult to understand how the influence of juror X became so over-powering as to be responsible for the verdict in favor of the defendant. This confession of weakness on the part of several jurors is highly improbable and is contradicted by several other jurors, who have submitted affiidavits to the effect that the verdict for defendant was reached after due deliberation and a free and full discussion of the facts by all the members of the jury, without the influence of juror X or any other juror.

"B, a juror, says: 'There was a fair and honest discussion of all the facts in this case. We had argument and discussion and went into the case thoroughly. I deny here that there was any bulldozing or any other

method of coercion used in reaching this verdict, nor any violence threatened on the part of anybody. Some were for the plaintiff and finally voted for the defendant, and reached their verdict freely and willingly. There was nothing unusual in reaching the verdict in this case. I signed my name to the stated verdict as did all the other jurors. This verdict was reached in fairness, and finally all the jurors reached their verdict on the facts. Nobody dominated the other, and each had his own say. I signed the paper for the defendant, and state every other juror did so willingly.'

"To the same effect are the affidavits of jurors C, D, E and X.

"E, one of the jurors, says: 'At all times each juror discussed the case pro and con. At no time during my discussion of the case was I influenced and voted strictly on the evidence as I heard it produced in court and after I applied the law as the judge gave it to me.'

"Five jurors have made affidavits denying the allegations of jurors F, G, H, I and J.

"We therefore have the affidavits of five jurors that the verdict was brought about by coercion. Opposed to such allegations we have the affidavits of five other jurors, D, C, B, E and X, that there was nothing unusual in the discussion of the evidence or the finding of the verdict.

"If verdicts are to be set aside on conflicting affidavits of jurors after they have been rendered in a case of this character we should soon have a chaotic condition. It has so frequently been held that a verdict cannot be impeached by the affidavit of a juror that the law seems to be well settled on that subject. This was a sealed verdict, to which were affixed the signatures of all the jurors before the verdict was finally submitted to the court."

In the other dissenting opinion, one of the justices expressed his disapproval of the action of the trial court in setting aside the verdict in the following language:

"No verdict in a closely litigated case would be immune from attack if the courts are to give heed to the expressions of jurors after the verdict has been rendered. Lawyers of experience know that jurors, when interviewed after the rendition of a verdict, frequently say that they would have found the other way if they were to reconsider the matter or that they had been misled by the emphasis placed on certain evidence or had not fully comprehended the court's charge. Rarely can a juror resist the importunities of the defeated and disappointed litigant and refrain from giving that consoling balm. A field would be opened to those who might seek by unfair or corrupt means to turn a juror from his recorded decision and utilize his change of view to nullify the verdict. Courts would be largely employed in sifting these affidavits, and jury trials would result, not in decision determinative of the issues in dispute, but in creating new realms of controversy.

"There is wisdom in strictly enforcing the ancient rule which forbids the impeachment of a verdict by the affidavit of a juror. The language of one authority is pertinent: 'The danger would be infinite if an affidavit could be received from a juryman for the purpose of setting aside a verdict.'

"It is well settled that affidavits of jurors are inadmissible for the purpose of impeaching their verdict (citing cases).

"If the affidavits of the jurors be excised from the record and discarded there is nothing upon which the order of the trial court can be based. All that remains is some proof that one juror endeavored to confer with the court in the morning before the sealed verdict was opened, but was unable to speak to the court before entering the jury box with his fellow jurors.

"It is an unvarying practice that the clerk, after calling the roll, asks whether the jury have reached a verdict, and upon an affirmative response, the sealed verdict is opened and read. When this was being done and the jury harkened to its record, none of the jurors gave utterance to anything to indicate that the verdict which they had signed during the prior evening, and the recording of which they were then witnessing, was not their real verdict. Had plaintiff's counsel so requested the jury might then have been polled, but he waived his rights in that respect by failing so to move. These formalities are strictly followed because they are designed for the prevention and correction of error. They must be carried out while the jury are still serving as an arm of the court. After the verdict has been so received and recorded, and the jury have been discharged, and the court, as here, has declined to disturb it upon a motion made upon the court's minutes, that verdict, so hedged about in its reception and entry, must be regarded as having settled the issue submitted to the jury for decision. No juror can then, after having been discharged from consideration of the case, be heard to impeach his verdict and cause the litigation to be reopened.

"Were the rule otherwise the effective and final disposition of controversies would be thwarted and the present vast amount of litigation occupying the time of the courts would be greatly increased. The rights of parties throughout a controversy are carefully safeguarded under our procedure. No litigant should be unduly vexed with repeated trials of the same dispute. The verdict of a jury reached upon conflicting evidence under the guidance of a full and fair charge imports finality and is not to be lightly tossed aside upon the claim of some of the jurors that they have experienced a change of view. Care must be taken that the doors be not thus opened to a flood of unending litigation."

It is quite probable that the case will receive the consideration of the Court of Appeals, the highest court of this State. The writer agrees with the dissenting opinions in this case. If the majority opinion should receive the sanction of the Court of Appeals, it seems obvious that disgruntled and unsuccessful litigants will seek, upon one pretext or another, to obtain the affidavit of one or more jurors with a view to setting aside the verdict rendered. The result of this practice has been so fully and ably treated in the dissenting opinions discussed in this editorial, that it is unnecessary to add anything to what has already been said. It is sufficient to point out that the majority opinion opens the door to a flood of unending litigation.

HOUSE OF DELEGATES

MINUTES OF ANNUAL MEETING

The 125th Annual Meeting of the House of Delegates of the Medical Society of the State of New York was held at the Hotel Syracuse, Syracuse, New York, on Monday, June 1, 1931, at 2 P. M., Dr. John A. Card, Speaker; Dr. Daniel S. Dougherty Secretary.

1. Committee on Credentials

The Speaker: The first order of business is the report of the Reference Committee on Credentials; Mr. Secretary.

The Secretary: Mr. Speaker and gentlemen, there are no disputed delegations. All gentlemen present have a right to vote. See Sections 8 and 49.)

The Speaker announced that the Secretary would call the roll by Counties for the purpose of determining the presence of recognized delegates.

The Secretary thereupon called the roll by Counties.

The Speaker: There being a quorum present, we will proceed to the business of the house.

2. Approval of Minutes

The Speaker: The first order of business will be the reading of the minutes of the previous meeting.

The Secretary: I move that the readings be dispensed with, and that the minutes be adopted as published in the New York State Journal of Medicine, July 1, 1930.

Motion seconded and carried.

3. Reference Committees

The Speaker: I shall now ask the Secretary if he will read the list of Reference Committees.

The Secretary read the following reference committees.

Reference Committee on the Report of the President: Luther F. Warren, Chairman, Kings; Floyd S. Winslow, Monroe; Augustus J. Hambrook, Rensselaer; Joseph B. Hulett, Orange; J. D. Olin, Jefferson.

Reference Committee on the Reports of the Secretary, The Council, Councillors and The Board of Censors: William A. Krieger, Chairman, Dutchess-Putnam; Terry M. Townsend, New York; Frederick H. Flaherty, Onondaga; Horace M. Hicks, Montgomery, Charles H. Goodrich, Kings.

Reference Committee on the Reports of the Treasurer and Trustees: Aaron Sobel, Chairman, Dutchess-Putnam; Charles C. Trembley, Franklin; Andrew Sloan, Oneida; David W. Beard, Schoharie; Luther A. Payne Sullivan.

Reference Committee on the Report of the Committee on Legislation: Walter Ludlum, Chairman, Kings; Frederic C. Conway, Albany; B. Wallace Hamilton, New York; Albert A. Gartner, Erie; Leon M. Kysor, Steuben.

Reference Committee on the Report of the Committee on Scientific Work and The Committee on Arrangements: Irving Smiley, Chairman, Bronx; Milton P. Messinger, Genesee; Louis A. Van Kleeck, Nassau; Frederick J. Schnell, Niagara; Milton G. Potter, Erie.

Reference Committee on the Reports of the Committee on Public Health and Medical Education and Committee on Cancer Prevention: Reeve B. Howland, Chairman, Chemung; George M. Fisher, Oneida; Thomas M. Brennan, Kings; Carl Bettiger, Queens; Clyde C. Lytle, Ontario.

Reference Committee on the Report of the Committee on Medical Economics: De Witt Stetten, Chairman, New York; Cornelius J. Egan, New York; Charles R. Barber, Monroe; Charles E. Padelford, Orleans; Edgar Bieber, Chautauqua.

Reference Committee on the Report of the Committee on Public Relations: George W. Cottis, Chairman, Chautauqua; Harrison Betts, Westchester; William R. Thomson, Wyoming; Walter A. Calihan, Monroe; John D. Bonnar, Erie.

Reference Committee on the Report of the Legal Counsel: C. Knight Deyo, Chairman, Dutchess-Putnam; Luzerne Coville, Tompkins; Samuel M. Kaufman, New York; William P. Howard, Albany; Frank M. Dyer, Broome.

Reference Committee on the Reports of the Committee on Medical Research and the Committee on Periodic Health Examination: Edward R. Cunniffe, Chairman, New York; Willard H. Veeder, Monroe; Edward A. Flemming, Queens; Henry J. Noerling, Columbia; Elias H. Bartley, Kings.

Reference Committee on the Reports of the Committee on Nursing and the Committee on Physical Therapy: John E. Jennings, Chairman, Kings; Sylvester C. Clemans, Fulton, Lyman C. Lewis, Allegany, Edwin H. Fiske, Kings, Adelbert Allen, New York.

Reference Committee on the Report of the Committee to Form a Plan to make Toxin Anti-toxin available to Every Child in the State: Alec Thomson, Chairman, Kings; Brayton E. Kinne, Albany; Louis A. Friedman, Bronx; Francis M. O'Gorman, Erie; Frederick J. Bowen, Livingston.

Reference Committee on Credentials: The Secretary.

Reference Committee on New Business A: Edward M. Colie, Jr., Chairman, New York; George A. Leitner, Rockland; Edwin A. Griffin, Kings; Morris Maslon, Warren; George M. Cady, Tioga.

Reference Committee on New Business B: Samuel J. Kopetzky, Chairman, New York; Hyzer W. Jones, Oneida; W. Grant Cooper, St. Lawrence; Edwin C Podvin, Bronx; Howard C. Murray, Herkimer.

Reference Committee on New Business C: David J. Kaliski, Chairman, New York; Charles E. Scofield, Kings; Thomas P. Farmer, Onondaga; George S. Towne, Saratoga: Lucius H. Smith, Wayne.

The Speaker: I shall now ask the various Committees to proceed to their respective duties.

4. Unfinished Business

The Speaker: The next order of business is unfinished business arising from the proceedings of the last House of Delegates. Mr. Secretary, is there anything on your desk?

The Secretary: There is not.

The Speaker: We shall now proceed to new business.

5. Address of the President

The Speaker: The next order of business is the address of the President.

The Secretary: Owing to the fact that this report appeared in the May 1, 1931, issue of the New York State Journal of Medicine, and is in the hands of the delegates, I would ask the privilege of moving that it be referred, without reading to the proper reference committee.

Motion seconded and carried.

The Speaker: The next order of business will be the reports of the various officers and committees, including the Council, Trustees, Board of Censors, Secretary,

Treasurer, Councillors, and the standing and special committees

6 ANNUAL REPORTS

The Secretary moved that as all the reports have been printed in the May first issue of the *Journal* and also have been distributed to the delegates, they be referred to the respective reference committees as printed

Motion seconded and carried

7 TOXIN-ANTITOXIN COMMITTEE

Dr Van Etten, of the Bronx Presented the following resolution

As chairman of the Committees to make Toxin Antitoxin available to every child in the State, I recommend that this Committee be discharged—for the reason that the five year campaign period has expired and for the additional reason that this work now lies within the field of the Committee on Public Health and Medical Education

I further recommend that consideration of the subject of preventive immunizations be referred to the Committee on Public Health and Medical Education

The Speaker Referred to the proper committee (Sec 50)

8 CREDENTIALS

The Secretary Mr Speaker, before this meeting continues I would like to have you decide a question I have in my hand a telegram which reads 'I hereby authorize John H Reid to act as delegate for me Haskell" Dr Haskell's alternate Dr Reid, has never been elected by his County Society, Rensselaer County As Chairman of the Credentials Committee I naturally have to decide, but I would rather have the decision come from the Speaker (See Sec 1 and 49)

The Speaker Part of the rule is that a delegate must present credentials signed by the President and Secretary of his respective County Society, and that will be my ruling I would be very glad to have Dr Reid sit in the House of Delegates, but I am afraid I will have to deny him a vote

9 VOLSTEAD ACT IN RELATION TO PHYSICIANS

Dr Sondern of New York Presented the following resolution

WHEREAS, Congress has undertaken to fix the dose of wine, whiskey and brandy by legislative fiat, thus taking over the functions of pharmacologists and physicians and

WHEREAS, the Volstead Act compels physicians to betray the confidences of their patients by keeping a record of their diseases and ailments which records are open for inspection by the Federal Prohibition Authorities, thus violating the traditions of the medical profession medical ethics and the laws of a number of our states, and

WHEREAS, relief from these conditions has been sought in the courts and has been denied by the United States Supreme Court, and

WHEREAS the Wickersham Commission has unanimously made the recommendation "Removal of the causes of irritation and resentment on the part of the Medical Profession by (a) Doing away with the statutory fixing of the amount which may be prescribed and the number of prescriptions (b) Abolition of the requirements of specifying the ailment for which liquor is prescribed in the book to go into the public files, (c) Leaving as much as is possible to regulation rather than by fixing details by statute,'

Now, THEREFORE, BE IT RESOLVED, that the Medical Society of the State of New York hereby formally expresses its disapproval of those portions of the Volstead Act which invade the right of the State of New York to regulate the practice of medicine within its own borders and which deprives the physician of his right to the free exercise of his judgment in the practice of his profession,

AND BE IT RESOLVED that the Medical Society of the State of New York demand of Congress the repeal of said portions of the Volstead Act,

AND BE IT RESOLVED that the Medical Society of the State of New York urge each of its members to demand of his senators and congressmen the repeal of said portions of the Volstead Act

AND BE IT RESOLVED, that the Secretary of the Medical Society of the State of New York be and hereby is instructed to transmit a copy of these resolutions to the Senators from New York and to each representative in Congress of the State of New York,

AND BE IT FURTHER RESOLVED, that the Delegates of the Medical Society of the State of New York to the House of Delegates of the American Medical Association be and hereby are instructed to present a similar resolution to the House of Delegates of the American Medical Society at its next meeting for action

The Speaker Referred to Reference Committee on New Business A (Section 75)

10 MEDICAL PUBLICITY COMMITTEE

The Secretary I have a report of the special committee appointed to study the letter from Dr H A Houghton in regard to authorizing medical publicity It has examined this question from many angles, including that section of the President's Annual Report for 1930 in which the subject was partially dealt with It would respectfully report as follows

(1) That the necessity of an outlet from the State Society through some committee of editorials and lay medical articles seems advisable, and ways and means should be discussed in the House of Delegates as to the advisability of creating (a) a regular standing committee for such purposes, by proper amendments to the Constitution, which would apparently take too long to start a project or (b) creating a sub committee under the direction of the present Publication Committee with power given them and with an appropriation to engage a physician in part time or full time to formulate and publish such articles, as seem pertinent, in the newspapers and lay magazines, such as are published by the group headed by the Editor of the *A M A* Journal

Dr Houghton's letter is appended hereto for study by the reference committee to which this report may be referred, as it is the hope of your Special Committee that the subject may be referred by the Executive Committee to the House of Delegates—and there brought forth for full and free discussion, that the various Delegates may take back to their Component County Societies the results of the discussion

Respectfully submitted
JAMES N VANDER VEER *Chairman*

The Speaker Referred to Reference Committee on New Business B (Section 51)

11 PRESS RELATIONS COMMITTEE

Dr Heyd presented the following resolution

WHEREAS it is desirable to provide the press with authentic medical news and place the views of the organized profession before the public and

WHEREAS, the interests of public health education frequently demand that individual physicians broadcast over the radio on medical topics or write for lay magazines and newspapers, and

WHEREAS, it is necessary that copy of this type adhere to the highest standards and that the self-advertisement of publicity seekers within the profession and of quacks faddists and irregular practitioners without it be curtailed as far as possible,

THEREFORE BE IT RESOLVED, that the House of Delegates of the Medical Society of the State of New York

shall establish a Press Relations Committee to take these matters in charge and formulate rules and regulations to govern them, these rules to be submitted for approval to the House of Delegates or, ad interim to the Council or its Executive Committee and

BE IT FURTHER RESOLVED, that this Press Relations Committee shall embrace the entire state in its workings and shall be composed of two or more members from each District Branch of the Medical Society of the State of New York.

The Speaker: Referred to Reference Committee on New Business B. (Section 51.)

12. RETIREMENT FUND FOR PHYSICIANS

Dr. Patterson of New York: Presented the following resolution:

WHEREAS, no provision at present exists in the Medical Society of the State of New York for retirement stipends for physicians in the State of New York; and

WHEREAS, in certain other professions such provision has been successfully made; and

WHEREAS, it would seem advisable that the delegates here assembled should take appropriate action to this end,

BE IT THEREFORE RESOLVED, that the Medical Society of the State of New York through its delegates here assembled authorize the appointment of a Committee of not fewer than five to study ways and means of establishing a Retirement Fund for the benefit of the members of the Medical Society of the State of New York; and

BE IT FURTHER RESOLVED, that said Committee be prepared to make a report at the next regular meeting of this body.

The Speaker: Referred to Reference Committee on New Business C. (Section 99.)

13. CERTIFICATION OF SPECIALISTS

Dr. Trick of Erie: Presented the following resolution:

The Committee on the Certification of Specialists was appointed to carry out the recommendation adopted by this House in June of 1929.

The solution of this problem is a very difficult one and has been approached with the greatest caution.

At a meeting held in Albany in January, 1931, consisting of representatives from the Department of Education, Board of Medical Examiners, the Deans of the Medical Schools, the New York Academy of Medicine, and the Medical Society of the State of New York, the following resolution was adopted:

"That the Department of Education in conference with the Medical Society of the State of New York proceed to formulate plans for the preliminary education of specialists."

Shortly after the meeting a resolution to be presented to the House of Delegates of the American Medical Association was published in the bulletin of the American Medical Association. The principal point of the said resolution reads as follows:

"Resolved that the Speaker of the House of Delegates shall appoint by and with the advice of the President and the Board of Trustees a Commission on qualifications for specialists composed of nine members; that the said Commission shall undertake to define the qualifications that should be required of the individual physician who desires to limit his practice to any special field and to be known as a specialist, and that in arriving at such definition the Commission on Qualifications for Specialists should give consideration to questions of education, training, and clinical experience."

That this Committee be enlarged as may seem necessary or desirable; that an appropriation for the expenses of this Committee be included in the budget; that this Committee continue to carry out the intent of the resolution adopted in January in conformity with the work of the Commission of the American Medical Association, if it should be appointed.

We would recommend that a special committee on the certification of specialists be created.

The Speaker: Referred to Reference Committee on New Business B. (Section 52.)

14. MINIMUM WAGE FOR PHYSICIANS

The following resolution introduced by Dr. Julius Ferber of New York was read by Dr. Messing of New York.

WHEREAS, the Medical Society of the County of New York after considerable study of the exploitation of physicians by municipal and state departments as well as by lay corporations saw fit to endorse the movement, to demand the five dollar minimum wage per hour for physicians employed on part time, and

WHEREAS, because of the economic distress now prevailing generally forces many physicians to accept a part time position at lesser rate,

THEREFORE, BE IT RESOLVED, that the House of Delegates of the Medical Society of the State of New York record its opinion in favor of a minimum wage of five dollars per hour for physicians working upon a part time basis, but

BE IT FURTHER RESOLVED, that a five dollar per hour minimum charge shall not be so construed as a demand for an increase in salary for medical men employed in regular positions under the Civil Service Laws, nor for physicians holding regular departmental positions which after a term of service entitle the holder thereof to a pension.

The Speaker: Referred to Reference Committee on New Business A. (Section 73.)

15. RECOGNITION OF PHYSICIANS IN FOREIGN COUNTRIES

The following resolution was presented by Dr. Kopetzky of New York.

WHEREAS, many foreign countries do not recognize medical diplomas granted in the United States and do not permit American doctors, graduates of American Medical Colleges to practice, and

THEREFORE, BE IT RESOLVED, that the House of Delegates of the Medical Society of the State of New York instruct its delegates to the American Medical Association to bring this situation to the attention of the House of Delegates of the American Medical Association for the purpose and to the end that this unjustified disqualification of graduates of medical schools of the United States be discontinued and that American physicians desiring to practice in foreign countries be granted the same rights and privileges as their nationals have in the United States.

The Speaker: Referred to Reference Committee on New Business C. (Section 100.)

16. PRIVILEGE OF THE ASSEMBLY ROOM

The presence in the House of a gentleman who had drawn up and supported a bill adverse to the interests of the medical profession and the welfare of the public, having been brought to the attention of the speaker, the speaker called for a vote on the question of whether the privilege of remaining in the room should be accorded to him. A vote was thereupon taken and it was decided unanimously in the negative. (See Section 123.)

17. RECIPROCITY IN RECOGNITION OF AMERICAN PHYSICIANS

Dr. Kopetzky, of New York: Presented the following resolution:

WHEREAS, many foreign countries do not recognize graduates of American Medical Schools, nor permit them to practice medicine,

THEREFORE, BE IT RESOLVED, by the House of Delegates of the Medical Society of the State of New York, that this situation be brought to the attention of the Regents of the State of New York for the purpose and to the end that some degree of reciprocity be established and that the existing discrimination against American doctors be stopped

The Speaker Referred to Reference Committee on New Business C (Section 100)

18 PAY CLINICS

Dr Subkis, of New York Presented the following resolution

WHEREAS, there is an increasing tendency on the part of Dispensaries and the Out Patient Departments of Hospitals and Medical Centers to conduct Pay Clinics, and

WHEREAS these Clinics diagnose and treat patients outside of the Provision of the New York State Dispensary Law,

THEREFORE BE IT RESOLVED, that the Committee on Legislation initiate legislation at the next session of the New York State Legislature to the effect of preventing Pay Clinics from being operated under dispensary laws

The Speaker Referred to Reference Committee on New Business C (Section 102)

19 MEDICAL PRACTICE BY CORPORATIONS

Dr Herber of New York Presented the following resolution

WHEREAS, the Judicial Council of the American Medical Association in its report as published in the American Medical Association Bulletin as of April 1931, regards the decision of Judge Samuel R Blake of the Superior Court of the State of California, in and for the County of Los Angeles, in a case of Granville McGowen, Plaintiff, vs Medical Service Corporation, a corporation, defendant as being of the greatest importance at a time when commercial organizations established for profit are engaging in the sale of medical service in a manner that may be detrimental to the public good and opposed to the progress of scientific medicine,

THEREFORE, BE IT RESOLVED, that the House of Delegates of the Medical Society of the State of New York instruct its counsel to bring suit against one of the medical agencies engaging as a corporation, in the practice of medicine, that this suit be pressed for a decision upon two fundamental questions (1) Can a corporation practice medicine? (2) Is the manner and method of the defendant corporation such as to constitute the practice of medicine?

The Speaker Referred to Reference Committee on New Business A (Section 74)

20 STATE COMMITTEE ON PUBLIC RELATIONS

Dr Donnelly Resolutions adopted by the Medical Society of the County of Erie May 18, 1931

WHEREAS the Report of the Chairman of the Committee on Public Relations of the Medical Society of the State of New York, published in the State Journal May 1, 1931, approved the development of State aided county hospitals, and

WHEREAS, State aided institutions for medical care bring such hospitals under the dominance of the State Department of Health and promote the advancement of State medicine, and

WHEREAS the Chairman of said Committee recommends in his report that county medical societies establish intimate contacts with the leaders of every volunteer health organization in the county and

WHEREAS, each county medical society can best determine for itself the needs of its own locality and the worth of local volunteer health organizations and foundations and

WHEREAS, the Chairman of said Committee has had intimate contact with the State Charities Aid Association, as shown by a previous report he made, and in his present report seeks to impress organized medicine with the viewpoints of such volunteer organizations as the State Charities Aid Association whose record and activities are contrary to the economic welfare of the medical profession, and

WHEREAS, in 1930 the Trustees approved an appropriation of $2,500, to promote the work of the Committee on Public Relations,

THEREFORE BE IT RESOLVED, that the Medical Society of the County of Erie at a stated meeting May 18, 1931, records its disapproval of the report of the State Committee on Public Relations on the ground that it seeks to advance State medicine and to promote the encroachments of lay health organizations and foundations in the field of organized medicine

RESOLVED, that the Committee on Public Relations requires an entire new personnel which shall not be chosen from physicians who are associated with the State Charities Aid Association or its affiliated bodies

RESOLVED, that the Medical Society of the County of Erie requests the Executive Committee of the State Society in preparing the budget for the coming year to discontinue the annual appropriation of the funds of the Society for the work of the Committee on Public Relations

RESOLVED, that the Medical Society of the County of Erie requests that the amount of money appropriated in 1930 to the Committee on Public Relations be added to the appropriation made for the work of a committee more useful to the medical profession and recommends in particular the Committee on Legislation

The Speaker Referred to the Reference Committee on the Report of the Committee on Public Relations (Section 21) (No action taken)

21 PRELIMINARY PREPARATION OF FUTURE RESOLUTIONS

Dr James Smith of New York Presented the following resolution

WHEREAS the House of Delegates of the Medical Society of the State of New York transacts business by means of resolutions brought before it by the delegates, and

WHEREAS some of these resolutions are of the greatest importance to the medical profession and therefore require study and deliberation on the part of the profession and of the delegates who are to vote on these resolutions,

THEREFORE BE IT RESOLVED, that it is the sense of the House of Delegates of the Medical Society of the State of New York that most resolutions to be brought before this House should be in the hands of the Secretary not later than twenty days before the date of the Annual Meeting of the House of Delegates, and that such resolutions be printed in the May 15th issue of the NEW YORK STATE JOURNAL OF MEDICINE

The Speaker Referred to Reference Committee on New Business C (Section 56)

22 COUNTY DEPARTMENTS OF HEALTH

Dr Leone of Erie Presented the following resolution

RESOLVED, that the House of Delegates declare itself opposed to any legislative bill to make compulsory the establishment of county boards of health or county health units

The Speaker Referred to Reference Committee on New Business C (Section 70)

23 OPTOMETRY LAW

Dr Leone of Erie Presented the following

RESOLVED that the Secretary of the State Medical Society obtain an opinion from the Legal Counsel for

the Society on the constitutionality of the amendment to the optometry law enacted in 1931.

The Speaker: Referred to Reference Committee on New Business C. (Section 71.)

24. Birth Control

Dr. Donnelly of Erie: Presented the following:

Resolved, that the House of Delegates declare its opposition to the introduction or enactment of any legislative bill that shall change the policy of the State of New York in the matter of birth control.

The Speaker: Referred to Reference Committee on New Business B. (Section 101.)

25. Medical Advisory Board to Labor Department

Dr. Donnelly of Erie County: Presented the following resolution:

Resolved, that the House of Delegates declare itself opposed to any legislative bill for the creation of a medical advisory board in the Department of Labor.

The Speaker: Referred to Reference Committee on New Business B. (Sections 54 and 58.)

26. Free Choice of Physician

Dr. Donnelly of Erie County: Presented the following resolution:

Resolved that the Medical Society of the State of New York, through its Committee on Legislation, urges the passage of an amendment to the Compensation Act empowering the injured employee to choose his own physician.

The Speaker: Referred to Reference Committee on New Business B. (Sections 53-57.)

27. Cultists' Legislative Bills

Dr. Donnelly of Erie: Presented the following resolution:

Resolved, that the Medical Society of the County of Erie pledges its whole-hearted support to assist the State Committee on Legislation in defeating cultists' bills by personal interviews with legislators from Erie County prior to the next election.

The Speaker: That will be referred to Reference Committee on New Business C. (Section 103.)

28. Sewage Disposal Plants

Dr. Donnelly of Erie: Presented the following resolution:

Resolved, that the House of Delegates declare itself opposed to any amendment to the law that shall centralize authority in the State Department of Health concerning the location and erection of sewage disposal plants for municipalities.

The Speaker: Referred to Reference Committee on New Business A. (Section 72.)

29. Special Committee on Free Choice of Physicians

Dr. Lyons of Erie: Presented the following resolution:

Whereas, at the 1930 session of the House of Delegates a motion was carried that a special committee be appointed composed of members who have declared themselves in favor of free choice of physicians in compensation cases for the purpose of unifying all interests, and

Whereas, an amendment to said motion was made and carried that it be with authority to make necessary provision for counsel, and

Whereas, the Medical Society of the County of Erie has received no information from any authorized source that said *Special Committee* created by vote of the House of Delegates had been appointed as required by Section 13 of Chapter X of the By-Laws of the State Society,

Therefore Be It Resolved, that a *Special Committee* be appointed composed of members who have declared themselves in favor of free choice of physicians in compensation cases with power to act in the several counties of the State for the purpose of unifying all interests in support of an amendment to the Workmen's Compensation Law which shall permit injured employees the privilege of selecting their physician.

Resolved, that each county medical society in the State shall be invited to recommend a volunteer representative from its members to be appointed to said committee and such volunteer member shall become Chairman of the County sub-committee should the County Medical Society see fit to increase the personnel of its sub-committee.

The Speaker: Referred to Reference Committee on New Business B. (Section 55.)

30. Restraint on County Societies

Dr. Garen of Cattaraugus: Presented the following resolution:

Resolved, that it is the sentiment of the House of Delegates of the Medical Society of the State of New York that its members or committees shall not be permitted to engage in the promotion of a medical project, state or national, requiring legislation until such project and the proposed legislation thereon shall have been submitted for consideration to the House of Delegates and approved by a two-thirds vote.

30A. Acceptance of Subsidies

Dr. Garen also introduced the following resolution:

Resolved, that no member of this Society or committee of this Society shall be permitted to accept funds, grants, donations or any form of financial assistance either directly or indirectly from personal or lay sources for the promotion of medical projects requiring legislation without permission from the House of Delegates by a two-thirds vote.

The Speaker: Both these resolutions referred to Reference Committee on New Business A. (Sections 68 and 69.)

Are there any other resolutions under the head of new business to come before the House of Delegates?

Are there any committees ready to report?

The Reference Committee on the Report of the President I believe is ready to report.

31. Report of the President

Dr. Warren: The Committee wishes to express the pleasure it has had in studying our President's report. (Journal May 1, 1931, page 517). The report speaks first of the work done; a tremendous work that could only have been accomplished by one of unselfish devotion to the cause. The report shows that our President was approaching his duties through the idealisms of medicine and attempting constantly to understand through its work the present difficulties of our profession with the idea of formulating principles, not policies or politics, to guide us correctly in their attempted solutions.

Your committee wishes to emphasize that the report commonly deals in principles and as such shows the understanding of our leader in first settling the principle upon which proper action must be built if proper results are to be gotten. His unusual ability in analyzing the factors causing some of our present difficulties and his clear conception as to their solution have brought much commendation, not only from our own state but from medical organizations in a great number of states in which he has participated in programs speaking on the relationships of medicine.

Your committee furthermore requests that every member of this House before passing his vote on recommendations should ask himself what is best in this instance for medicine. The time has come when the

"I", the personal angle and the local factional attitude must be submerged for the good of the whole. It must be further remembered that although technically the responsibility of this body ends in the Medical Society of the State of New York still the actions of this Society are discussed and copied by many others and hence our responsibility to our action does not end here. To lead others however, we must approach our problems with a judicious mind—we must have facts—and to gather facts we must work.

Your committee speaks as it has of the work and spirit of our President in which we are sure that every member of this House agrees, and it now wishes to pass to the recommendations under the President's report.

Mr. Speaker, I ask for your ruling as to whether the report will be read in toto before the recommendations are passed on, or whether it will be acted on separately?

The Speaker: I think we will act on each recommendation separately and then on the report as a whole.

Dr. Warren: Your committee has taken up each of the divisions as mentioned in the President's Report and in its report will follow that detail.

The report, deals first with the President's activities—which has been covered in general by your committee in its introductory remarks. (Jour. May 1. p. 517.)

The report refers to some of medicine's difficulties of the past,—but, through common sense and statesmanship—applied to her problems—she has emerged successfully and progressed favorably.

It calls for the application of the same principles of action to meet our present day problems.

And your committee approves of this section of the report.

I move the adoption of this recommendation.

Motion seconded and carried.

32. A Journal Reporter in Every County Society

Dr. Warren: The President refers to the constant effort which has been made in the past to make our Journal the real mouthpiece of our Society. (Jour. May 1, p. 518). This effort must be continued. To constantly improve it, means more interest must be given to it. To this end the committee recommends:

(1) That the House of Delegates instruct each County Medical Society to appoint or elect a reporter whose duty shall be to report to the Journal the results of meetings and activities of his Society. This reporter may or may not be the secretary of the County Society.

I move the adoption of this recommendation.

The Speaker: I ask the Committee to revise that portion of their report in which they say "That the House of Delegates instruct the County Societies." The House of Delegates cannot instruct the County Societies, they can advise them. The County Societies have a government of their own.

Dr. Warren: We will accept that.

Dr. Leone of Erie: I have before me here the comment in the Report of the President wherein he states the Journal is designed and maintained in order to affect all the activities of the State Societies and to give a résumé of the trend of medical public opinion.

Now, to me, as nearly as I can understand it, that is practically laying down a new principle as far as it concerns this State Journal. In that short paragraph, very concise, but very important, our President has entirely ignored the activities of the various component County Societies. It seems to me that that is not only a new principle that he has just announced, but it also is a violation of that part of our By-Laws wherein it is stated that the Journal shall publish anything that comes from the County Societies. Now, this past year I have had occasion to peruse it very carefully and I find where a great number of the County Societies have been entirely ignored in having access to the columns of the Journal; particularly is it so concerning the activities that have been carried on by the County of Erie. We have repeatedly sent articles, perhaps sometimes not to the liking of our brethren, but by an unforeseen plan our whole scheme of publication and articles has been entirely ignored so far. We have not heard anything from them. I do not see the reason for it. It seems to me according to the By-Laws and Constitution of this Society the component County Societies are part of it, and I cannot understand why they should be so ignored. It seems to me they ought to be included in the great scheme of this Federation of County Societies and we should have some consideration in the use of the Journal.

Dr. Wightman stated that such news as came to the State Journal and was acceptable to the members had been freely published and that there had been no discrimination against any County Society; that the Journal published what was sent them. He also stated that the Journal was not partisan in any form or shape, and that it would welcome anything that is new.

The motion for the adoption of this portion of the report was seconded and carried.

33. Bulletins of County Societies

Dr. Warren: The Committee further recommends that the sending of bulletins to the officers of the County Societies be approved when in the judgment of any committee it is necessary, but only after approval of the House of Delegates or the Council or the Executive Committee. (Jour. May 1, p. 518.)

I move the adoption of this recommendation.

Motion was seconded and carried.

34. Popular Medical Publicity

Dr. Warren: Again it recommends that the popular medical publicity now handled by the State Department of Health be approved and that the Department be requested to continue. (Jour. May 1, p. 518.)

I move the adoption of this recommendation.

Motion seconded and carried.

35. Graduate Education

Dr. Warren: The report next deals with graduate education, and advises that the subject of graduate education be given most careful consideration with the object of expanding it to the fullest practical limit. (Jour. May 1, p. 518.) Your committee commends the past efforts of this committee on graduate education which has formulated a program yielding invaluable benefit to the members of our society and fully recognizes that graduate education is one of the strongest means we have in getting our profession out of some of its difficulties and recommends that:

The Committee on graduate education should particularly sponsor those courses having a practical clinical bearing applicable to the work of the man in daily practice.

I move the adoption of this recommendation.

Motion seconded and carried.

Dr. Warren: It further recommends that the Committee on graduate education study the causes of poor attendance to graduate lectures to gain facts as to how this work can be more interestedly and successfully carried on.

It further recommends that the committee on graduate education hold conferences with the representatives of the medical schools of the State of New York with the idea of working out some possible program in which these schools will wholeheartedly cooperate.

I move the adoption of these recommendations.

Motion seconded and carried.

36. Economics Committee

Dr. Warren: Your committee recommends that the report of the Economics Committee bearing on the agree-

The Speaker: Permit me to inform you you are now voting on Dr. Garen's amendment.

The motion eliminating the words "Council or Executive Committee" was carried.

Dr. Rooney: I move to amend, that the date in this resolution be fixed as January 1, 1932; secondly, that prior to any action by any of the bodies of this society, a complete copy of the report of the Committee studying the recommendations of the so-called Health Commission shall be submitted to each component County Society in this state.

Motion seconded.

Dr. Ludlum offered an additional amendment that a referendum vote of the entire membership of the State Society be taken.

Dr. Rooney stated that he could not accept the amendment to his amendment inasmuch as the expenditure would be too great.

Dr. Bonnar withdrew his motion for a referendum in view of Dr. Rooney's explanation of the expense involved.

Dr. Winslow: I would like to ask Dr. Warren if he would be willing to accept Dr. Rooney's amendment?

Dr. Warren: If the other members of this Committee will so signify we will accept that amendment.

The amendment was accepted by the Committee.

The Speaker: The recommendation is that the House of Delegates instruct the Committee on Public Health and the Committee on Public Relations to study this report and make recommendations on all or any of the subjects presented and that such Committees report their recommendations to the House of Delegates not later than January 1, 1932.

The recommendation was carried.

Dr. Ludlum: As a point of information, how are they going to report to the House of Delegates?

The Speaker: That will be left to the Secretary.

The Secretary: I wish to rise on a point of information. I would like to know whether the House wants me to call a special meeting of the House of Delegates.

Dr. Ludlum: If I may be allowed to speak further, I move the report of the House of Delegates be in the form of a referendum vote.

Motion seconded.

Dr. Rooney: I move to amend Dr. Ludlum's motion in that this report will in the natural course of events be submitted to the Council, that if the Council determines that a special meeting of the House of Delegates is necessary, they shall call one or submit the question by referendum.

The Speaker: The amendment to the amendment of the resolution is that when this report is submitted, if the Council sees fit they may call a special meeting of the House of Delegates or take a referendum vote of the House of Delegates.

The amendment to the amendment was carried.

The Speaker: Now the amended resolution, or the amendment to the resolution which was acceptable to the committee is before you.

The recommendation is that the House of Delegates instruct the Committee on Public Health and the Committee on Public Relations to study the Report of the Governor's Commission, and to make recommendations upon all or any of the subjects presented and that the said committee report their recommendations to the House of Delegates not later than January 1, 1932, and that the Council in its wisdom refer this to the House of Delegates either by a special meeting or by referendum of the House.

Dr. Rooney: I regret again to take up the time of this House, but I feel there was one item the Speaker omitted. Prior to any action by the House of Delegates a copy of the report shall be submitted to each component County Society.

The Speaker: You are correct.

The recommendation was thereupon carried.

Dr. Warren: By way of explanation, our first recommendations only had to deal with the study of the volume that was printed to see whether we believed it merits some thought or action or some adjustment on the twelve subjects of the Commission's study.

The second recommendation is: Your Committee further recommends that the House of Delegates instruct the Committee on Public Health and the Committee on Legislation to study the report of the Special Health Commission and recommend such legislation as it deems necessary to carry out the recommendations of our Public Health Committee and our Committee on Public Relations, and to report to the House of Delegates or the Council or the Executive Committee not later than December 1st, 1931.

Dr. Rooney: I move that this recommendation be laid on the table. It is unnecessary. The Committee on Legislation is the official body of the Society and all legislation must be in accordance with the Constitution and By-Laws submitted through it and it will have the final say in the matter.

The Speaker: A motion is made that this part of the report be laid on the table.

Motion seconded and carried.

42. The Public Welfare Law

Dr. Warren: The report next speaks of the Public Welfare Law and its effective workings in certain counties of the state. (Jour., May 1, p. 521). It states that very few counties are taking advantage of this law and believes that it deserves wider usage and should be better understood. Your committee, therefore recommends; that the House of Delegates instruct the President of each county society as to the uses, benefits and the administration of the Public Welfare Law.

I move the adoption of the Report.

The Secretary: A point of information as to the portion "That the House of Delegates instruct the President of each county society as to the uses, benefits and the administration of the Public Welfare Law." How shall this be done?

Dr. Rooney: I would like to move to amend that that portion of the Public Welfare Law that relates to the Medical Profession be abstracted by the secretary of the Society and be published in the Journal.

Motion seconded.

The Speaker: You are now voting on the amendment that that portion of the Public Welfare Law which affects physicians be abstracted from the Public Welfare Law and sent by the Secretary's office to the various presidents of the County Societies.

Dr. Rooney: Since making my motion I have received information that copies of the Welfare Law have been sent to the Council and the Executice Committee, and that a copy can be procured free of charge from the Legislature. I therefore take the privilege of withdrawing my motion.

The Speaker: All in favor of that portion of the Reference Committee's report on the President's report, will signify by saying "aye." Contrary minded "no." The chair is in doubt.

All in favor of that portion of the report, or the recommendation of that portion of the report will please signify by standing.

Those opposed please signify by standing.

A rising vote was taken and the motion lost.

43. The Committee on Activities

We all recognize that frequent meetings and conferences of individuals interested in the same project yield much, but we also recognize that there must be no duplication for several reasons; expense, confusion in effort, and misunderstanding. (Jour., May 1, p. 521). Hence we believe that it would be best at present to use the machinery we now have to get the chairmen of com-

mittees together for conference This can be accomplished moderately well without added expense or change in By-Laws Hence, the committee suggests, that at those times when the council meets, the chairman of the Standing Committees can be gotten together for discussion of such problems as have a common interest

I move the adoption of this recommendation

Motion seconded and carried

44 THE TRUSTEES

Dr Warren The President recognizes that the Trustees really are the custodians of the Society and that that their function is to guard the trusts and properties of the society (Jour, May 1, p 521) They are men greatly interested in our organization They have served long and faithfully That they should always be informed of the activities of each chairman of the various standing and special committees seems to need no argument.

We, therefore, recommend that the monthly reports submitted by the chairmen of the various standing and special committees be duplicated and sent to each Trustee

I move the adoption of this recommendation

Motion seconded and carried

45 ORGANIZATION

Dr Warren The report of the President calls for a united front, particularly when dealing with the public (Jour, May 1, p 522) It recognizes debate as a proper means to attain a reasonable viewpoint It further recognizes that minority opinion is always helpful to keep majority rule from being too dictatorial, too dogmatic In these critical times your committee feels that divided opinions and multiple policies offer a great target for every volunteer or lay organization or individual who wishes to attack us We recognize that these thrusts are definitely harmful to us and to our profession in that they tend to break down the morale of our profession, and lessen public faith in our works After proper deliberation of our problems we should unitedly say—*This is the decision of medicine, of thinking medicine*—of organized medicine and not be rent by the prattle of disorganizing medicine With these facts in mind your committee recommends, that the House of Delegates approve in the principle of majority rule as determined after due deliberation, and expects each of its members to be loyal to the will of the majority when expressing his views on medical matters to the public

I move the adoption of this recommendation

Motion seconded and carried

46 MEDICAL CARE AND MEDICAL SERVICE

Dr Warren Your Committee well recognizes that this part of the President's report is a very important one (Jour, May 1, p 522) The people of the state must have both medical care and medical service available At present too few facts are known as to what is necessary to accomplish these ends and how many people will need some special provision for their care, and your committee recommends that a special committee of three be appointed the Chairman of the Public Health Committee, the Chairman of the Public Relations Committee and the Chairman of the Committee on Medical Economics, with the power to increase the personnel as necessary—to study the three questions on medical care and medical service as follows

1 What is proper and adequate medical service?

2 How can it be provided for all the people?

3 How can such service be adequately paid for? and that the committee report to the House of Delegates, the Council or the Executive Committee—either in a preliminary report—or serially or in toto as speedily as possible

I move the adoption of this recommendation

Seconded

Dr Rooney I move that this also lie on the table for the following reason

The Committee on Medical Care of the American Medical Association is just about completing their five year study on medical care and it is going to cover the whole United States of America

It seems to me that this will be an expensive duplication of effort by making another constituted group to carry on a study of this sort A report of that sort will probably be ready within a year, perhaps less, and as a member of this House, a member of the Board of Trustees, and as a member of your Committee on Medical Care, I move that this resolution lie on the table

Motion seconded and carried

47 APPRAISALS

Dr Warren The President's report recognizes that medical problems are not limited to New York State (Jour, May 1, p 523) They are nationwide They are worldwide They need study and more study—and every medical organization should be working alone some phase to help solve them Although our National body has done much along this line your Committee believes that the parent body should be very active in gathering facts through which we can appraise our own resources—to the end that such facts can be utilized in *adjusting our standards and improving our services* To this end the committee recommends that a resolution be presented to the American Medical Association at its 1931 meeting requesting that a national commission be appointed to make a study of the relationships of medicine to the public, to medical care, to medical service, and to all the interests of public health administration and practice for the purpose of developing constructive thought regarding them under the leadership of medicine and that this Commission be asked to make a *preliminary report with such recommendations as it may* have at the 1932 meeting of the American Medical Association with the object of bringing the influence of the organized medical profession to bear on every medical problem

I move the adoption of this recommendation

Motion seconded

Dr Rooney I move that this resolution lie on the table because the American Medical Association or its Council on Public Accounting and Public Relations has carried on this work constantly for a whole year and has for many years

Motion was seconded

The Speaker The motion is made and seconded that this portion of the report be laid on the table

Motion was carried

48 FUTURE POSITION OF MEDICINE

Dr Warren To one with a vision there are no difficulties They only serve to make one the better understand the problems Difficulties are capitalized by constructive action Reasonable men must finally meet on common ground and accept reasonable adjustments And so the writer of our report sees a very bright future through the leadership of medical statesmen who always arise in time of approaching storm and who through ability, devotion and principle get us through to greater usefulness So your committee heartily approves this spirit of the President who has the past year buried the "I" and lived for the issues of medicine (Jour May 1, p 523)

Motion seconded

The Speaker The motion is made that the report of the Committee be adopted as a whole of course with the various amendments that have been passed by the House

Motion seconded and carried

49. Credentials

The Speaker: I wish to announce that Dr. John H. Reid has produced sufficient credentials from his County Society and he is duly seated as a delegate from Rensselaer County. (See Secs. 1 and 8).

The Vice Speaker here took the chair.

The Vice Speaker: Are there any other Committees ready to report?

50. Report of Reference Committee on Toxin Anti-toxin

Dr. Thomson: Your Reference Committee appointed to consider the Report of the *Committee to Form a Plan to Make Toxin Anti-toxin Available to Every Child in the State* found no recommendation in the original report. (Jour., May 1, p. 564). While it was in session a supplemental report was received from the chairman of the committee reading as follows (Sec. 7): "As chairman of the Committee to make Toxin Anti-toxin available to every child in the State. I recommend that this Committee be discharged—for the reason that the five year compaign period has expired and for the additional reason that this work now lies within the field of the Committee on Public Health and Medical Education.

"I further recommend that consideration of the subject of preventive immunizations be referred to the Committee on Public Health and Medical Education.

Nathan B. Van Etten, *Chairman.*"

Your Reference Committee appreciates the point of view expressed in the Report—namely that the medical profession has not assumed the degree of leadership in the diphtheria elimination campaign which might be considered adequate.

On the other hand, your Reference Committee understands that in certain communities a great deal of immunization work has been done through the activities of the individual physicians and Medical Societies. It seems obvious to your Reference Committee that the Committee is correct in its comment that each County Society should assume as an important part of its public health program the continuous stimulation of its members to take a progressive attitude toward the elimination of a preventable disease.

Your Reference Committee further believes that the best way for the Medical Society of the State of New York to promote the prevention of diphtheria would be through the Committee on Public Health and Medical Education, and therefore concurs in the thoughts expressed in the supplemental report, and recommends that the special Committee be discharged with thanks, that the problem of diphtheria prevention be referred to the Committee on Public Health and Medical Education with instruction to evaluate the work done in the State through the County Societies, and present a suggestive plan, the principles of which could be adopted by each County Medical Society.

I move the adoption of the Report.

Motion seconded and carried.

51. Press Relations

Dr. Kopetzky: Your Reference Committee on New Business B has had presented to it two resolutions bearing upon the question of establishing a statewide press relations committee, the resolution introduced by New York County, and the one presented by Messrs. Vander Veer, Goodrich, and Trick (Sections 10 and 11). The resolution submitted by the latter three gentlemen works out the details of a press relations committee and bureau. The one submitted by New York County is a fundamental resolution and creates such a committee, tells its composition, and permits the committee to work its own details. We therefore recommend the adoption of the resolution submitted by the delegate from New York County. (Resolution A) And further recommend that the details contained in communication B be referred to this newly created committee for its study and recommendation.

I move the adoption of this recommendation.

Motion seconded and carried.

52. Certification of Specialists

Dr. Kopetzky: A resolution was introduced by Drs. Charles Gordon Heyd and Henry R. Trick which recommended that a special committee be created by this House of Delegates on "The Certification of Specialists." (Sec. 13). The committee feels that the time is approaching when the public will be entitled to know that a given physician has achieved the minimum requirements deemed necessary to hold himself out as a specialist; and we believe that the establishment of such a committee will be a step in the right direction. This Committee, after studying the question, and reporting upon it will afford this House of Delegates an ample opportunity for the full discussion of the details of the question later. In making this report, we again warn the House of Delegates that we believe it inadvisable to recommend anything that will bring the Medical Practice Act into question in the Legislature.

I move the adoption of this recommendation.

Motion seconded and carried.

53. Free Choice of Physicians

Dr. Kopetzky: We have received a resolution from Erie County "Resolved that the Medical Society of the State of New York through its Committee on Legislation urges the passage of an amendment to the compensation Acts empowering the injured employee to choose his own physician." (Secs. 26 and 57).

The committee approves this resolution, but does not think it necessary that it be passed by this House since this is the position of the House of Delegates of this Society. (Sec. 57).

54. Medical Advisory Board to Department of Labor

Erie County presented the resolution "That the House of Delegates declare itself opposed to any legislative bill for the creation of a Medical advisory board in the Department of Labor." (Secs. 25 and 58).

The Committee feels that a resolution of this kind is unwise and impolitic, because it ties the hands of the House of Delegates on a negative phase of a question. It is conceivable that an advisory committee might be devised by some legislator which would meet the approval of even Erie County, and if the resolution presented would be passed a county would have tied its own hands. We disapprove the resolution.

55. Special Committee on Free Choice of Physicians

The resolution introduced by Dr. Leone of Erie County (Sec. 29), that a special committee be appointed, composed of members who have declared themselves in favor of free choice of physicians in compensation cases with power to act in the several counties of the State for the purpose of unifying all interests in support of an amendment to the Workmen's Compensation Law, which shall permit the injured employee the privilege of selecting their physician, and to have added to it a volunteer representative who shall become the county sub-committee's chairman, is disapproved by this committee, because it sets up machinery on a single principle which is cumbersome, in conflict with existing machinery of the State Society, for example, the Legislative Committee, the Public Relations Committee, etc.

This Committee has already approved a resolution embodying the question of free choice and the State Society is on record favoring free choice of physicians by injured employees. It is therefore unnecessary to have a committee for propaganda purposes since the House

of Delegates is a unit and has acted as a unit on this question for a long time

56 PRELIMINARY PREPARATION OF FUTURE RESOLUTIONS

Dr Kopetzky The committee approves the resolution introduced by Dr Smith of New York County (Sec 21), and recommends that Resolutions to be acted upon by the House of Delegates shall be sent to the secretary of the Medical Society of the State of New York in ample time for publication in the May 15th issue of the NEW YORK STATE JOURNAL OF MEDICINE. This resolution, however should not be interpreted to preclude the introduction of resolutions from the floor of the House at the time of meeting of the House of Delegates, where the introduction of said resolution would have been impossible as above outlined

In other words, while we approve the preconvention publication of as many resolutions as possible so that the intelligence of the House of Delegates shall manifest itself in the action taken we would not set up a machinery which would preclude any man from the exercise of his right as a delegate of his county from introducing a resolution at the House of Delegates which could not have been sent because of some reason inherent in itself before the May 15th issue of the State Journal of Medicine

I move the adoption of this resolution

The Secretary The resolution requires the publication on May 15th, and that is rather impractical We may have a meeting of this House on April 20th What would become of the resolution then? We have had meetings of the House of Delegates in April

Dr Wightman Inasmuch as the desire of this recommendation is to inform every member of the State Society in ample time to consider a resolution will Dr Kopetzky accept a thirty day period previous to the meeting as ample time?

Dr Kopetzky We will

Dr Rooney I move to amend that this resolution shall not preclude the possibility of introduction of any resolution that has not hitherto been published at the meeting of the House of Delegates provided that twenty-five per cent of the members of that House approve of the introduction of the resolution

Motion seconded

The Vice Speaker Dr Rooney has stated that he moves to amend this resolution that this shall not be construed to preclude the introduction of resolutions of a delegate before this House provided twenty five per cent of the delegates have consented thereto All those in favor will signify by saying aye —opposed no

Amendment lost

Dr Kopetzky I move that the resolution with amendment be accepted by the Committee

Motion seconded and carried

Dr Kopetzky I now move the report of the Reference Committee on New Business B be adopted as a whole

The Vice Speaker It is customary to vote on each question individually

I would like to take them one at a time

Dr Kopetzky The first resolution is that this House of Delegates go on record again as favoring the free choice of physicians in compensation cases The committee feels that is not necessary because we are already on record but I think the House should take action on the recommendation of the committee The committee recommends that this be not adopted

Dr Bedell I do not believe that is the proper interpretation of the committee's action I would ask you sir, to have the Chairman of the Reference Committee make that statement so that we understand it is not that we disapprove we just do not wish to go on record again It is an unnecessary action I think that should be stated by the chairman

Dr Kopetzky Dr Bedell has exactly stressed the point I would be the last one to speak against the free choice of physicians I have fought for it for years I am in favor of it We feel we are on record and we weaken our position by restating it It is unnecessary to pass the same resolution again I do not know what to do with the resolution except the committee does not feel is should be passed

I move the recommendation of the Reference Committee be adopted

The Vice Speaker The motion is before the House that the Report of Reference Committee on new Business B be approved

Dr Leone, of Erie Do I understand you are including them all in one motion?

The Vice Speaker All in one motion

Dr Leone I move they be separated seconded and carried

The Vice Speaker Read the first resolution Dr Kopetzky

57 FREE CHOICE OF PHYSICIAN

Dr Kopetzky Resolved that the Medical Society of the State of New York through its Committee on Legislation urges the passage of an amendment to the Compensation Act empowering the injured employee to choose his own physician (Secs 26 and 53)

We take the stand of the State Society that it is unnecessary to pass it again

The Vice Speaker The question is the affirmation of the recommendation of the Committee on this matter

Motion seconded and carried

58 MEDICAL ADVISORY BOARD TO DEPARTMENT OF LABOR

Dr Kopetzky RESOLVED that the House of Delegates declares itself opposed to any legislative bill for the creation of a Medical advisory board in the Department of Labor (Secs 25 and 54)

Dr Rooney The recommendation of the committee as I understand it was that they disapproved of the resolution relating to a creation of a medical advisory board I do not recall the House has ever gone on record of approving or disapproving As I recall it the chairman of the committee said that their only desire to disapprove the resolution was in order to leave the House free to take such action afterward as they were disposed to take

For that reason and to clarify and dispose of the situation amicably I move this section of the report lie on the table

Motion was seconded and carried

Dr Kopetzky I move the adoption of the report as a whole with the exception of such parts as have been disposed of by motion to lay on the table

Motion seconded and carried

The Speaker resumed the chair

The Speaker Are there any other committees ready to report?

59 COMMITTEE ON LEGISLATION

Dr Ludlum Before proceeding to detailed consideration of this report your Reference Committee on the Report of the Committee on Legislation (Journal May 1 p 550) would re emphasize the very strenuous character of the work of the Standing Committee and call attention to the difficulty of its duties and the efficiency with which they have been performed Without any question this Committee deserves the hearty thanks of this House of Delegates and of the entire membership of the State Society and we recommend that the House of Delegates express this thanks by vote

I move the adoption of this recommendation

Motion seconded and carried

Dr Ludlum We quote an item of some interest in reference to legislative difficulties (N Y Med Week May 2, 1931)

"The Osteopathic Bill was passed in the Senate on a quick roll call. This may be attributed to the activities of Dr. Downing, the former Deputy Commissioner of the State Department of Education. During his incumbency of this office, especially while the battle for the Medical Practice Act was on, we heard much of his efforts on behalf of the practice of medicine in New York State. At the session of the Legislature he made a valiant effort to put the Osteopathic Bill of Senator Fearon and Assemblyman Tellier over."

60. Contact between Legislative Committee and Membership

Dr. Ludlum: "*Recommendation* 1 (*Jour.*, May 1, p. 550). Each and every County Society should establish a direct contact between the chairman of the legislative committee and the membership, through its secretary.

"In case of emergency the chairman of the County Legislative Committee should be given the power to call directly on the membership for letters, telegrams or telephones to the legislators at the expense of the Society."

The Reference Committee sees, in connection with this recommendation, that it would be necessary for each county society to limit the amount of expenditure allowed, but this does not need to be included in the recommendation and the Reference Committee approves this recommendation and moves its adoption.

Motion seconded and carried.

61. Study of Records of Legislators

Dr. Ludlum: "*Recommendation* 2 (*Jour.*, May 1, p. 550). That each and every County Society study the records of their respective legislators in relation to the practice of medicine and take effective action through the local press and personal propaganda to prevent the re-nomination and election of those who are avowedly hostile to their interest."

I move the adoption of this recommendation.

Motion seconded and carried.

62. Obedience to Decisions of the House of Delegates

Dr. Ludlum: "*Recommendation* 3 (*Jour.*, May 1, p. 551). That the House of Delegates call the attention of the County Societies that as members of the State Society it is their duty to abide by the decisions of the House of Delegates, and the House of Delegates instruct County Societies that all matters of legislation be transacted through the State Legislative Committee."

Literally interpreted this note of instruction that "all matters of legislation be transacted through the State Legislative Committee" would minimize the influence of County Societies over their legislators to the vanishing point and we would offer as a substitute: That the House of Delegates call the attention of the County Societies to the fact that it is their duty to abide by the decisions of the House of Delegates and more specifically as expressed in the sentence in the By-laws which reads: "The component County Societies and their committees on legislation shall cooperate with this Committee and act in harmony with it on all such matters."

I move the adoption of the recommendation.

Motion seconded.

Dr. Leone of Erie: It seems to me that in the adoption of this part of the recommendation, while it is good in some points, on the other hand it practically ties the hands of the County Societies so that they would not be able to do any effective work for or against any proposition.

We had a demonstration of that this past winter, and I think Erie County if they were to work through the State Legislative Committee would not have accomplished anything at all.

But, as matters stand, I believe we did accomplish something temporarily at least to see that this so-called Wicks-Hutchinson bill was not passed through the legislature.

For that reason I think you should make some changes not to tie the hands of the County Societies, so as to make them helpless.

Dr. James Smith of New York: Although I believe that in the past bulletins have been printed stating the names of those legislators who took a stand adverse to organized medicine, would I be out of order in requesting that this list of those gentlemen be published again in our Medical Journal so that we may refresh our minds before the next session?

Dr. Bonnar of Erie: In regard to the initiative of County Societies in legislative matters, personally I am distinctly in favor of the County Society acting quite independently, but in cooperation, too, with the State Committee on Legislation.

I do not believe we should in any way lessen the expression of any County Society on any matters of legislation, therefore in any way minimizing the relationship of the county in legislative matters. I am not in favor of it. I could not quite understand the reading of the resolution, but that is my attitude in regard to legislative matters.

Dr. Rooney of Albany: I do not think that the State Society has attempted in a legislative hearing to exclude any individual member from expressing his own individual opinion, but, I do not believe any individual member has the right to say he represents such a group unless he does actually represent his own County Society, and if he does he has a perfect right to appear before any legislative committee of this State under his constitutional privileges, as a citizen, and speak for what he pleases.

Now, I feel every chairman of every committee of this Society should not be required to introduce speakers who are opposed to the position of the State Society, but I believe that they should make absolutely no attempt to prevent them from speaking.

Dr. Sherwood of Niagara: The difficulty here seems to arise in connection with the late Wicks-Hutchinson Bill as a result of an apparently contradictory policy of the State Body in some of the provisions of that bill.

I think in that connection that it is no more than reasonable to expect the duly elected and created officers of the organization to define sharply between their personal opinions in connection with the proposed legislation and the official position of the State Society and House of Delegates.

It is not up to the different County Societies to take positions at legislative hearings in opposition to the policies of the State Society. However, in regard to these recommendations I would like to have the doctor make clear what provision was made in case the official position of the House of Delegates has not been made known.

For example, as far as I know the House of Delegates has taken no position regarding full time health officers in cities over 50,000. If I am wrong you may correct me.

If this resolution includes that contingency where the official position of the State Society has not been made known, I would be in favor of it.

Dr. Ludlum: I think I might clarify the situation by saying that neither the chairman of this Reference Committee nor this Reference Committee has anything to do with expressing its own opinion, nor has it anything to do with the general policy in this recommendation. The committee has merely called attention to the provision in the By-laws which is the legal document under which we now operate.

If that provision is not satisfactory this House of Delegates or any other House of Delegates through proper procedure may change that provision of the By-laws.

I move the adoption of this recommendation
Motion seconded and carried

63 Medical Publicity on Chiropractic

Dr Ludlum 'Recommendation 4 That a committee consisting of members of the State Society and the Academies of Buffalo, New York, Rochester, Syracuse and Utica be appointed whose duties it shall be to acquaint the public by well prepared, repeated publicity—that it is to the public's vital interest to see that the practice of medicine is kept at the highest possible level, that the public should be more concerned in keeping out the quack and unfit than the medical profession, and that organized medicine is tired of fighting the public's fight single handed (*Jour* May 1, p 551)

That a committee consisting of members of the State Society and the Academies of Buffalo, New York, Rochester, Syracuse and Utica be appointed whose duty shall be to urge the following proposition on the presidents and faculties of the great universities of the State of New York

'If there is a grain of scientific truth in the theory of chiropractic, it is their duty to teach it If on the other hand, chiropractic is a fraud and has no foundation in truth, then it is the duty of the said universities to their respective communities and the people of the state—to come out and say so

That the universities be urged to appoint a group of non medical scientists to investigate and report on the theories and practice of chiropractic, and that, if necessary, the medical profession pay for the expense of the investigation"

Your Reference Committee sympathizes most sincerely with the state of mind which inspired the preparation of this recommendation and approves most heartily the general idea contained in it, but aside from disapproving matters of detail such as including in a committee of the State Society, persons designated otherwise than as members of its own body, it believes that in this House of Delegates or soon, the entire question of medical publicity will be considered and therefore it would recommend that this recommendation of the legislative committee be referred to the Council unless it be considered by this House of Delegates in connection with other matters of publicity

I move the adoption of this recommendation
Motion seconded and carried

64 Publishing Rules and Regulations of Sanitary Code

Dr Ludlum "Recommendation 5 That in the future the Public Health Council shall cause to be printed in Health News' all proposed rules and regulations and modifications of the sanitary code Before any such rules regulations and modifications shall be adopted, the Public Health Council shall announce not less than ten days in advance of the hearing a place and date not less than one month subsequent to the first publication of the proposed measures, where it will hear those who may have objections to the proposed measures" (*Jour*, May 1 p 552)

I move the adoption of this recommendation
Motion seconded and carried

Dr Ludlum The Committee on Legislation offers five recommendations

Your Reference Committee approves three of these and the principle involved in the other two, and so reports to you

Further, it has considered it a duty to add certain information to that contained in the report of the Committee on Legislation as well as to express its appreciation and approval of the work done by this Committee It recommends the adoption of the report
Seconded and carried

65 Medical Economics

Dr Stetten Your Reference Committee on the Report of the Committee on Medical Economics (*Jour*, May 1, p 553) has carefully considered this Report which deals exclusively with the proposed arbitration agreement to be entered into between the Medical Society of the State of New York and the Compensation Insurance Carriers The report as a whole, is approved, and its adoption recommended, with, however, the elimination of the appended fee schedule To replace this fee schedule it is recommended by your Reference Committee that such a schedule, because of geographical peculiarities in the several counties of the State, should be arranged separately between the individual counties and the insurance carriers as has been done in the County of New York It is also recommended by your Reference Committee that the Committee on Medical Economics be instructed to assist the individual counties of the State in arranging this fee schedule with the insurance carriers, along the lines indicated in its Report and that further the Committee on Medical Economics, be instructed to help the counties in whichever way possible in carrying out this arbitration agreement with the insurance carriers

I move the adoption of the Report

Dr Dyer of Broome stated that the attitude of the County Society of Broome was that this was absolutely useless, that it is redundant and merely a repetition of what already exists that it offers nothing, profits nothing and simply obscures the situation as it is He thereupon made a motion that the adoption of the report be tabled

Motion was seconded but not carried

The Speaker Remember gentlemen, the report of this committee does not include the adoption of a fee schedule It approves the recommendation of the Committee on Medical Economics with the exception of a fee schedule and provides the means of working that out.

I move the adoption of the Report
Seconded and carried

66 Nurse Problem

Dr Jennings Your Reference Committee on the Report of the Committee to study the nurse problem approves the report and deplores the existence of the conditions which it sets forth (*Jour*, May 1, p 563)

We approve of the suggestion which the Committee has made of a required preliminary education for the student nurse and the recommendation of a study of such a plan

We commend the sympathetic and public spirited approach of the Committee to this difficult problem and recommend the continuation of the Committee for further study

I move the adoption of the Report
Motion seconded and carried

67 Physical Therapy

Dr Jennings Your Reference Committee approves the Report of the Committee on Physical Therapy, which deserves high commendation for the earnestness of its work (*Jour* May 1, p 561)

We wish to call attention to that part of the Report which discloses the existing degree of inertia among the County Societies

Twenty-nine societies have taken no action, 15 societies showed a retrogression from the activities of the preceding year, 6 societies remained about stationary Leaving only 10 societies of the entire State that have made progress in physical therapy

We are pleased to note that 57 per cent of the hospitals throughout the State possess physical therapy equipment, and 34 per cent of the remainder intend organizing such departments

We recommend the continuance of the Committee and

hope that another year will show greater interest and more progress in the County Societies.

I move the adoption of the Report.

Motion seconded and carried.

On motion duly seconded and carried the session thereupon adiourned until 8 P. M.

EVENING SESSION—8 P. M.

The meeting was called to order by the Speaker at eight P. M.

The Speaker: Is Reference Committee on New Business A ready to report?

68. Promotion of Medical Projects

Dr. Colie: The resolution proposed by Dr. Garen of Cattaraugus County (Sec. 30), Resolved, that it is the sentiment of the House of Delegates of the Medical Society of the State of New York that its members or committees shall not be permitted to engage in the promotion of the medical subject, state or national, requiring legislation, until such subject and the proposed legislation thereon shall have been submitted for consideration to the House of Delegates and approved by two-thirds vote.

I move that the recommendation be not approved.

Motion was seconded.

Dr. Leitner: That resolution was not offered by Cattaraugus County. It was offered by the delegate of Cattaraugus County without the endorsement of the County.

Motion that the recommendation be not approved seconded and carried.

69. Acceptance of Donations

Dr. Colie: By Dr. Garen of Cattaraugus (Sec. 30A): Resolved, that no member of this society or committee of this society shall be permitted to accept funds, grants, donations, or any form of financial assistance either directly or indirectly from personal or lay sources, for the promotion of medical projects requiring legislation, without permission from the House of Delegates given by two-thirds vote.

I move that the recommendation be not adopted.

Motion seconded.

Dr. Rooney: Mr. Speaker, this House five years ago adopted a resolution exactly the same in tenor as that which has been presented by Dr. Garen, and I proposed the resolution. So far as I know the House never rescinded its action. There was a very real reason for it then and I think there is a very real reason for it now.

I do not see why the Medical Society of the State of New York has to be the beneficiary of any fund or of any money outside of its own funds.

I hope the House of Delegates will not rescind that action which they took five years ago which was well based, and which I think is now well based.

I trust the recommendation of the committee will not pass and that the House will favor the adoption of the resolution.

The whole situation is briefly this: The original resolution stated that we should not accept money from other sources than our own funds.

The Reference Committee disapproves of this resolution.

If you vote for the committee's recommendation you will vote in favor of accepting money from other funds than your own. If you vote against it you will vote in favor of the resolution which we passed five years ago not to accept money from other sources than our own.

Dr. Colie: In view of the fact the chief criticism of this resolution is with the looseness of the wording rather than the severity of the principle I respectfully move it be re-referred.

Motion seconded and carried.

70. County Departments of Health

Dr. Colie: Resolution from Erie County (Sec. 22). That the House of Delegates declare itself opposed to any legislation to make compulsory the establishment of County Boards of Health, or County Health Units.

I move that the resolution be disapproved.

Dr. Bonnar: I object to the action of the Committee.

Dr. Rooney: I move that action upon this recommendation be postponed indefinitely.

Motion seconded and carried.

71. Optometry Law

Dr. Colie: Resolution from Erie County: That the secretary of the Medical Society of the State of New York obtain an opinion from the Legal Counsel for the society as to the constitutionality of the amendment to the Optometry Law enacted in 1931. (Sec. 23.)

It is recommended that this be adopted and I so move.

Motion seconded.

Dr. Bedell: I move that the opinion be printed in our Journal.

Seconded

Dr. Colie: I move that the resolution be adopted with the amendment.

Seconded and carried.

72. Sewage Disposal Plants

Dr. Colie: That the House of Delegates declare itself as opposed to any amendment to the law that shall centralize authority in the State Department of Health, concerning the location and erection of sewage disposal plants for municipalities. (Sec. 28.)

This resolution is not recommended on the ground it is ambiguous and not clear.

Dr. Thomson of Kings: Is it not true that the present state law authorizes or enables the State Health Department to interfere in sewage disposal and sanitation?

The Speaker: If there is anyone present who can answer that question I would be glad to hear from him. Dr. Rooney, can you answer Dr. Thomson's question?

Dr. Rooney: I can, if I may.

The present Public Health Law gives the State Department of Health the right to provide for the construction of or the prohibition of the construction of sewage disposal plants having affluents which may empty into a stream from which any of the other communities below that point draw their water supply. It gives them general police power over all the sewage disposal plants of the State of New York, and requires plans for all sewage disposal plants to be submitted to the State Department of Health prior to construction.

I do not believe any approval or disapproval will have any effect on this resolution. Therefore, I move that this resolution be postponed indefinitely.

Motion seconded and carried.

73. Minimum Wage for Physicians

Dr. Colie: Resolution introduced by Dr. Julius Ferber (Sec. 14): Whereas the Medical Society of the County of New York after considerable study of the exploitation of physicians by municipal and state department as well as by lay corporations, saw fit to endorse the movement, to demand the $5 minimum wage per hour for physicians employed on part time and,

Whereas because the economic distress now prevailing generally forces many physicians to accept the part time positions at lesser rate, therefore be it

Resolved, that the House of Delegates of the Medical Society of the State of New York records the opinion in favor of a minimum wage of $5 per hour, for physicians working upon a part-time basis, but be it further resolved that a $5 per hour minimum charge shall not be so construed as to constitute a demand for an increase

in salary in the case of medical men employed in regular positions under the Civil Service Laws nor for physicians holding regular departmental positions which after a term of service entitle the holder thereof to a pension

I move that this recommendation be not approved

Dr Rim of Kings I move that the resolution be tabled

Motion seconded and carried

74 MEDICAL PRACTICE BY CORPORATIONS

Dr Cohe Resolution introduced by Dr Julius Ferber (Sec 19) WHEREAS the Judicial Counsel of the Medical Association in its report as published in the American Association bulletin as of April 1931 regards the decision of Judge Samuel R Blake of the Superior Court of the State of California in and for the County of Los Angeles in the case of Granville McGowen plaintiff vs Medical Service Corp a corporation, defendant of being of the greatest importance at a time when commercial organizations established for profit are engaged in the sale of medical service in the matter that may be detrimental to the public good and opposed to the progress of the scientific medicine therefore be it

RESOLVED that the House of Delegates of the Medical Society of the State of New York instruct its counsel to bring suit against one of the medical agencies engaging as a corporation in the practice of medicine that this suit be pressed for a decision upon two fundamental questions

1 Can a corporation practice medicine?

2 Is the manner and method of the defendant corporation such as to constitute the practice and method recommended for adoption?

The Speaker It may be a departure from the usual order, but the Speaker wishes to ask a question What is the cost of such a thing going to be?

Dr Rooney I was just about to arise to ask the Speaker to request the Counsel of the Society to tell us just what a litigation of this sort means before it is terminated by a decision from the Court of Appeals in the State of New York It is a very expensive proposition and how it is going to affect us in the State of New York we cannot personally see So far as I know the Court of Appeals decisions in this state have uniformly held—and so far as I know still hold—a corporation can neither practice law nor medicine I should like to request the Speaker to ask Counsel whether I am wrong in that contention and whether a suit of that sort is not necessary

Mr Brosnan There is no question gentlemen under the decisions of the Court a corporation can neither practice medicine nor law I would hesitate to advise the adoption of this resolution since a proceeding of this kind would be extremely expensive for one thing and it may result in actions against this Society for another I think it is a situation we ought to go slow in I take it the resolution contemplates a criminal action against these corporations on the ground they are practicing medicine illegally It would mean the employment of investigators and the collection of evidence and the possibility of throwing the plaintiff which would be this society into some sort of libel action or action for malicious prosecution false arrest or something of that kind

I think it is a situation we ought to think over very carefully before any action is taken

I think this very resolution came before this body last year, but I believe it was withdrawn I do not think this lawsuit is necessary

Dr Ferber I fully appreciate the novelty as well as the magnitude of the undertaking advocated in this resolution but I also know that this is not a thunderstorm from a clear sky For the last four to five years medical men and women have discussed the advisability of initiating a test case in the courts of this state and to determine—first—whether corporations should be allowed to continue the practice of medicine under our Medical Practice Act, and—secondly—what constitutes medical practice by a corporation

Several years ago it was pointed out and rightly so that the Medical Society of the State of New York could not possibly start such action because it did not have the necessary funds to defray the expense incidental to such litigation Today we find that Providence has provided for this necessity through the agency of our capable Treasurer Dr Charles Gordon Heyd, during whose term of office the treasury of our State Society has managed to accumulate sufficient funds to enable it to protect the legitimate rights of the medical profession

There are those amongst us who claim that the bringing of such suit by our State Society is not practical because if we lose the Defendant Corporation would bring suit for damages amounting to many thousands of dollars Regardless of the merits of this objection I am at liberty to state that Providence has also provided for this emergency in the persons of self sacrificing physicians who are willing to act as Plaintiffs and bring suit against a corporation practicing medicine Unfortunately they have not the means to finance such action, but with encouragement from the profession they are ready to give their name, time and effort to the testing in the courts of the right of corporations to practice in this Empire State

As to the legal side of the question the decision rendered by the Superior Court of California in and for the County of Los Angeles in the case of Granville McGowen Plaintiff vs Medical Service Corporation, a corporation Defendant, sets ample precedent and gives us a real clue as to the sentiments of judiciary with regard to a corporation indulging in the practice of medicine The decision handed down by the eminent jurist Samuel R Blake contains in my opinion one of the most noble expressions of the ideal of medical practice that has ever been the privilege of any human being to utter He states The right to practice medicine attaches to the individual and dies with him and it can not be made a business sheltered under the cloak of corporations having marketable shares descendable under the law of inheritance ' In other words, the right to practice medicine is part and parcel of the individual not to be bartered commercialized or commissioned

We must consider, of course that the adoption of this resolution means action Unlike other resolutions which are merely an expression of opinion—kept on our minutes for future reference—the adoption of this resolution implies action responsibility and expense. But, who can point an accusing finger at our State Society that it ever lacked courage and initiative when the medical profession was in need of its influence and endeavor? We have been accused of being conservative but even our accusers admit that our conservatism has been tempered by deliberation We were never remiss in our duties to the medical profession but rather surveyed the field and studied the situation in order not to be carried away by the enthusiastic fancy of radicalism

Were we now to stand aloof and watch for developments outside of our sphere of activity and influence to bring about the occasion of corporate medicine we may be adjudged simpletons not knowing how to protect a rare privilege Nay! We may even be adjudged as indifferent to the degrading influence of corporate medicine on medicinal practice

I am confident that each and every one of you assembled here today fully evaluates the significance of this resolution and that you will vote for its adoption

Dr Wightman We have here tonight a man from the Department of Education Dr Rypins whom I think will speak very briefly and illustrate this thing for us

He is not a member of this Assembly but if it is the pleasure of this House to hear from him for two or three minutes, I think he will favor us with his remarks

The Speaker: Is there any objection on the part of the House of Delegates to hearing Dr. Rypins?

The House granted Dr. Rypins the privilege of the floor.

Dr. Rypins: I think Dr. Rooney has expressed the situation as well as I can. The question as to whether or not a corporation can practice medicine in New York State has been decided on numerous occasions, and within the last three or four years the Attorney General, with the cooperation of the Department of Education, has dissolved several corporations who had been guilty of practicing medicine without licenses.

I do not know what particular corporations you are talking about, but if there is any one who has a particular corporation in mind, the procedure is to refer the matter to me with the facts, and we will attempt to find out whether or not there is a violation of law.

It is not necessary to get a decision of the Court of Appeals. The Court of Appeals has already ruled on that in this state.

You must bear in mind, however, that there are corporations chartered under the Public Welfare Law, such as charitable clinics, and although they are incorporated, they are not incorporated for profit and they cannot be stopped under our law from practicing medicine.

I think most of the complaints you have in mind will have to be brought before the Department of Public Welfare. If, however, you have in mind other corporations for profit which are in your opinion practicing medicine, the proper procedure is to refer all the facts to me with a request for an investigation and prosecution, if the the facts warrant it.

Dr. Rooney: I move that the resolution lie on the table.

Motion seconded and carried.

75. Volstead Act

Dr. Colie: Presented by New York and Warren Counties (Sec. 9).

Whereas, Congress has undertaken to fix the dose of wine, whiskey and brandy by legislative fiat, thus taking over the functions of Pharmacologists and physicians, and

Whereas, the Volstead Act compels physicians to betray the confidences of their patients by keeping a record of their diseases and ailments which records are open for inspection by Federal Prohibition agents, thus violating the traditions of the medical professions, medical ethics and the laws of a number of our states, and

Whereas, relief from these conditions has been sought in the courts and has been denied by the United States Supreme Court, and

Whereas, the Wickersham commission has unanimously made the recommendation; "Removal of the causes and irritation and resentment on the part of the medical profession by: (a) doing away with the statutory fixing of the amount which may be prescribed and the number of prescriptions. (b) Abolishing of the requirements of specifying the ailment for which liquor is prescribed in the book which becomes later a record in the files of the Revenue Department. (c) Leaving as much as is possible to regulation rather than by fixing details by statute."

Now Therefore Be It Resolved, that the Medical Society of the State of New York hereby formally expresses its disapproval of those portions of the Volstead Act which invade the right of the State of New York to regulate the practice of medicine within its own borders and which deprive the physician of his right to do the free exercise of his judgment in the practice of his profession, and

Be It Further Resolved, that the Medical Society of the State of New York demand of Congress the repeal of the said portion of the Volstead Act, and

Be It Further Resolved, that the Medical Society of the State of New York urge each of its members to demand of his Senators and Congressmen the repeal of the said portions of the Volstead Act, and

Be It Further Resolved, that the Secretary of the Medical Society of the State of New York be and hereby is instructed to transmit a copy of these resolutions to the Senators from New York and to each representative of the State of New York in the House of Representatives, and

Be It Further Resolved, that the delegates of the Medical Society of the State of New York to the House of Delegates of the American Medical Association be and hereby are instructed to present a similar resolution to the House of Delegates of the American Medical Society for action at the next meeting.

I move the adoption of this resolution.

Motion seconded and carried.

76. Report of Secretary

Dr. Krieger: The Reference Committee to which was referred the reports of the Secretary, Council, Councillors, and the Board of Censors, would respectfully offer the following:

We are deeply conscious of the increasing duties that confront the Secretary of a Society of such magnitude as ours has become, and appreciate the necessity of having for that office one who has the pulse of the profession constantly under touch, one who is familiar with the various reactions that arise in the rapid changes which are taking place in society, pertinent to the physician, one whose wisdom in the handling of problems that arise all over the State, is sufficient to keep everyone happy and satisfied, one whose wise counsel and judgment are sought after and heeded by the members of our profession. Such a person we have in our Secretary, Dr. Daniel S. Dougherty. The Committee at this time wishes to extend to him their sincere appreciation of the results of his untiring efforts in behalf of our Society, and to express to the Society its congratulations in having for the office of Secretary, one who has shown the ability, courage and sincerity that Dr. Dougherty possesses. (Jour., May 1, p. 524.)

77. The Office Organization

Your Committee commends that portion of the report which deals with the Society in general, and feels that the references to those who are in charge of the offices in New York City and Albany are deserving and timely, and recommends the adoption of that portion of the report as representing the sentiments of the Society. (Jour., May 1, p. 524.)

I move the adoption of this recommendation number one.

Motion seconded and carried.

78. Financial Department

Dr. Krieger: Your Committee concurs in that portion of the report dealing with the financial department, (Jour., May 1, p. 525) and feels that, with the method used in handling the finances of the Society, the high qualities of the Trustees and Treasurer, and the excellent condition of the Treasury, that the interests of the Society are certainly thoroughly safeguarded.

I move the adoption of this portion of the report.

Motion seconded and carried.

79. Legal Department

Dr. Krieger: The commendation of the Secretary regarding the Legal Department is carefully noted and approved, (Jour., May 1, p. 525) and the Committee recommends that the House of Delegates extends its thanks to the Counsel of the Society, Mr. Lorenz J. Brosnan, and his associates, for their results in the handling of the legal problems which confront the Society and its individual members.

I move the adoption of this portion of the report.

Motion seconded and carried.

80. COMMITTEES

Dr. Kreiger: The excellent work done by the standing and special committees as mentioned in the Secretary's report (*Jour.*, May 1, p. 525) is worthy of approval by the Society and a vote of appreciation to them is hereby recommended.

I move the adoption of this recommendation.

Motion seconded and carried.

81. COMMITTEE ON REVISION OF BY-LAWS

Dr. Krieger: The Committee approves the portion of the report, that a revision of the Constitution and By-Laws are needed in view of changing conditions, and the suggestion of the Secretary as to the personnel of a committee to make such revision has been given serious consideration, (Jour., May 1, p. 525) and it therefore recommends that the House of Delegates approve the suggestion, namely, that the President-Elect, the Secretary and Speaker, together with Drs. Ludlum of Kings, Rooney of Albany, Farmer of Onondaga, and Trick of Erie, be appointed such Committee to report at the next annual meeting in 1932.

I move the adoption of this recommendation.

The Secretary: In regard to that recommendation, I would like to make an explanation. There is somewhat of an error. When I wrote that I meant the House recommend for the President for appointment, not that the House appoint. I have told Dr. Johnson that, because it is Dr. Johnson's prerogative to appoint the committee.

The recommendation was seconded and carried. (See also Section 115.)

82. DISTRICT BRANCHES

Dr. Krieger: It is interesting to the Committee that the report of the Secretary shows an increased interest in the District Branch meetings as evidenced by the attendance (Journal, May 1, Page 526), and it is recommended that these meetings be given all the publicity possible in order to bring together even greater numbers of the members for their mutual benefit.

I move the adoption of this recommendation.

Motion seconded and carried.

83. STATE-WIDE CONFERENCES

Dr. Krieger: The Conference of County Secretaries, Legislative Chairmen, and Public Relation Chairman (Journal, May 1, Page 526) have been productive of excellent results, and the recommendation of the Secretary that they be made an annual feature is hereby approved.

I move the adoption of this recommendation.

Motion seconded and carried.

84. INSURANCE COMMITTEE

Dr. Krieger: The Committee feels in accord with the Secretary's attitude that the work of the Insurance Committee (Journal, May 1, Page 526) has been effective, and approves the recommendation that the Chairman be authorized to visit and address the District Branch Meetings. (Section 89.)

I move the adoption of this recommendation.

Motion seconded and carried.

85. DR. E. ELIOT HARRIS, IN MEMORIAM

Dr. Krieger: The death of Dr. E. Eliot Harris (Journal, May 1, Page 527) has removed from our midst a great man, one whose interests in the welfare of this Society were manifold, and who as Speaker of this House presided over its deliberations with fairness in every respect.

The recommendation of the Secretary, that this House, by formal action, pay fitting tribute to the memory of Dr. Harris is heartily endorsed, and recommends that a Committee be appointed by the President to prepare suitable resolutions to be spread on the minutes.

I move the adoption of this recommendation.

Motion seconded and carried.

86. MEMBERSHIP

Dr. Krieger: The Committee notes with considerable gratification that the membership in the State Society has shown a substantial gain during the past year (Journal, May 1, Page 527), and it is recommended that an attempt be made to induce each man qualified to take membership in this Society.

I move the adoption of this recommendation.

Motion seconded and carried.

Dr. Krieger: I move the adoption of the report of the Reference Committee as a whole.

Motion seconded and carried.

87. BUFFALO FOR NEXT ANNUAL MEETING

Dr. Bonnar of Erie: Not having been heard very much this afternoon I wish to speak to this House of Delegates on a very important matter while you are still in your right minds.

I do not know whether I have the privilege, but I wish to say the object of my rising is to extend an invitation. Have I the floor?

The Speaker: I am going to allow you the floor.

Dr. Bonnar of Erie: The Erie County Medical Society has placed upon myself and the delegation from that County the great responsibility and the great pleasure of extending an invitation to the Medical Society of the State of New York to hold its meeting in 1932 in Buffalo, which will be the centennial of our existence as a city.

The Secretary: I move we accept the invitation.

Motion seconded and carried.

87. REPORT OF COUNCIL

Dr. Krieger: The Committee after carefully reading the report of the Council (Journal, May 1, Page 527), which includes the work done by the Executive Committee, feels that the Society is to be congratulated on having a group of men who have given so much of their time and attention, as the report shows, to the various matters which concern the Society, all of which has been done without remuneration or expectation of reward. The accomplishments during the year are worthy of the support of this House, and a vote of confidence is hereby recommended.

I move the adoption of this recommendation.

Motion seconded and carried.

88. PUBLICATION COMMITTEE

Dr. Krieger: The Committee feels that it should at this time commend the Publication Committee, the Editor in Chief, and the Executive Editor (Journal, May 1, Page 529) for the large amount of work they have done in improving the Journal, and they recommend that every member be urged to read his Journal more thoroughly, that he may be better acquainted with the doings of our Society.

I move the adoption of this recommendation.

Motion seconded and carried.

89. INSURANCE COMMITTEE

Dr. Krieger: It is gratifying to the Committee that the cost of malpractice insurance under our group plan has been revised, and that the revision is downward. (Journal May 1, Page 529.)

The Insurance Committee has prepared a set of resolutions regarding the question of malpractice coverage, which are printed in the report of the Council, and after having carefully studied them your Committee approves and recommends their adoption. (Section 84.)

I move the adoption of this recommendation.

Motion seconded and carried.

90. Principles of Professional Conduct

Dr. Krieger: The Committee to revise the Principles of Professional Conduct (Journal, May 1, Page 530) has made several suggestions and presents in the report of the Council a Revision of the entire matter. It is the opinion of the Reference Committee that this amended code is proper and pertinent and it recommends the adoption of the revision as suggested.

I move the adoption of the principles of Professional Conduct as revised.

Motion seconded and carried.

Dr. Krieger: I move the adoption of the report of the Reference Committee as a whole.

Motion seconded and carried.

91. Board of Censors

Dr. Krieger: The Reference Committee on the report of the Board of Censors (Journal, May 1, Page 533) finds that there was but one meeting held during the year, and at the end of the hearing on the appeal presented to it, by mutual agreement, the appeal was withdrawn.

I move the adoption of the Report of the Board of Censors as published.

Motion seconded and carried.

92. Report of Councillors

Dr. Krieger: The Reference Committee on the reports of the Councillors (Journal, May 1, Page 570, and May 15, Page 651), after carefully reading the reports, finds that the annual meetings of the various District Branches were well attended, and that the programs were exceptionally interesting and instructive, all of which reflects the interest and cooperation on the part of the Presidents of the various branches.

The Committee notes that the officers of the State Society were in attendance at most of these meetings and participated in the deliberations.

It is gratifying to note that the attendance at these meetings have been steadily increasing, indicating that they should be continued and encouraged.

We commend the various Councillors for their work in making these meetings a success.

I move the adoption of this Report.

Motion seconded and carried.

Dr. Krieger: I move the adoption of the report as a whole.

Motion seconded and carried.

93. Committee on Arrangements

Dr. Smiley: Your Reference Committee begs leave to report as follows:

The Report of the Committee on Arrangements (Journal, May 1, Page 549) speaks for itself. We commend the diligence and fidelity with which the general plan and the many details for the meeting have been anticipated and perfected for the benefit and pleasure of the members of the Society.

We commend the appreciation and thanks of this Society to the Committee for their labors.

I move the adoption of the report.

Motion seconded and carried.

94. Committee on Scientific Work

Dr. Smiley: Your Reference Committee on the Report of the Committee on Scientific Work (Journal, May 1, Page 557) has carefully studied this report and commends the committee for the excellent scientific program it has arranged for the benefit of the Society.

Your Reference Committee begs leave to quote the following paragraph from the report of this Committee:

"Your Committee has had great difficulty in arranging an instructive program because of the conflict between our meeting and that of many of the special societies. We most respectfully suggest that, if possible, our annual meeting be held at a time when the leaders of medical thought are not obligated to attend their special societies."

Your Reference Committee recognizes the importance and seriousness of the situation referred to and recommends to the officers of the State Society charged with the designation of the date for State Society meetings the desirability of conferences with officers of the Special Scientific Societies concerned, with the view of removing conflicting meeting dates as far as possible to the mutual advantage of all the members of all the Societies concerned.

We recommend the appreciation and thanks of the Society to this Committee for the efforts of their labors.

I move the adoption of the Report.

Motion seconded and carried.

95. Periodic Health Examinations

Dr. Cunniffe of the Bronx: This is the first yearly report of the five-year program of the Committee. (Journal, May 1, Page 558.) The activities during the past year were concerned primarily with the formulation of a policy and a procedure to bring about the health examinations of all of the citizens of the State of New York, and that such examinations should be conducted primarily in the offices of private physicians. The scheme of the Committee involves, first, the bringing of the public to the physician's office and, second, a good and satisfactory health examination.

Their program consists in aiding the physician in giving addresses on health examinations to lay audiences and a series of suggestions have been prepared by the Committee, and will be shortly published. Also the program for the next year is concerned with the health examination of women, and a selective list of topics for a series of medical articles and addresses, on the health examination of women, is published in this report. This is a very excellent idea and the Committee highly approves of it.

I move the adoption of this portion of the report.

Motion seconded and carried.

96. Post-Graduate Education in Health Examination

Dr. Cunniffe: Post-Graduate medical education in the matter of efficient and satisfactory health examinations (Journal, May 1, Page 559) has been considered, and a series of lectures and clinics has been given to the Queens County Medical Society and the Tioga County Medical Society.

The Committee feels that this supplementary education in health examinations by the private physician is very necessary, if we are ever to succeed in bringing the public to the physician's office. Consequently, we approve this line of endeavor and urge that it be offered to the other County Societies of the State.

I move the adoption of this portion of the report.

Motion seconded and carried.

97. Questionnaire—Health Examinations

Dr. Cunniffe: The remainder of the Report discusses the matter of a questionnaire for the securing of information regarding health examinations (Journal, May 1, Page 559) and also the many avenues through which this matter can be brought to the public. Special notice taken of the offer of a radio outlet giving a thirty to fifty station hookup every week for fifteen minutes between ten and eleven o'clock in the morning for the coming year. This time is best for reaching the women in the home, and coordinates with the present effort to advance the health examination for women as the major project for this year and next. It is proposed to provide a medical speaker, who will submit his talk to the Committee two months in advance, to be edited and brought into harmony with the standards of the community. The

Committee proposes to cover the field of women's health examinations in a substantial, practical and inspiring fashion, with special reference to the service of the practicing physician in this oncoming field of preventive medicine.

I move the adoption of this part of the report
Motion seconded and carried

Dr Cunniffe I move the adoption of the report as a whole
Motion seconded and carried

98 COMMITTEE ON MEDICAL RESEARCH

Dr Cunniffe This Report discusses the opposition to the anti vivesection bill both in the State Legislature and in the Federal Congress (Journal, May 1, Page 557) The Report states that the Bill was committed to the Committee on Codes of the State Legislature and no further action could be reported at that time We note with pleasure the personal appearance in opposition to these bills of the representatives of many of the institutions concerned with medical education However, the effort against the bill in the Federal Congress was limited to letters of correspondence to our Congressmen and Senators We feel that this bill, which must be fought every year, is of too great importance to be allowed to pass without personal appearance at the hearings in opposition to the bill Consequently, we urge that the Chairman of this Committee for the next year be urged to provide personal representation at all hearings in opposition to these measures

I move the adoption of this report
Motion seconded and carried

99 RETIREMENT FUND FOR PHYSICIANS

Dr Kalish Your Reference Committee on New Business C has a resolution introduced by Dr William Patterson of New York County as follows (Section 12)

WHEREAS, No provision at present exists in the Medical Society of the State of New York for retirement stipends for physicians in the State of New York, and

WHEREAS in certain other professions such provision has been successfully made, and

WHEREAS, it would seem advisable that the delegates here assembled should take appropriate action to this end,

BE IT THEREFORE RESOLVED that the Medical Society of the State of New York through its delegates here assembled appoint a Committee of not fewer than five to study ways and means of establishing a Retirement Fund for the benefit of the members of the Medical Society of the State of New York, and

BE IT FURTHER RESOLVED that said Committee be prepared to make a Report at the next regular meeting of this body

I move the adoption of this resolution
Seconded and carried

100 RECOGNITION OF AMERICAN PHYSICIANS IN FOREIGN COUNTRIES

Dr Kalish We have two resolutions similar in nature introduced by the County of New York as follows

WHEREAS, many foreign countries do not recognize graduates of American Medical Schools, nor permit them to practice medicine,

THEREFORE BE IT RESOLVED by the House of Delegates of the Medical Society of the State of New York, that this situation be brought to the attention of the Regents of the State of New York for the purpose and to the end that some degree of reciprocity be established and that the existing discrimination against American doctors be stopped (Section 17)

WHEREAS many foreign countries do not recognize medical diplomas granted in the United States and do not permit American doctors, graduates of American Medical Colleges, to practice, and

THEREFORE BE IT RESOLVED that the House of Delegates of the Medical Society of the State of New York instruct its delegates to the American Medical Association to bring this situation to the attention of the House of Delegates of the American Medical Association for the purpose and to the end that this unjustified disqualification of graduates of medical schools of the United States be discontinued and that American physicians desiring to practice in foreign countries be granted the same rights and privileges as their nationals have in the United States (Section 15)

Committee on New Business C approves both resolutions pertaining to the rights of American graduates to practice in foreign countries and to bring this situation to the attention of the Board of Regents of the State of New York to the end that reciprocity be established for practitioners duly licensed to practice in the State of New York

I move the adoption of these resolutions
Motion seconded and carried

101 BIRTH CONTROL

In regard to the resolution adopted by Erie County on May 18 1931 (Section 24), that the House of Delegates of the State Society declare its opposition to the introduction or enactment of any legislation that shall change the policy in the matter of Birth Control, your Reference Committee recommends that since the State Society has taken a stand along these lines that no further action should be taken by the House of Delegates at this time

I move the adoption of the recommendation
Motion seconded and carried

102 PAY CLINICS

Dr Kalish Resolution introduced by Dr Subkis of New York (Section 18)

WHEREAS, there is an increasing tendency on the part of dispensaries and the Out Patient Departments of Hospitals and Medical Centers to conduct Pay Clinics and

WHEREAS, these Clinics diagnose and treat patients *outside of the Provision of the New York State Dispensary Law,*

THEREFORE BE IT RESOLVED that the Committee on Legislation initiate legislation at the next session of the New York State Legislature to the effect of preventing Pay Clinics from being operated under dispensary laws

Your committee approves this resolution and is of the opinion that the operation of pay clinics under the guise and with the aid of philanthropic agencies is to be deprecated under present laws Special and new laws are necessary to meet this *new situation which has arisen* through the establishment of pay clinics

I move the adoption of the recommendation
Motion seconded and carried

103 CULTISTS' LEGISLATIVE BILLS

Dr Kalish We have a resolution introduced by Erie County

RESOLVED, that the Medical Society of the County of Erie pledges its whole hearted support to assist the State *Committee on Legislation* in defeating cultists' bills by personal interviews with legislators from Erie County prior to the next election (Section 27)

Your committee finds that it is rather difficult to understand why this resolution was introduced Your committee finds no action is necessary by the House of Delegates

I move the adoption of the report
Motion seconded and carried

104 LEGAL COUNSEL

Dr Dyo The Reference Committee on the report of the legal counsel (Journal, May 1, Page 536) begs to submit the following

Mr. Brosnan has completed his first year's work in the new position of Legal Counsel with marked success. This success we believe is due to the fact that he has continued the policy which he helped to inaugurate eleven years ago. Namely, that of creating a better understanding between the profession and the lay public.

The editorial work in number and subjects treated equal those of previous years.

The case reports exceeded those of the previous year by four.

The reduction in the number of personal inquiries have been reduced by ten. This reduction the committee interprets is because more of the members of the State Society are reading the editorials and case records, thus becoming more familiar with the legal aspect of their practice.

This year Mr. Brosnan announces that a book on The Legal Relations Between the Physician and the Patient by Mr. Stryker and himself will be completed.

This is the first up to date book on this subject published since 1911 by Wilson.

The committee wish to take this opportunity to thank the authors for their contribution to medical literature along the lines of their established policies of helping the public to better understand some of the physician's economic and professional problems.

The litigation work of our counsel has been as heavy as usual. There was an increase in the number of suits this year from 192 of the previous year to 286 this year.

Cases disposed of were 159 as against 144 or an increase of 15 cases for the year. Of this 159 cases 26 were settled, 130 dismissed or discontinued. Only 3 cases resulted in a judgment for the plaintiff and 1 of these 3 cases is now on appeal.

The cases now in court show an increase of 127 over the number of cases for last year at this time.

The report of the members availing themselves of the group insurance is very encouraging. There has been a gain of 32% of the 498 new members taken into the Society this year over last year which is far better than the previous year. This reflects the untiring efforts of Drs. Card and Heyd, the Society's Insurance Committee.

The Committee wishes again this year to encourage each County Society through its delegates to do its bit and continue this steady gain in members of the State Society taking out a group malpractice insurance, in order that our Legal Counsel may feel he has a united front of the profession behind him to continue his policies for a better understanding of the problems of the Medical Profession.

This Committee feels that in Mr. Brosnan the Society has an untiring, conscientious, and excellent counsel. The Society should feel as judged by this committee that its legal affairs would not be better cared for than by its present incumbent.

I move the adoption of this report.

Motion seconded and carried.

105. Public Health and Medical Education

Dr. Howland: The Reference Committee on the Report of the Committee on Public Health and Medical Education has carefully reviewed the reports of the Committee. (Journal. May 1, Page 541.)

We commend the policy of the Committee, which in brief consists of two parts: *First:* Investigation of Public Health activities and the education of the physician in such matters. *Second:* "A contribution in the field of public health on the part of the medical profession, in aiding to provide adequate medical care through the continued instruction of the physician by means of graduate education."

The tabulated figures in the report of the Committee show that only one-third of the component county societies have availed themselves of these courses. There should be more. The figures indicate that the cost of the work has been gradually reduced. We commend the recommendation of the Committee that small adjacent county societies join in these courses. We urge the component County Societies to be particular to appoint a strong committee on graduate education and that these committees consult with the State Committee and be guided in a large measure by its suggestions as to courses and time for the lectures.

We commend the Committee's proposal to make available courses on Tuberculosis and Obstetrics and Pediatrics, which subjects have not been presented in the last three years. We are heartily in accord with the Committee's plan of maintaining an active interest in general public health activities, and in endeavoring to stimulate county societies to appoint active committees on this subject. The need for such committees is specially urgent at the present time, in view of the new health legislation recently enacted in this State.

We concur in the Committee's view that it is regrettable to have to admit that the Committee on Public Health of the State Society, as well as County Societies, has not been consulted about these matters during the period of investigation and during the construction of legislative bills.

We desire to express our appreciation of the great amount of work which the Chairman and Committee has accomplished during the past year, and well within the appropriation made to the Committee.

Knowing something of the prospective plans for the coming year, we wish to recommend that there be no change in the Chairmanship of the Committee, that the work of the Committee may go progressively on.

I move the adoption of the report.

Motion seconded and carried.

106. Cancer Prevention

Dr. Howland: The Reference Committee on the Report of the Committee on Cancer Prevention (Journal, May 1, Page 544) heartily endorses the report as printed, and we urge that the County Societies do devote, as the Committee recommends, one meeting a year on the subject of cancer and that the Committee consult with the State Committee in obtaining able speakers for such meetings.

We congratulate the Chairman in making such progress in the education of the physicians and the public.

I move the adoption of the report.

Motion seconded and carried.

107. Board of Trustees

Dr. Sobel: The Reference Committee's report on the report of the Board of Trustees. (Journal, May 1, Page 532.)

This Committee commends the report of the Board of Trustees on its management of the finances of the Society, and its handling of the Society's investments.

In these times of depreciation, too much care cannot be exercised in the selection of securities which meet the requirements of Trust Funds, and it is the opinion of this committee that the Board of Trustees have used all possible precautions as represented by their consultations with the different groups of experts, namely:

1. Financial Expert; 2. Banking House; 3. Brokerage Firm.

In the creation of three distinct trust funds the Board of Trustees have displayed excellent judgment for the future safeguarding of the Society's Financial welfare, as enumerated in this report.

1. Journal Fund; 2. Directory Fund; 3. The General Investment Fund.

The dovetailing of the Budget System of the three departments, namely, Executive Committee, Board of Trustees, and Treasurer, form an absolute check on our expenditures for the current year.

I move the adoption of the report.

Motion seconded and carried.

108 Report of the Treasurer

Dr Sobel Your Reference Committee on the Report of the Treasurer begs to submit the following (Journal, May 1, Page 534)

The Treasurer is to be highly complimented on his report of the finances of the society His reports show that the society is on a sound financial basis, and too much credit cannot be given to him for his tireless and unceasing efforts to effect the same

A thorough examination of the Treasurer's statement for 1930-1931 indicates that he has had a surplus of almost $16 000, which he and the Board of Trustees have invested most judiciously This item alone represents a sum of over $1 25 per member of the society, which is building up a surplus and which should be encouraged for the good of the society from a financial standpoint

Your Rerefence Committee wishes to comment upon the low cost of operating the business side of the society, which represents total disbursements for the years 1930 1931 of $158 896 57 and income of $178 660 75, making a net profit of $16 044 59, giving its members in return an excellent medical journal, an annual directory, post graduate courses, legal protection of the best quality, annual meeting, considerable protection against vicious legislation and other items too numerous to mention

We heartily commend the treasurer's policy of his budget methods and building up a sinking fund for the good and welfare of our organization

I move the adoption of the report

Motion seconded and carried

109 Public Relations Committee

Dr Cottis The Report of the Committee on Public Relations (Journal May 1, Page 545) stresses the necessity of medical men cooperating with all health agencies whether lay or governmental and their pushing forward to a greater extent than formerly the newer ideas in medicine relating to health measures and the prevention of disease We endorse this portion of the report and move its adoption with the understanding that the State Medical Society retain its leadership in public health matters

We endorse this section of the report and move its adoption

Motion seconded and carried

110 Principles for County Committees on Public Relations

Dr Cottis The Committee recommends the following principles to County Committees on Public Relations (Journal, May 1, Page 546)

1 The activities of each County Committee should consist in expanding the health work which is already being undertaken in the county by any organization as well as to initiate new measures

2 The members of each County Committee shall seek to establish intimate contacts with the leaders of every volunteer health organization in the county They shall not wait for invitations to cooperate with the lay organizations, but shall take the initiative if necessary, in proposing it

3 The Committee shall offer the advice and assistance of the medical profession as to the most practical ways of conducting any form of health service in the county, and if possible shall see that every health organization in the county shall include at least one local physician on its governing body

4 The State Committee on Public Relations is in the position to give consultation and advice to any county committee in caring for its problems in the field of Public Relations

We endorse this portion of the report and move its adoption

Motion seconded and carried

111 Conferences County Chairmen

Dr Cottis The committee emphasizes the importance and value of the conference of chairmen of County Public Relations Committees Journal May 1, Page 545), and feels that it justified the expenditure of money It recommends that the conference be continued every year We endorse this section of the report and move its adoption

Motion seconded and carried

112 County Hospitals Rules for

Dr Cottis The Committee has considered rules and regulations to govern county hospitals that are to receive State aid The following are the recommendations (Journal, May 1, Page 546)

1 All registered physicians residing in the county shall be eligible to membership on the staff Physicians residing outside of the county may use the hospital but cannot become voting members of the staff

2 From their number they shall nominate for election by the board of managers a medical board of not less than five members

3 The medical board subject to the approval of the board of managers and the State Commissioner of Health, shall have supervision and control of all medical service in the hospital This shall include appointments for the necessary, efficient and adequate surgical, medical, special and nursing services of the hospital the preparation of rules and regulations for the conduct of the professional work of the hospital and the formulation or whatever by laws seem necessary for the efficient conduct of its (medical board's) business

As indicated by this resolution, the committee was unanimous in feeling that every provision should be made to guarantee the privileges of these county hospitals to every practicing physician in the county

We endorse this portion of the report and move its adoption

Motion seconded and carried

113 Welfare Law, and Crippled Children

Dr Cottis In regard to the separation of the law relating to the medical care of the physically handicapped child and the public welfare law, the Committee on Public Relations offers the following conclusions (Journal May 1, Page 547)

1 That the intent of the laws is to have the State assist those who because of some physical or mental infirmity are not able to exercise their full privileges of citizenship to remedy or remove such infirmity,

2 That the State prefers to have such medical care rendered in the homes when practicable and possible rather than in State or County provided institutions Hospitalization for such surgical care is expected and for such purpose the local hospital is to be preferred,

3 That the immediate responsibility for the supervision and conduct of all such work should rest with the proper local body or official,

4 That the welfare officer when possible should employ the physician preferred by the indigent,

5 That the State Department of Health which is authorized to make examination of physically handicapped children should do so for the purpose of approving or disapproving the recommendations for medical treatment made by the court but should not express a preference for attending physician or surgeon nor refuse to honor bills submitted for work performed if charges are commensurate with those generally prevailing in that community

6 That the State should use its offer of assistance to encourage communities to take financial responsibility of the care of its wards and not to stress clinic work

where physicians and hospitals receive no compensation.

7. Every county society should, by resolution, present formal communications to the judge of the children's court and welfare officials offering the services of the members of the Society.

We endorse this portion of the report and move its adoption.

Motion seconded and carried.

114. Future Plans

Dr. Cottis: The Committee has outlined as a program for future work (Journal, May 1, Page 548) that it will seek a conference with representatives of Federation of Labor for the purpose of discussing the function of the physician in the administration of the Workmen's Compensation Law. It also proposes similar conferences with the Parent-Teachers' Association, the Farm Bureau and Home Bureau, Chambers of Commerce, the Women's Clubs of the State and the Conference of Mayors, for the purpose of developing a closer relationship with these various organizations and to bring to them the attitude of the medical profession toward the various health problems with which they may be concerned. We endorse this section of the report and move its adoption.

Motion seconded and carried.

Dr. Cottis: In view of the great amount of conscientious and painstaking work performed by this Committee under the Chairmanship of Dr. Sadlier, we highly commend its efforts and move a vote of thanks to the committee.

Dr. Cottis: I move the adoption of the report as a whole.

Motion seconded and carried.

The Speaker: Members of the House of Delegates, is there anything else to come before this House?

115. Revision of By-Laws

The Secretary: The following amendments to the Constitution and By-Laws adopted at the last Annual Meeting held in Rochester were referred to this Meeting for action.

By-Laws:

Chapter X, Section 10. *Amend to read:*

"At least one month before the meeting of the House of Delegates the Speaker shall appoint such Reference Committees as he shall deem expedient for the purposes of the Meeting. Immediately after the organization of the House of Delegates he shall formally announce the appointments to the committees. Only members of the House of Delegates are eligible for appointment on the Reference Committees. Such committees shall consist of five members, three members constituting a quorum, and shall serve during the meeting at which they are appointed."

Chapter X, Section 11. *Amend to read:*

"Reports of Officers and Standing Committees shall be printed at least one month before the meeting of the House of Delegates and sent to the members of the Reference Committee appointed according to Section 10 for their preliminary consideration. All recommendations, resolutions, measures and propositions presented to the House of Delegates and which have been duly seconded shall be referred immediately to the appropriate reference committee."

Chapter IX, Section 3. *Add:*

"The appellant must also state if he desires to be present in person or by counsel. In the event that the appellant shall so declare, he must file with the notice of appeal a bond in the sum of Five Hundred Dollars to cover the costs of said appeal. In the event that the appellant fails to appear, either in person or by counsel, after making the aforesaid declarations, he shall forfeit to the State Society such share of said bond as represents necessary expenditures incident to convene the Board of Censors on said appeal."

Chapter IX, Section 7. *Add:*

"The Appellant must also state if he desires to be present in person or by counsel."

Chapter II.

Omit "(d) Trustees" and substitute the letter (d) for (e).

Chapter III, Section 1.

Omit "Trustees" in first line and "Trustee" in second line from bottom.

Chapter II, Section 2.

Omit "Trustees" in third line.

I move that they be referred to the new Committee to Revise the Constitution and By-Laws.

Seconded and carried. (See also Sec. 81.)

116. Retired Memberships

The Secretary: The following gentlemen have been recommended by their County Societies, the recommendation being signed by the Secretary and President of each County Society for retired membership.

Felix Cohn, New York City; D. Bryson Delevan, New York City; Albert Warren Ferris, East Orange, New Jersey; George Henry Fox, New York City; Eli H. Long, Buffalo; John Middleton, Buffalo; George E. Munroe, New York City; Russel C. Paris, Hudson Falls; Willis H. Proctor, Peekskill; E. Benjamin Ramsdell, White Plains; William G. Telfair, Astoria; John B. Todd, Syracuse; Franz J. A. Torek, New York City; Frank T. Hopkins, New York City; Charles W. Geel, Berlin.

I move they be elected to retired membership.

Motion seconded and carried.

117. Remuneration of Dispensary Physicians

Dr. Sadlier: Whereas, at a meeting of the Coordinating Committee of the Five County Society of the City of New York, a resolution was offered and passed, that it was the opinion of this Committee that physicians working in dispensaries should receive remuneration, and

Whereas, this resolution was ordered referred to the Five County Societies for their consideration and action, and also to the Medical Society of the State of New York for consideration and action,

Be It Resolved, that it is the sense of the House of Delegates of the Medical Society of the State of New York that Dispensary Physicians should receive remuneration for their services.

The Speaker: Referred to Committee on New Business A (Sec. 121).

Dr. Bedell moved that the Assembly adjourn until 9 A. M. Tuesday morning, June 2, 1931. Seconded and carried.

(The House thereupon adjourned.)

Adjourned Session of the House of Delegates
Tuesday, June 2, 1931

The meeting was called to order by the Speaker at 9 A. M.

118. Roll Call

The Speaker: The Secretary will please call the roll.

The Secretary called the roll and the following delegates responded:

Frederic C. Conway, William P. Howard, Brayton E. Kinne, Lyman C. Lewis, Irving Smiley, Isidore J. Landsman, Edward R. Cunniffe, Cornelius J. Egan, Louis A. Friedman, Vincent S. Hayward, Jacob A. Keller, Edward C. Podvin, Frank M. Dyer, Arthur S. Chittenden, Joseph P. Garen, Louis F. O'Neill, Edgar Bieber, George W. Cottis, Reeve B. Howland, Earl W. Wilcox, Anton S. Schneider, Charles J. Kelley, Robert

Brittain, C. Knight Deyo, William A. Krieger, Aaron Sobel, John D. Bonnar, James H. Donnelly, Albert A. Gartner, Mary J. Kazmierczak, Charles Leone, Edward J. Lyons, Francis M. O'Gorman, Milton G. Potter, Charles C. Trembley, Sylvester C. Clemans, Milton P. Messinger, Howard C. Murray, Joseph D. Olin, Robert F. Barber, Elias H. Bartley, John L. Bauer, Siegfried Block, George I. Swetlow, E. Jefferson Browder, William Linder, Frederic E. Elliott, Edwin A. Griffin, Alec N. Thomson, John E. Jennings, Simon Frucht, Walter D. Ludlum, Joseph W. Malone, Charles T. Graham-Rogers, Harold R. Merwarth, Bernard Stattman, Nunzio A. Rini, Charles E. Scofield, James Steele, Luther F. Warren, F. Edward Jones, Lynn B. Chase, Charles R. Barber, Walter A. Calihan, Edward G. Whipple, Willard H. Veeder, Floyd S. Winslow, Horace M. Hicks, Everett C. Jessup, Louis A. Van Kleeck, Adelbert B. Allen, Emily D. Barringer, Henry W. Cave, Edward M. Colie, Jr., John Douglas, Ten Eyck Elmendorf, Julius Ferber, B. Wallace Hamilton, David J Kaliski, Samuel M. Kaufman, Frederick C. Keller, Samuel J. Kopetzky, Arnold Messing, William M. Patterson, Nathan Ratnoff, Morris Rosenthal, James W. Smith, Frederic E. Sondern, DeWitt Stetten, Joseph Subkis, Henry K. Taylor, Terry M. Townsend, Franklin Welkers, Frederick J. Schnell, Richard H. Sherwood, George M. Fisher, Hyzer W. Jones, Andrew Sloan, William W. Street, Frederick S. Wetherell, Albert G. Swift, Claude C. Lytle, Walter W. Davis, Joseph B. Hulett, Charles E. Padelford, Alva G. Dunbar, Floyd J. Atwell, Carl Goettiger, Edward A. Flemming, L. Howard Moss, James R. Reuling, Jr., Charles B. Story, Albert L. Voltz, Augustus J. Hambrook, John H. Reid, Oscar M. Race, Eugene D. Scala, George A. Leitner, W. Grant Cooper, Stanley W. Sayer, George S. Towne, Dudley R. Kathan, William C. Treder, David W. Beard, Allen W. Holmes, William M. Follete, Leon M. Kysor, Herbert B. Smith, Albert E. Payne, Arthur T. Davis, Luther C. Payne, George M. Cady, Luzerne Coville, Morris Maslon, Walter S. Bennett, Lucius H. Smith, Harrison Betts, Merwin E. Marsland, Romeo Roberto, William J. Doerfler, L. Hayden Humphrey.

The following Officers, Trustees and Chairmen of Standing Committees were present:

William H. Ross, William D. Johnson, Henry L. K. Shaw, Daniel S. Dougherty, Peter Irving, Charles G. Heyd, James Pedersen, John A. Card, Thomas P. Farmer, Frederick H. Flaherty, Arthur J. Bedell, James E. Sadlier, Charles H. Goodrich, Edgar A. Vander Veer, Augustus B. Santry, E. Carlton Foster, W. Ross Thomson, Harry R. Trick, James F. Rooney, Arthur W. Booth, Nathan B. Van Etten, Grant C. Madill.

The following ex-Presidents were present:

Martin B. Tinker, Thomas H. Halsted, Orrin S. Wightman, James N. Vander Veer.

119. Election of Officers

The Speaker announced that the meeting would proceed to the election of officers.

The Secretary announced the following tellers: Edward M. Colie, Chairman, Andrew Sloan, Louis A. Van Kleeck, Reeve B. Howland, Hyzer W. Jones, John Douglas, Aaron Sobel, Augustus J. Hambrook, Charles Leone, John E. Jennings, Walter A. Calihan, and Luzerne Coville.

Dr. Bedell: I move that the election of the Chairman of the Committee on Arrangements be referred to the Council.

Election of Officers

The following officers were elected:

President-Elect, Dr. Charles Gordon Heyd; First Vice-President, Dr. Charles C. Trembley; Second Vice-President, Dr. Harrison Betts; Secretary, Dr. Daniel S. Dougherty; Assistant Secretary, Dr. Peter Irving; Treasurer, Dr. Frederic E. Sondern; Assistant Treasurer, Dr. James Pedersen; Speaker, Dr. John A. Card; Vice-Speaker, Dr. George W. Cottis; Trustee, Dr. Harry R. Trick; Chairman of the Committee on Scientific Work, Dr. Arthur J. Bedell; Chairman of the Committee on Legislation, Dr. Harry Aranow; Chairman of the Committee on Medical Economics, Dr. Charles H. Goodrich; Chairman of the Committee on Public Health and Medical Education, Dr. Thomas P. Farmer; Chairman of the Committee on Public Relations, Dr. James E. Sadlier; Chairman of the Committee on Medical Research, Dr. Stanhope Bayne-Jones.

The following were elected delegates to the American Medical Association for 1932-1933: Dr. Daniel S. Dougherty, Dr. Nathan B. Van Etten, Dr. George A. Leitner, Dr. Samuel J. Kopetzky; Dr. Orrin S. Wightman; Dr. William H. Ross; Dr. James N. Vander Veer.

The following were elected alternates to the American Medical Association for 1932-1933: Dr. J. Richard Kevin, Dr. Charles H. Goodrich, Dr. Emily Barringer, Dr. Edwin A. Griffin, Dr. John H. Reid, Dr. Edward C. Podvin, Dr. Charles B. Story.

120. Saratoga Springs Health Resort

Dr. Towne, of Saratoga: Presented the following:

Whereas, the State of New York has undertaken an extensive program of development for the establishment of a cure resort at Saratoga Springs by means of hydrotherapy through the use of the mineral waters, and

Whereas, the State has already committed itself to this program by the investment of more than five million dollars, and

Whereas, the State Legislature has made a further appropriation of two million dollars for the erection of a research laboratory, drink hall, administration building and other equipment for the operation of the cure régime, and

Whereas, Governor Franklin D. Roosevelt has appointed a reservation commission, whose chairman is Mr. Noyes of Oneida, which is now actively engaged in working out the details of this development and régime,

Be It Resolved, That the Medical Society of the State of New York endorses this program of development by the State, and pledges its support for the success of the undertaking.

The Speaker: Referred to Committee on New Business C. (Sec. 122.)

121. Dispensary Physicians—Remuneration

The Secretary: I wish to read for Dr. Colie, Chairman of Committee on New Business A, the following report: (Sec. 117.)

Whereas, at a meeting of the Coordinating Committee of the Five County Societies of the City of New York, a resolution was offered and passed, that it was the opinion of this Committee that physicians working in dispensaries should receive remuneration, and

Whereas, this resolution was ordered referred to the Five County Society of the State of New York for consideration and action,

Be It Resolved, that it is the sense of the House of Delegates of the Medical Society of the State of New York that Dispensary Physicians should receive remuneration for their services.

I move the adoption of this recommendation.

Motion seconded and carried.

122. Saratoga Springs Health Resort

Committee on New Business C: Approves of the resolution that the Medical Society of the State of New York endorses the development and establishment of a cure resort in Saratoga Springs by means of hydrotherapy through the use of mineral waters.

I move its adoption.

Seconded and carried

123. PRIVILEGE OF THE ASSEMBLY ROOM

Dr. Rooney moved that the House rescind the action taken at the session of June 1 (Section 16), regarding the exclusion from the room of a supporter of a bill adverse to the interest of the medical profession and the welfare of the public.

Motion was seconded and carried.

124. RESOLUTIONS OF THANKS

The Secretary: I move that a vote of thanks be extended to the Committee on Arrangements and its subcommittees, together with the Onondaga County Medical Society for their hospitality and courtesy in furnishing entertainment for the members of the Society and for the attention and efficiency in which they have conducted all the arrangements for the meeting.

Seconded and carried.

The Speaker: Members of the House of Delegates, we are about to conclude our deliberations. Mr. Secretary, is there anything left undone?

The Secretary: Nothing to my knowledge.

Dr. Rooney: I move this House adjourn sine die.

The Speaker: I declare the 125th meeting of the House of Delegates adjourned without date.

JOHN A. CARD, *Chairman Speaker*
DANIEL S. DOUGHERTY, *Secretary.*

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Wisconsin, Graduate Courses 725
Medical Licensing Bill 722
Workmen's Compensation, Agreements in Broome County 590
and Governor's Committee 652
Woman's Auxiliary in North Central States 794
Women's Medical Society 782

BROOME COUNTY

The regular monthly meeting of the Broome County Medical Society was held on May 29, 1931, in the Art Gallery at the Hotel Arlington. Dinner was served at 7 P. M. About fifty members were present.

Dr. Victor W. Bergstrom of the Kilmer Pathological Laboratory, and Dr. Katherine B. McInnis of 120 Oak Street, Binghamton, were elected to membership; Dr. C. E. Rowe, of the Syracuse State School, was reinstated; and Dr. Mark W. Welch, of 207 Washington Street, Endicott, was proposed for membership.

A letter was read from Dr. E. S. Steblen, Secretary of the Binghamton Psychiatric Society inviting the Broome County Medical Society to be its guest at the Spring Meeting which is to be held on June 15th at the Binghamton State Hospital.

A communication was read from Senator Love in which he expressed his appreciation of a letter from the Broome County Medical Society complimenting him on his attitude towards the chiropractic and the osteopathic bills. Dr. Love further said in his letter that the Senators expected the medical profession to offer some constructive program.

The scientific program consisted of addresses by Dr. George E. Bennett, Professor of Orthopedics, Johns Hopkins University, Baltimore, Md., and Dr. Sydney R. Miller, Internist of Johns Hopkins and Union Memorial Hospitals, Baltimore, Md. Dr. Miller spoke on "Blood Stream Infections and Their Therapy." This title Dr. Miller said was a misnomer which he used purposely. Dr. Miller described the invasion of the body by infection as a trench warfare. He spoke at length on the various infections, their treatment, vaccines, and transfusions. The paper was most instructive and interesting and was highly appreciated by those present. The paper was discussed by Drs. George Bennett, C. M. Allaben, W. H. Hobbs, C. D. Squires, H. L. Johnston, U. S. Kann, F. M. Dyer, D. Molyneaux, S. H. Kinne and C. H. Berlinghof.

Dr. Bennett spoke on "Stiff and Painful Shoulders," and discussed the symptoms, differential diagnosis and treatment. The address, illustrated by lantern slides, was a most interesting one, splendidly presented, and greatly enjoyed by all present. It was discussed by Dr. Mary J. Ross, Dr. C. M. Allaben, Dr. W. H. Hobbs, and U. S. Kann.

HENRY D. WATSON, *Secretary.*

FRANKLIN COUNTY

The regular semi-annual meeting of the Medical Society of the County of Franklin was held in the John Black Memorial Room in Saranac Lake, June 10, 1931 A noon luncheon was served at Hotel Saranac, and a Business Session began at 2 P M

The following officers were present

Dr P E Stamatiades, President, in Chair
Dr H Beattie Brown Vice President
Dr G F Zimmerman, Secretary and Treasurer
Dr R G Perkins, Censor

Members present were Drs D M Brumfiel, E M Jameson, J F Eagan, F H Heise, E N Packard, H McL Kinghorn, J W Kissane, E S Welles, C C Trembley, J N Hayes and M A Wardner

Drs Kissane, Kinghorn and Packard were named a committee to nominate officers for the coming year

The following nominations were submitted and unanimously approved

For President, Dr H Beattie Brown
For Vice President, Dr J W Kissane
For Secretary-Treasurer, Dr G F Zimmerman
For Censor, for three years, Dr E M Jameson
Delegate to New York State Meeting Dr C C Trembley
Dr Robert J Beck was elected to membership

The business session was unusually active and many helpful suggestions were made and accepted

Dr C C Trembley reported the proceedings of the New York State meeting for 1931, which he attended as delegate, and stated that the meeting was uniformly harmonious and that in the main only routine work was accomplished (Dr Trembley had been elected first Vice President of the State Society)

It was regularly moved, seconded and carried that Dr Trembley and Dr Welles be added to the committee appointed by the Malone Staff of Physicians to confer with the Supervisors of Franklin County in an effort to secure payment for physicians' services rendered town and county cases under hospitalization The other members of the Committee are Drs Perkins, White and Welding

The fee suggested by the Workmen's Compensation Commission was adopted. It was regularly moved, seconded and carried that the President name a Public Relations Committee to arrange for pre-school clinics for Franklin County in those districts where clinics are not already held

Dr. Perkins, Chairman of the Cancer Committee, reported that he found many people who are eager to learn about cancer, and advised that at some time in the future considerable time should be given at one of our meetings to the subject of cancer Much discussion was given to the subject of physicians and surgeons services to county patients under hospital care, and all agreed that such services should be paid a reasonable amount

The scientific session was one of unusual interest, the papers all being of present-day progress, and carefully prepared

1 Common Fractures of the Spine and Their Treatment—Dr R G Perkins, Malone

This lecture was graphically illustrated by the use of X-ray plates and a cleverly assembled spinal column showing the mechanical events in the course of a fracture

2 Allergic Manifestations in Infants—Dr J W Kissane, Malone

This paper showed in a lucid manner the factor of diet in the prevention and cure of some of the alarming allergic explosions in the infant

3 Acute sub-clavicular infiltration—Dr J N Hayes, Saranac Lake

This was a highly instructive paper, illustrated by X-ray plates, showing the great importance of X-ray pictures in all cases of suspected tuberculosis of the lungs These X-rays frequently reveal active tuberculosis before any definite physical signs can be elicited

G F ZIMMERMAN,
Secretary

TRI-STATE CONFERENCE

Two representatives from New York, Drs Ross and Lawrence, participated in the eighteenth session of the Tri State Conference which was held in Philadelphia on May 23, 1931 Seven representatives were present from Pennsylvania and four from New Jersey

The program consisted of two papers Dr Ross I Patterson, of Philadelphia, President of the Medical Society of the State of Pennsylvania, spoke on "Our Responsibility for Public Education Regarding Comparative Costs of Sickness", and Dr Walter F Donaldson Secretary read a paper on "A Romance of Paternalism, referring to wastefulness in the treatment of war veterans Every representative present contributed to the discussion

GREENE COUNTY

The regular meeting of the Greene County Medical Society was held on May 18 at the Saulpaugh Hotel, Catskill. The Scientific session at 8 P. M. was preceded by a dinner.

Dr. Atkinson, the President, presided and the following members were present: Drs. Van Hoesen, Daley, A. O. Persons, Rapp, Honeyford, Waller, Van Slyke and Goodrich.

Dr. Thomas P. Farmer of Syracuse, Chairman of the State Committee on Medical Education; Dr. Edgar A. Vander Veer of Albany, President of the Third District Branch; Dr. Joseph Lawrence, Executive Officer of the State Society, and Mr. Henry Barker, Welfare Commissioner of Greene County, were guests.

Dr. Thos. E. McQuade of Coxsackie was proposed for membership.

A communication from Dr. Chandler, Chairman of the State Committee on Medical Economics, was read regarding an agreement between the insurance carriers with reference to fees for compensation cases. It was discussed by Drs. Honeyford, Rapp, Van Hoesen, Daley, Atkinson, Vander Veer and Lawrence. No formal action was taken.

Dr. Thomas P. Farmer then gave an interesting address on Cancer of the Female Generative organs and illustrated it by lantern slides.

At the request of the President Dr. Farmer at the conclusion of the discussion of his paper gave a resumé of what he had learned in his journeys about the State about County Health units.

Mr. Barker was next introduced and spoke on the administration of the Public Welfare Law in Greene County. This was discussed by a number of members and it seemed to be the opinion that we had a very able and conscientious Commissioner who was always ready to co-operate with the physicians.

A vote of thanks was given Dr. Farmer and Mr. Barker.

Dr. Daley, Chairman of the Committee on Public Relations, appointed Drs. R. F. Persons, Rapp, Van Hoesen and Sinclair as members of the Committee.

Dr. Goodrich moved that an assessment of $1.00 per member be levied to provide a gift for Dr. Willard on the completion of 40 years services as Treasurer of the Society. Seconded by Dr. Van Hoesen and carried. Drs. Honeyford, Rapp and the President were appointed to carry out this plan.

W. M. RAPP, Secretary.

ALLEGANY COUNTY

A luncheon and regular meeting of the Allegany County Medical Society was held at the Wellsville Country Club, May 28th, 1931, with the President, Dr. H. K. Hardy, in the Chair.

Papers by Dr. Douglas P. Arnold of Buffalo upon "Gastro Intestinal Disorders in Childhood" and Dr. J. Paul Rems of Belmont upon "Precardial Pain" were read and widely discussed.

It was voted that the delegate to the State Society be instructed to oppose any action of the State Society tending to favor any bill in the state legislature making compulsory the establishment of County health units.

Resolutions of regret and respect were adopted regarding the recent deaths of Dr. W. R. Harbison of Bolivar, and Dr. B. C. Wakely of Angelica.

Doctors Ethel B. Perry and Dorothy Gray of Belfast were accepted as members of the society.

LYMAN C. LEWIS, *Secretary.*

LEWIS COUNTY

A regular meeting of the Medical Society of Lewis County was held at the Carlowden Country Club, in Denmark, N. Y., on May 12th.

We gladly welcomed several members of the Jefferson County Medical Society who accepted the invitation to meet with us and hear Dr. Frederick S. Wetherell of Syracuse, N. Y., who presented the topic "Diseases of the Thyroid Gland" in such an interesting, instructive and conversational manner that none were cognizant of the passing time.

We take this opportunity to thank the members of the Jefferson County Medical Society for their thoughtful interest in our small medical organization, shown by inviting us to and making us feel at home at, their yearly post-graduate lecture courses.

F. E. JONES, *Secretary.*

BRONX COUNTY

A regular meeting of the Bronx County Medical Society, held at Elsmere Hall, on May 20, 1931, was called to order at 9 P. M., with the President, Dr. Gettinger, in the Chair.

The following candidates were elected to membership: Drs. Solomon P. Carp, Arthur F. Donofrio, Aaron M. Lefkovits, Hymen J. Mendelowitz, S. Jerome Rauch, Nathan Savitsky, and Charles Weinreb.

The Economic Program proceeded as follows:

Address:

"The Whys and Wherefores of Compulsory Health Insurance," Hon. Julius S. Berg, Senator —State of New York.

Discussion:

Dr. Linsly R. Williams, Director—New York Academy of Medicine.

Dr. Nathan B. Van Etten, Ex-President—Medical Society of the State of New York and Bronx County Medical Society.

Dr. Louis I. Harris, Former Health Commissioner—City of New York.

I. J. LANDSMAN, M. D., *Secretary.*

The Annual Meeting of the Bronx County Medical Society was held at Elsmere Hall, 170th Street at College Avenue, on June 17, 1931, with the President, Dr. Gettinger, in the Chair.

Drs. Aaron Herzog, Harold H. Levy, Nathan H. Rappaport and Isaac Schultz were elected to membership.

The following officers were elected for the ensuing year:

President ..... Irving Smiley
First Vice-President ..... William Klein
Second Vice-President ..... Maurice O. Magid
Secretary ..... I. J. Landsman
Treasurer ..... J. Adlai Keller

Board of Censors: Joseph H. Gettinger, Joseph Golomb, Milton J. Goodfriend, Edward R. Cunniffe, Harry Projector, Adolph Rostenberg.

Delegates: J. Lewis Amster, Edward R. Cunniffe, Cornelius J. Egan, Vincent S. Hayward, Harry Aranow, Louis A. Friedman, J. Adlai Keller, Edward C. Podvin.

Alternates: Benjamin Diamond, Samuel Feldman, Moses H. Krakow, Isaias A. Lehman, William Lenetska, Louis Nagorsky, Charles S. Rogers, Samuel Rosenzweig.

Resolutions on the death of Dr. J. B. Cohen, a charter member of the Society, were adopted by a rising vote.

Dr. Magid, for the Committee on Medical Economics, reported as to Hearings of the Labor Department on Compensation Cases and of the Arbitration Committee.

Dr. Aranow, Chairman of the State Legislative Committee, reported as to the advisability of our Society opposing those legislative candidates who have supported bills against the interests of the public health.

Dr. L. A. Friedman, Chairman of the Committee on Public Health and Medical Education, reported that the Committee, in conjunction with the Bronx Tuberculosis and Health Committee, has been making every effort to have the examination of school children done by the family physician instead of the school doctor. The Department of Education is cooperating in our endeavors to send letters from each of the public and parochial schools of the Bronx urging the parents to take their children to their physician for examination before admission to school.

Dr. Benjamin introduced a Resolution endorsing the Schedules of Salaries submitted by the Public Health Officers' Association of the City of New York requesting increases to Clinic Physicians, Medical Inspectors, Dentists, and Veterinary Surgeons in the service of the Department of Health. This Resolution was put to vote and was unanimously adopted. The Secretary was instructed to communicate with the Mayor, appealing for the approval of the Board of Estimate and Apportionment.

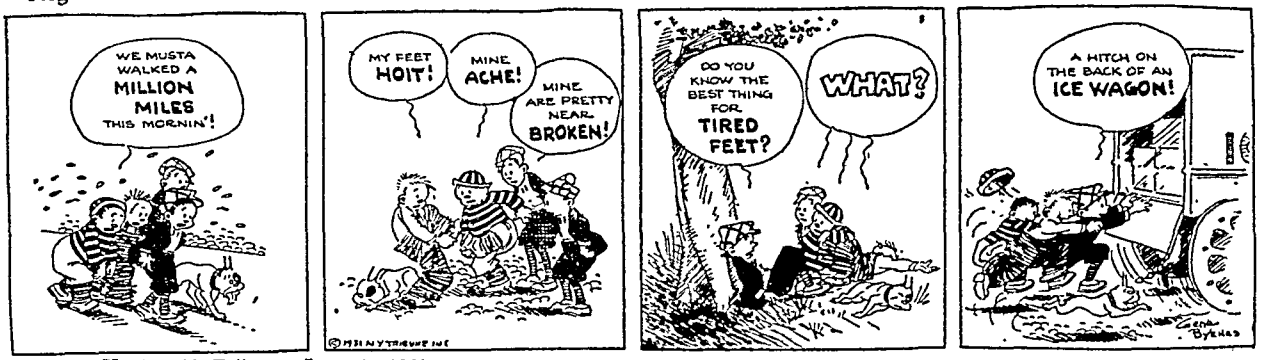
The scientific program of the evening then proceeded as follows:

1. "Contributions of Medical and Other Sciences," Joseph H. Gettinger, Retiring President.
2. "Tibet—The Forbidding Forbidden Land" (Illustrated with Motion Pictures), Gene Lamb.

I. J. LANDSMAN, M.D., *Secretary*

THE DAILY PRESS

Reg'lar Fellers — Very Soothing — By Gene Byrnes



From N. Y. Herald Tribune, June 1, 1931.

TEACHING HEALTH BY EXAMPLE

Instruction in the theory of health is obligatory in the public schools of New York State, but teaching health by practice is voluntary. The New York Sun of June 8 has the following editorial comment on conditions in the schools of New York City:

"New York city's school masters and mistresses instruct their pupils in hygienic habits. But the city does not practice what the instructors preach; a student on his way from a class in 'health education' to the lunch room can find no facilities for washing his hands. The Board of Education, for reasons of economy, supplies neither soap nor towels; in the few schools where these are available, the cost is borne by the parents' association or some similar organization.

"This condition will be remedied, however, if the school board follows the counsel of the Board of Superintendents, which has recommended that the budget for next year include an appropriation for soap and paper towels for all schools. 'Handwashing facilities,' reads the recommendation of the superintendents, 'are as essential and justifiable in any school as are books, paper and pencils.'

"Installation of soap and towel service in the public schools has been advocated for years. The latest mention of the matter was made a few days ago by the Joint Committee on Education, which reported on conditions in the Harlem schools. Medical societies, parents, teachers and principals have protested that the entire health education program in the schools was at times vitiated because children had no means for washing the dust and grime of the classroom from their hands.

"The stock answer has been that the children would waste the paper towels. Accordingly, experiments have been carried on with hot-air drying apparatus. To install such apparatus in old schools, however, would probably be more expensive than to distribute paper towels. As for waste, it is estimated that the proposed service would cost $60,000 a year; the entire sum could easily be saved by watchfulness in the purchase of but one school site a year."

THE NEW YORK HOSPITAL

The New York Hospital will be the nucleus for the new Cornell Medical Center, just as the Presbyterian Hospital is for that of Columbia. The New York Times of May 27 says editorially:

"The New York Hospital, which has been from its foundation, in 1791, a teaching hospital, is at the threshold of one of the most stupendous undertakings for the sick and for teaching and medical research. Its majestic new buildings, filling three blocks immediately north of the Rockefeller Institute for Research, between Sixty-eighth and Seventy-first Streets, and rising like white cliffs from the edge of the East River, are as mighty a fortress against disease as is the Medical Centre on the west

side of the island. The part-time staff will be composed of men who are also in private practice and are considered essential both in their linking the hospital to the community and to the general practice and in their influence upon the full-time members and the students. Their professional attainments and their value as teachers will determine their appointment.

"'The Mother of Hospitals' is thus in its varied service to continue to hold the place in the community which age alone could not have assured it. The generous gifts of many have helped to make the physical provision possible; but, except for the deep interest and foresight and the munificent legacies of the late Payne Whitney, what is now a certainty could hardly have been more than a hope or a remote possibility."

STANDARDIZING DOCTORS

The following editorial from the *New York Herald Tribune* of May 27 will be approved by family doctors:

"The idea that the family physician is being squeezed out of existence by the specialist on the one hand and group practice on the other has been answered very effectively in a speech to the Medical Society of the County of New York by Dr. Wingate M. Johnson, of Winston-Salem, N. C. It is an idea which stems from the notion that standardization, the watchword of modern civilization, can be stretched to include personal service as well as commodities. Dr. Johnson, in dispelling it, puts the community under obligation to his common sense. Here is the gist of his argument:

"The basic defect in comparing the medical profession with merchants and manufacturers is that doctors are dealing with human beings rather than machines; and human beings are individuals and simply refuse to be standardized. The parts of one Ford car will fit a million other Fords; but no two human beings are exactly alike. To overlook the human equation and attempt to treat people as animated machines is to invite failure.

"In other words, no doctor can fulfill his function unless he knows his patients intimately, since each, whatever his ailment, presents a problem by itself. The specialist, to be sure, has his place as an authority in a narrow field who is valuable as a supplement to the general practitioner. So have those institutions or corporations, public or private, to which certain categories of invalids may repair for treatment as to a cafeteria. But the bedrock of the profession will still continue to repose in those devoted men who make it their business in life to minister to individuals regardless of what ails them.

"The truth of Dr. Johnson's remarks is not confined to the practice of medicine. Personal idiosyncrasy has set a limit to standardization beyond which it ventures at its peril. This limit may vary with the type of service involved, but even the merchant and the manufacturer have been made aware of it. The individual is still supreme in the world, and long may he wave!"

A NEW BEEF ANIMAL

The people of the United States are becoming accustomed to reindeer steaks from Alaska, and now they may possibly be offered meat from a new hybrid animal. *The New York Times* of May 26 says:

"When the animals marched into the ark two by two there was not a galoyak in the line-up. His absence, however, was no reflection on his value, for that historic launching took place before his time. He is a parvenu of such recent date that he has not even yet made his appearance in cross-word puzzles. But he is so valuable that, since no galoyak existed, one had to be invented.

"He is a scion of the Yak family, and of truly eugenic breeding. Yaks have long flourished in subarctic regions, leading satisfactory lives except for the fact that they do not provide appetizing food for subarctic peoples. In Canada the experiment was made of mating them with buffaloes, but their progeny still made tough eating. Later, in Alaska, the experts evolved a scheme for inter-marriage between yaks and Galloway cows. The resulting hybrids were a huge success. The young galoyaks have the stamina to withstand the rigors of the cold climate, and also provide tender cuts of meat for Alaskan dinner tables."

BOOK REVIEWS

COAL-MINERS' NYSTAGMUS. By G. F. HAYCRAFT, M.R.C.S., L.R.C.P 12mo of 15 pages. New York and London, Oxford University Press, 1931. Paper, 30c. (Oxford Medical Publications.)

Here is a little monograph dealing with the practical aspects of miners' nystagmus. It is evidently written by a man who has had experience. The English ophthalmologists seem to have coal-miner nystagmus experiences quite often. We do not. It is doubtless because we do not have so many of these cases even in the great coal mining regions. There have been a number of studies on the subject during the last year or so and in fact, the Government is exercising every effort to help out the workers. In some sections of Great Britain there has been an increase in the number of nystagmus cases.

While we do not expect to see many or any, for that matter, of these eye-jumps, it is well for ophthalmologists and neurologists to peruse the 15 small pages of this booklet, for it will give them ideas for differential diagnosis. We all need ideas. J. N. EVANS.

ROENTGEN INTERPRETATION: A Manual for Students and Practitioners. By GEORGE W. HOLMES, M.D., and HOWARD E. RUGGLES, M.D. Fourth edition. Octavo of 339 pages, illustrated. Philadelphia, Lea & Febiger, 1931. Cloth, $5.00.

This book has met with such generalized success that within a comparatively short space of time the fourth edition now appears. It is written essentially for beginners and has been brought up to date, keeping pace with the ever-advancing science of Radiology that has now become such an absolute necessity for modern diagnosis. Any skilled technician can take radiograms, but only a well trained, experienced roentgenologist can interpret them properly. Better no radiologic study at all, than an incorrect interpretation.

The authors specifically state that no attempt was made to cover the subject completely, but rather to suggest and illustrate key cases to whet one's appetite for more thorough knowledge of such subject or subjects in which the particular individual is interested.

A thorough bibliography completes each chapter, the running down of which will more than satisfy the most zealous mind.

For a general survey of the subject, teaching purposes, and a lead for more detailed knowledge, one needs to look no further. Students and beginners will find a mine of information and the more experienced can readily brush up with its aid.

MILTON G. WASCH.

A TEXT-BOOK OF MEDICAL JURISPRUDENCE AND TOXICOLOGY. By JOHN GLAISTER, M.D., D.P.H., in collaboration with JOHN GLAISTER, Jr., M.B., Ch.B. Fifth edition. Octavo of 954 pages, illustrated. New York, William Wood & Company, 1931. Cloth, $8.50.

This book is a real delight to anyone interested in this subject; and considering the scope of the topics discussed, it could not fail to be of value to every physician. Under examination, there is a very illuminating article on finger printing, not found in all books on this subject. Two other chapters of marked scientific interest which are extremely well presented are death by suffocation, and by electricity and lightning. The part of the book dealing with toxicology gives all the information that any physician would desire.

J. F. W. MEAGHER.

INDUSTRIAL MICROBIOLOGY. The Utilization of Bacteria, Yeasts and Molds in Industrial Processes. By HENRY FIELD SMYTH, M.D., and WALTER LORD OBOLD, M.S. Octavo of 313 pages. Baltimore, Williams & Wilkins Company, 1930. Cloth, $6.00.

In this volume the authors have assembled an immense amount of practical information on the use of bacteria, yeasts and molds in industry. It is a working manual for the industrial bacteriologist. To the physician and the student of human pathogens, it will be of no practical value but a reading of certain portions will add to one's general knowledge, bring to light many curious facts and make one realize the vital role of micro-organisms in many industries and in the life cycle of man.

The authors discuss the part played by micro-organisms in the production of vinegar, lactic acid, various alcohols, glycerine, glue, gelatin, tanning of hides, preparation of such textiles as rayon and flax, ensilage and preservation of sugar, curing of tobacco, solidifying of rubber latex and commercial enzyme manufacturing. They also discuss the harmful effects of micro-organisms in spoilage and shrinkage of many products including foods. They give complete technical directions for work in industrial microbiology including a discussion of patents.

Micro-organisms seem to play an important part in nearly all industries with their possibilities not yet fully exploited. Among the curious facts found in this book were the following: cigarettes consist exclusively of fermented tobacco; Charlotte, N. C., operates motors with gas formed by fermenting sewage and progressive New Castle, Pa., makes gas for heating in the same way.

E. B. SMITH.

EPIDEMIOLOGICAL ESSAYS. By F. G. CROOKSHANK, M.D., F.R.C.P. Octavo of 136 pages. New York, The Macmillan Company, 1931. Cloth, $2.50.

In this book Dr. Crookshank has attempted to play the role of a philosopher. First, speculating on a problem about which we often wonder but into which we never delve, namely, Why Time Flies,—he later deals with the more familiar topic of watering places and climates for the treatment of disease and while he does not enumerate the distinctive virtues of this supplemental branch of medical therapy he implores his medical readers to be tolerant with such empiricism which he places on a par with cinchona in the treatment of malaria and its derivative, quinidine, for heart disease. He concludes this chapter by reminding us that "the laboratory by itself is bound to fail . . . but when we do prosecute observations in the field of Nature we are not quite so confident of attaining ultimate explanations as are our valued colleagues of the laboratory."

He discusses some practical problems of influenza by stressing on the telluric and cosmic influences which he considers to be quite as important as the microcosmic standpoint in the interpretation of that disease. There is a chapter on the treatment of encephalitis lethargica which tells us about everything that could be done for the patient except the specific agent about which we do not know. And after this energetic but futile dissertation he concludes that it "would be foolish to give any statistical impressions of the results of treatment conducted on these lines."

The chapter on pneumonia is very short but especially interesting because it depicts a distinct change in the trend of medical practice. He maintains that the "average case of pneumonia, influenzal or otherwise, was better and more wisely treated on the whole thirty years

ago than today ' because in those days the importance of the individual was paramount while today we deal in groups or in statistics It is not uncommon for the present day physician after diagnosing an ailment as pneumonia to find the patient shipped to a hospital on the advice of neighbors or friends with the consequent added danger due to transportation as well as the inherent increased hospital mortality rate as compared to the home to which one has been accustomed

EMANUEL KRIMSKY

MICROBIOLOGY AND ELEMENTARY PATHOLOGY For the Use of Nurses By CHARLES G SINCLAIR, B S, M D Octavo of 362 pages, illustrated Philadelphia, J A Davis Company, 1930 Cloth, $2 50

Those who have had experience teaching nurses pathology and bacteriology realize the need for a text book which will give a 'suitable perspective of these subjects" and yet not burden the student with the ' frightening depths of the average medical text-book

In the opinion of the reviewer this book is answer to the call Parts I and II deal with microbiology, presented in a concise, practical and comprehensive style The insertion of laboratory methods of diagnosis of each organism under consideration and the vivid illustrations each of which tells the story of the pathology produced by these organisms amplifies the long descriptions given in other texts These features induce receptivity on the part of the student nurse who would otherwise be bored by long chapters of reading matter

The laboratory exercises undoubtedly convert the subject matter which would otherwise appear to the student as an abstract philosophy into a practical subject.

Section III, on Elementary Pathology, deals with representative pathological processes which are essential for the student nurse This section includes clinical pathological methods with which the nurse should become acquainted in order to properly equip herself for her duties in medicine A better text book cannot be found on the library shelf of a nurse's home

SILIK H POLAYES

A HANDBOOK ON DISEASES OF CHILDREN including Dietetics and the Common Fevers By BRUCE WILLIAMSON, M D M R C P 12mo of 290 pages, illustrated New York, William Wood & Company, 1931 Cloth, $3 50

This is a compend on diseases and conditions that affect infants and children

Only a few paragraphs are given on each subject—in fact a few pertinent facts as to onset, symptoms, diagnosis and treatment

It is really too brief to be of practical value to a well trained physician whose practice includes infants and children T B G

INFANT FEEDING IN GENERAL PRACTICE. By J V C BRAITHWAITE M D, M R C P 12mo of 140 pages New York, William Wood & Company, 1930 Cloth, $1 75

This little book, as its name implies is written for the general practitioner and contains much sound advice

The emphasis laid on breast milk feeding throughout the book is unusual, and may well be taken as a model for many of us to follow

The basic elemental figures for computing modified milk formulas correspond very closely to the American method In fact, they have their origin from America

There is much common sense reasoning and one who follows the advice cannot go far wrong

It is brief, sound, and well worth while

A D SMITH

THE TREATMENT OF CHRONIC DEAFNESS by the Electrophonoide Method of Zund-Burguet By GEORGE C CATHCART, M A M D Second edition 12mo of 111 pages, illustrated New York and London, Oxford University Press, 1931 Cloth, $1 50 (Oxford Medical Publications)

One of the most discouraging phases of otologic practice is the treatment of chronic deafness, especially the type due to auditory nerve disease Dr Cathcart describes in an able and convincing manner his experiences with 665 cases treated by the Zund-Burguet method during a period of seven years and states that 65% of his cases have been improved He does not speak of cures but of functional improvements especially in stubborn forms of accompanying tinnitus The instrument employed is an electrical device known as an electrophonoide which by reproducing as far as possible the same kind and number of vibrations as are contained in the whole range of human voices electrically re educates the ears with the sounds of the human voice

He offers no logical explanation for the beneficial effects by this method of treatment but asserts that it is as empirical as the use of quinine in malaria

The treatment of chronic deafness has been such a disheartening phase of otological practice that some encouragement in the form of such a treatise should serve as a welcome tool for further experimentation How often we find such helpless individuals subjected to frequent Eustachian tubal inflations to nose and throat operations, or to removal of questionable foci of infections with not the faintest iota of relief

EMANUEL KRIMSKY

MODERN METHODS OF TREATMENT By LOGAN CLENDENING, M D Fourth edition Octavo of 819 pages, illustrated St Louis, The C V Mosby Company, 1931 Cloth, $10 00

In this fourth edition, the first published in 1924, the plan of the book is the same, that is, to furnish an outline of all the methods of treatment used in internal medicine The first part deals with general therapeutics and the various methods of treatment, as those which employ drugs, diet, hydrotherapy, electrotherapy and other procedures

The second part on special therapeutics describes the application of the various methods of treatment to specific diseases

Some additions in this edition are the description of the use of desiccated stomach in pernicious anemia, of salyrgan, undulant fever, the use of parathyroid hormone in Paget s disease and of hyperparathyroidism

The book is convenient in its inclusion of many subjects not ordinarily found in one volume and the author has an original style of writing which is easy to read

W E McCOLLOM

A TEXTBOOK OF LABORATORY DIAGNOSIS with Clinical Applications for Practitioners and Students By LEWIS E OSGOOD, M A, M D, and HOWARD D HASKINS M D Octavo of 475 pages, illustrated Philadelphia, P Blakiston's Son & Co, Inc, 1931 Cloth $5 00

Laboratory Diagnosis" by Osgood and Haskins is a relatively short and comprehensive volume, intended to arouse the interest of the student, and to satisfy the needs of the practitioner in this field of medicine It expresses the views of the authors as taught at the University of Oregon The book is divided into two parts the first of which concerns itself with explanation of the theoretical foundations of laboratory diagnosis as applied to the various systems, the second is devoted to a technical description of the tests recommended The book is well illustrated As a whole the subject is handled efficiently, and should prove to be of value to both the student and practitioner

MAX LEDERER

OUR NEIGHBORS

MEDICAL TRENDS IN SOUTH CAROLINA

The modern tendencies in the practice of medicine are under discussion in every State Medical Society, and are frequently the subject of Presidential addresses. An excellent discussion of the subject is that of Dr. Kenneth M. Lynch, President of the South Carolina Medical Association given before the annual meeting on May 6, and reported in the May issue of the Journal of the State Association.

Doctor Lynch first refers to a definition of the field of medicine adopted by the British Government:

"Medicine deals not only with the cure of disease, but also with the proper development and right use of the human body in all conditions of activity and environment, as well as with its protection from disease and accident, and its repair."

Discussing the importance of curative medicine, Doctor Lynch says:

"At the same time that we have been actively reducing the number of diseases to be cured, we have been increasing the volume of measures to be used against those which now remain, to such an extent that curative medicine is now of much larger proportions that it ever was. . . . So far as the main body of the profession is concerned, curative medicine is, and will probably remain indefinitely, the major activity in medicine.

"The truth of this conception of curative medicine is not altered by the fact that some of the major troublesome problems which confront us today concern this field. . . . . We have encountered economic problems which are not solved to the liking of the profession or the public, and about which we are being harassed by those who would solve them for us on grounds which do not take the special character of service into account and which, therefore, are not only not acceptable but are at times provocative of resentment."

Discussing the practice of preventive medicine, Doctor Lynch says:

"Turning to the main consideration in the British government's definition of medicine—that it deals with the proper development and right use of the human body in all conditions of activity and environment, as well as with its protection from disease and accident, and its repair—we find reason for deep concern as to how the profession is to keep control of the broad field if this definition is to become of practical acceptance, as it apparently must.

"Within this lies a conception of a spread of preventive medicine to boundaries heretofore largely unthought of and probably not now to be visualized. I need only to refer to two largely uncultivated fields, those of the sciences of nutrition and of psychiatry, to bring to mind the wealth of ignorance in the very fundamentals of the preservation of health of the body and the mind with which we are still surrounded.

"At the present time we think of preventive medicine largely in terms of breaking the chain of sequence in the transmission of infection—and we have been disappointed many times in its impracticability. We have had only an occasional glimmer of light on the prospect of something farther back, something nearer basic than that, in controlling infectious disease. We have also vaccinated against the contraction of infection, and are still in trouble to make our vaccinations acceptable by the people.

"Our knowledge of the relation between malnourishment and disease is not such that we can speak with certainty even about those conditions, such as scurvy and rickets, concerning which we commonly express ourselves so confidently. To speak of feeding in its relations to other major conditions of disease which might be named or even to the control of structural development of the human being is only justifiable at the present in an acknowledgment that they are at least related in our ignorance of their fundamentals. When we call to mind the fact that the honey bee can vary the treatment, apparently the feeding, of its larval young so as to develop at will a fully matured female organism in the queen bee on the one hand or an unsexed female worker on the other, it is not unscientific to speculate on what the human might do in assuring proper conditions for developing its young and preventing the occurrence of deformities and of weaknesses during intra-uterine life. Pre-natal care, when attended to at all, is now constituted largely in the interest of the mother, that she may carry on through the period of pregnancy and delivery in a healthy state. In the scheme of nature normal motherhood is an incident in the main event of the production of fit offspring, and pre-natal care will come to have more reference to the proper condition of the child for its entry into the external world.

"It is particularly appropriate that such matters should be called to mind here for the purpose of recognizing the public participation which this State has undertaken in the study of nutrition; and that complacency in the Profession might well lose to it the guidance which should be in our

(*Continued on page* 856—*adv. xiv*)

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Literature based on seventeen years experience and covering the main features of the Hay Fever problem will be furnished physicians upon request.

We also invite correspondence upon specific cases in any locality.

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(*Continued from page* 854)

hands, might even nullify this splendid beginning or cause it to be side-tracked into unworthy channels in which its scientific purpose would be vitiated or destroyed.

"In the large territory of mental hygiene we have made so little progress that there are not more than a figurative handful of us who even understand the language of the few who have undertaken to enter it."

"To enter into further discussion of these and of other major problems, such as the influence of heredity, or the menace of cancer, perhaps might create an impression of pessimism contrary to a real feeling of optimism about the outcome which is as certain as it is that the profession is the agency responsible for the prolongation of life of our young through a more healthy and happy duration in the present generation over the past

"That there is any serious disposition to disturb the control of the whole of medicine by the profession I sincerely doubt. There is, however, an intense and growing interest in the public and in various agencies of it to bring about more activity in solving the live problems both professional and economic, of preventive and curative medicine. Failure on our part to take the directing lead or to give evidence of full cooperation in these movements has been and will be taken as selfish or headstrong balkiness.

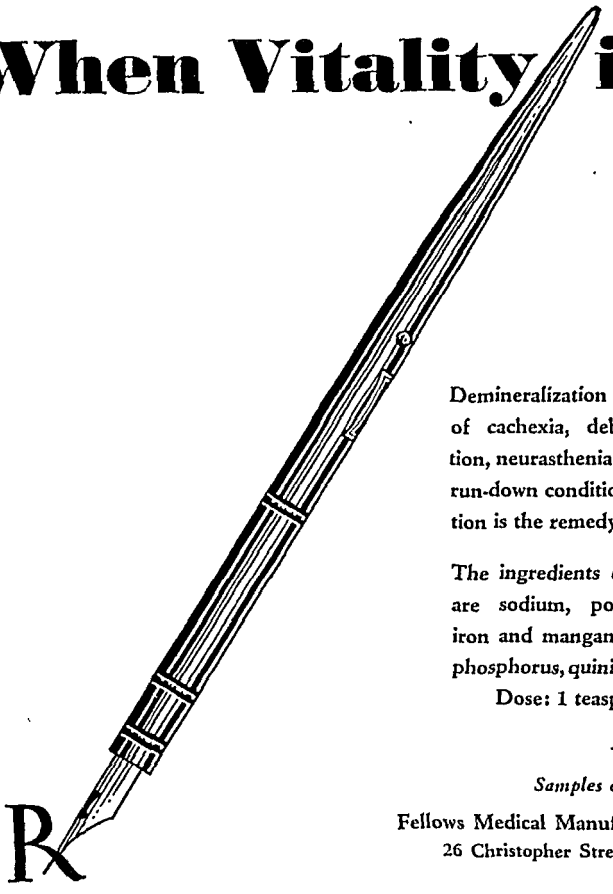
"Failure of leadership or blunt disagreement will take control out of our hands and will no only allow, but will demand, an extension of public medicine. The exhibition of a spirit of guiding cooperativeness should preserve our position of medical advisor and supervisor.

"That socialization of medicine in some form and to some extent seems inevitable to close students of the present trend is apparent. That it is the bugaboo which some profess to see, is not necessarily true. Whether it may be or not is dependent on the participation of the profession.

"We can visualize one form of 'state medicine' in which individual effort would be stifled and the progress of medicine stringhalted. Another kind can be visualized in which progress in knowledge and ability of the individual and of the whole would be stimulated.

"Take a page from military annals, the best defense is an active offense. The nature of an adequate and inclusive plan of an aggressive nature by medicine itself has not yet been formulated, and it may not be necessary or even possible for it to take the form of a definite unified plan of action. It is essential that we shall keep uppermost in our purposes the careful preservation of our position as medical advisor and as supervisor of the whole of medicine, no matter how broad the conception of the medical field may be."

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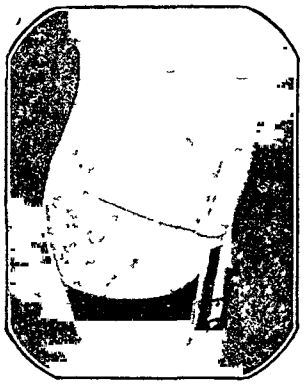
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MEDICAL PROBLEMS IN OKLAHOMA

The June issue of the Journal of the Oklahoma State Medical Association contains the President's address before the thirty-ninth annual session of the Oklahoma State Medical Association on May 12. The address was given by Dr. Henry C. Weber, who discussed some of the concrete problems of the medical profession of the State. After discussing the subjects of medical teaching and the care of crippled children, the President said:

"I think we should have a radical change in our method of handling the health department of our State. And in this statement I do not want to criticize our present health commissioner, who I think is doing everything possible to do for the State under the existing laws and practices. But we have in our Constitution a provision for a State Board of Health to be appointed by the Governor; but this has never been vitalized by the legislature, and the health department has become a political institution to be turned completely over with each incoming administration. I think the legislature should be asked to pass a law vitalizing that provision in the Constitution, so that the department may be taken out of politics and that a competent commissioner, thoroughly trained and qualified by experience to discharge the duties of this office and allowing him to remain in this position permanently, unless removed for cause. This would allow him time to organize each county health unit and would result in great good to the entire State in matters of public health and sanitation."

Concerning the care of victims of automobile accidents, Doctor Weber says:

"A serious automobile accident happens and a femur is fractured, perhaps compounded; the patient is rushed to the hospital and doctors called, *x*-rays are made and the necessary treatment given and the patient placed in bed where he must remain for several weeks. Now in 75% of the cases the patient is not financially responsible; but he gets the same care as he would if he were a millionaire. He leaves the hospital and sues the party responsible for the accident and gets a settlement and leaves. The doctors and hospitals never receive one cent for all their care as well as for the expense in caring for him.

"I think we should ask the legislature to enact some law that would protect us as the lawyers are protected. Or such as some states now have, Massachusetts for example, requiring any person who has an automobile to carry a certain amount of insurance which he receives from the state, and should be included in his payment of a license; or to pass a law making a doctor's and hospital bill a lien on any insurance or judgment he may receive, so that a claim may be filed, and the amount of the bill be deducted from his judgment and paid direct to the doctor."

(*Continued on page 859—Adv. xvii*)

(*Continued from page 858—adv. xvi*)

The certification of specialists is also discussed by Doctor Weber, who approves the Denmark plan, as follows:

"There is a general belief that any one putting himself up as a specialist in any one line should have had a minimum amount of training in that line before he can call himself a specialist. Many European countries have some such requirements Denmark seems to have the best plan, which is as follows: At the annual meeting of the medical association, a specialist committee is elected which consists of a member of the faculty of the University; a practicing specialist; a chief physician for a hospital; and a practicing physician from the country. Each member serves three years, and they work out the course of training for each specialty in consultations with the association of specialists in each field. The application for a specialist is made to the committee, and they must pass favorably upon it before any member may advertise as a specialist. This would protect the public from physicians who have become specialists overnight, and would also protect the physician who has spent much time and money to prepare himself to do special work, and he should be protected."

CRIPPLED CHILDREN IN OKLAHOMA

Oklahoma is justified in its pride in its care of crippled children described in the following report of the Committee of the State Medical Association, printed in the June issue of the Journal:

"The report of the work that has been done in the past year in connection with crippled children can best be presented by abstracting the findings as reported by the Secretary of the Oklahoma Society for Crippled Children. Considering the cause of orthopedic defects in children, the following general headings cover practically all the cases:

"1	Infantile paralysis	1147
2	Spastic paralysis	724
3.	Congenital defects of which club feet and harelip or cleft palate, or both, constitute a great majority	791
4.	Bone tuberculosis	198
5.	Osteomyelitis	235
6.	Arthritis	149
7.	Traumatic defects	328
8.	Miscellaneous which includes deformities of rickets, rare bone and muscle abnormalities, and tumors	225
	Total	3797

"It has been our experience that we are able to help a majority of the orthopedic cases that have been admitted. Some of the cases are very favorable for correction, providing that the diagnosis

(*Continued on page 860—adv. xviii*)



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(*Continued from page 861—adv. xix*)

ployed. There are also three such organizations without the State that are selling these contracts within Oklahoma through their fiscal representatives, one in Kansas, two in Arkansas.

"Inquiry has been made of both the American Medical Association and the American College of Surgeons as to their opinion concerning this practice. Both have condemned it as being contrary to the ethics of the American Medical Association.

"The question further arises as to whether or not there is any breaking of the Medical Practice Act of the State of Oklahoma in the actions of any of these individuals or corporations. Various angles of the question are being drawn up and submitted to the Attorney General through the State Board of Medical Examiners for an opinion."

HOUSE OF DELEGATES OF LOUISIANA

The form of organization of the House of Delegates of the Louisiana State Medical Society is similar to that in New York, and is commended by Dr. L. S. Lippincott, the fraternal delegate from the Mississippi State Association in the following report printed in the June number of the *New Orleans Medical and Surgical Journal:*

"Our Louisiana neighbors have a way of conducting the meetings of their House of Delegates which is a distinct improvement on our own method. The House meets on the day preceding the first day of scientific sessions and has the whole day to devote to business without interruption. During that day, practically all of the business of the Society is completed and no further meetings are required or held until the last day, when a short session completes the work. It might not be practical for us to devote a whole day to the meeting of our House of Delegates, but it might be possible to devote all of the first forenoon to business, thus avoiding the rush that sometimes occurs and the necessity of further sessions until the last day. It would probably insure better attendance of delegates.

"Further, in Louisiana, as with the American Medical Association, the House of Delegates is presided over by a speaker who is elected by the delegates and is usually re-elected from year to year over a considerable period. This custom relieves the President of the Society, who is otherwise always busy and may not always be best fitted for conducting a business session with dispatch and order. It also allows for the choice of a trained parliamentarian as speaker, who by re-election and service year after year learns all the 'ropes' and is able to make the House his business in the Association.

(*Continued on page 864—adv. xxii*)

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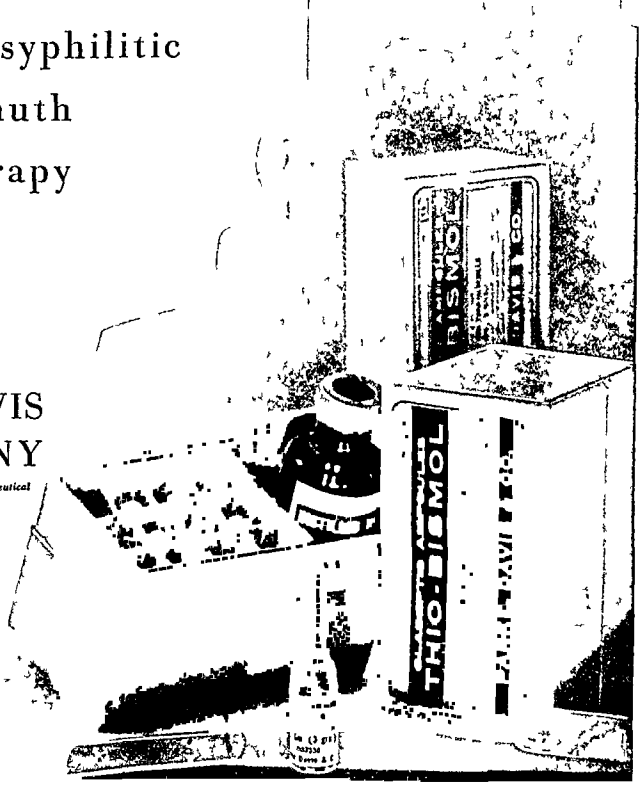
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(*Continued from page 862—adv. xx*)

"In the program of the Louisiana Society are printed the names of the delegates. Such a list sent to all members in advance, might serve to remind men who have been elected that they are expected to attend the meetings, and would be valuable for check at the meetings."

INTERNE MEMBERSHIP IN LOUISIANA

The May issue of the New Orleans Medical and Surgical Journal, the organ of the Louisiana State Medical Society, contains the following item taken from an address of Dr. C. G. Cole, retiring president of the Orleans Parish Medical Society (City of New Orleans):

"Our Board has made a concerted effort to have the State Society dues of seven dollars ($7.00) abolished, so far as Interne members are concerned, and have requested the Louisiana State Medical Society to give this proposal their earnest and favorable consideration. We feel that it is unfair to our Internes to require them to pay these dues, thereby making it prohibitive for them to avail themselves of the facilities offered by our local Society, where dues for internes are only one dollar ($1.00) per year. It is an appalling fact that out of over one hundred and thirty (130) Internes in this city only one interne is a member of our local and State Society."

The transactions of the House of Delegates of the State Society state that provision was made for interne membership.

BIRTH CONTROL IN RHODE ISLAND

The May number of the *Rhode Island Medical Journal* contains the following editorial on birth control from a Rhode Island point of view:

"The recent meeting in Providence sponsored by the American Birth Control League, and patronized by a distinguished group of intelligent, educated and altruistic citizens, both men and women, is an interesting evidence of the extension of this movement, which is gaining by leaps and bounds throughout the United States.

"That contraception is practiced among large numbers of intelligent people is no secret, especially to members of the medical profession. That the haphazard and unscientific attempts at this practice are ill advised and dangerous, and often defeat their own purpose is equa of parent.

"Accepting the fact that the public wi tinue contraception, it would seem that the liberal medical profession should welcon

(*Continued on page 865—adv. xxiii*)

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(Continued from page 864—adv xxii)

effort to direct such practice into scientific channels and provide only where indicated, the necessary information to further proper methods rather than the unscientific schemes of neighborhood gossip

"There are now seventy-two so-called birth control clinics throughout the country with the number steadily and rapidly increasing The American League, with the avowed program of providing properly supervised medical clinics and disseminating correct contraceptive knowledge to the over-burdened, underprivileged, and pathological mother, is at least putting the matter into better surroundings.

'Disregarding individual convictions whether of our own or promulgated by religious authority, contraception is definitely indicated in selected cases and would be a constructive step in decreasing hereditary diseases, lessening prostitution, reducing child labor, destitution, and the resulting need for charity. But if indicated, it should be under medical supervision and strict scientific pro- rather than that of over-enthusiastic or al lay organizations

h Control clinics have the virtue of selec- f cases, ethical advice, and medical spon- They do not countenance the charlatan ultist, and are a potent factor in the elimof the abortionist. These virtues at least commend them to liberal minded physi-

SYLVANIA EXHIBIT AT A. M. A. MEETING

April number of the *Pennsylvania Medurnal* has the following editorial on the t of the State Society at the A M A ig:

ie Medical Society of the State of Penn nia has reserved space in the Scientific bit to be held in connection with the 1931 on of the American Medical Association. hiladelphia, June 8 to 12 This exhibit, orized by the Board of Trustees, has been ned largely for the purpose of further iliarizing our own members, as well as the nbers of other State medical societies, with tried and proved accomplishments of our anization, such as our Medical Defense and dical Benevolence Funds, each of which has n established for more than twenty years l is functioning to the credit and satisfaction of all concerned. We shall also take vantage of the opportunity to display the ord of attainments of our Cancer Comssion, Mental Hygiene Committee, and mmittee on Public Relations

We hope that at least 3000 members of the dical Society of the State of Pennsylvania ll register at Philadelphia, and that many

(Continued on page 866—adv xxv)

HERE

is one of the advertisements of The Sugar Institute

THE advertisement reproduced here is one of the series appearing in newspapers throughout the country. In order to keep the statements in accord with modern medical practice, they have been submitted to and approved by some of the leading authorities in the field of human nutrition in the United States. The Sugar Institute, 129 Front Street, New York.

fresh vegetables
CAN BE MADE MORE tasty



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As you make your selection of vegetables remember that their distinctive flavor can be heightened with sugar

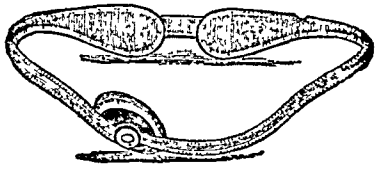
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(*Continued from page 865—adv. xxiii*)

will visit our exhibit. We again remind members that only Fellows of the Amer Medical Association are eligible to registe take part in the scientific transactions o visit the scientific exhibit, the latter exl being open only to those who have pr credentials."

COST OF OHIO STATE MEDICAL JOURNAL

The May number of the *Ohio State Me Journal* contains the following report of finances for the year:

Revenue:			
Advertising		$13,257.60	
Less Commissions	$928.34		
Cash Discount	453.08	1,381.42	$11,8
Circulation (or amount appropriated for the Journal			7,0
Miscellaneous			
Bad Debts Collected			
Total Revenue			$18,9
Expense:			
Journal Printing		$11,781.22	
Office Salaries		3,840.00	
Rent		1,500.00	
Journal Postage		543.60	
Telephone and Telegraph		230.91	
Depreciation		205.39	
Bad Debts		39.00	
Journal Envelopes		236.21	
Office Supplies		103.59	
Miscellaneous Expense		40.78	
Water, Ice and Towel Service		99.75	
Dues and Subscriptions		89.35	
Stationery and Printing		85.56	
News Clipping Service		71.50	
Stencils and Mimeograph Supplies		65.05	
Repairs and Cleaning		59.15	
Express and Delivery Service		20.09	
Halftones and Etchings		14.85	
Total Expense			$19,0
Expense in Excess of Revenue for the Year ending December 31, 1930			

MEDICAL SOCIETY ORGANIZATI IN MISSISSIPPI

The June number of the *New Orleans M cal and Surgical Journal* contains the preside address of Dr. E. F. Howard, on May 12, he the sixty-fourth annual session of the Mississ State Medical Association in which he discu

(*Continued on page 867—adv. xxv*)

(*Continued from page 866—adv. xxiv*)

the County and District Societies in a frank, intimate way.

Doctor Howard first discussed medical legislation as follows:

"Our laws regulating and safeguarding the practice of medicine did not come by chance, nor were they the gift of some inspired, lay legislator. Organized medicine brought them into existence at the cost of a great deal of time, thought, effort and money; and organized medicine alone can keep them on the statute books. The bigger and stronger we are, the better we can perform this duty."

"Last year a bill was introduced in the Massachusetts legislature that 'would have created a department of public medicine, to furnish to all citizens, without cost to them, complete medical service in all cases of sickness, accident and childbirth, including transportation to and from a hospital, maintenance in a hospital and all drugs, appliances and artificial limbs required.' (A.M.A. Bulletin, Oct. 1930). Rather comprehensive, was it not? Perhaps not without merit. But couple this with the amendments to our own practice act proposed at the last session of the Mississippi Legislature, and picture to yourself the state of affairs that will exist if such suggestions ever become laws."

Doctor Howard then described the organization of the components of the State Society in Districts and Counties and called attention to the laxity of the District Councilors in advising and inspiring the County Societies. He continues:

"Gentlemen of the Association: These matters are entirely in your hands. If you are satisfied with present conditions, turn over and go back to sleep; but if you want a real Association, an organization that will justify the proud pronouncement of the second article of the Constitution, you must wake up and see to it that these councilors and delegates get on the job. And if we are to have the success to which we are entitled, we must give some attention to the affairs of the component societies."

President Howard ends his address with a diagnosis of the conditions, but he wisely concludes:

(*Continued on page 868—adv. xxvi*)

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(*Continued from page* 867—*adv. xxv*)

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POLICY OF THE STATE JOURNAL OF MINNESOTA

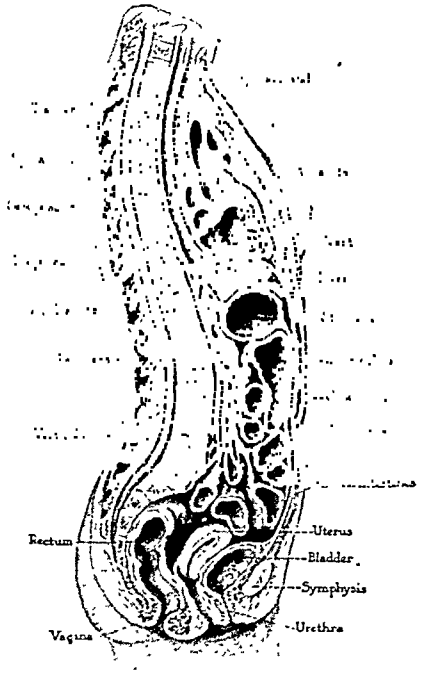
The May number of *Minnesota Medicine,* the organ of the Minnesota State Medical Association, contains the following statement of its policy, which is about the same as that of the other State Journals:

"The main function of a state journal and Minnesota Medicine in particular should be to make physicians better physicians. If we can share in accomplishing this objective, the existence of the journal is justified. To accomplish that end, we attempt to publish articles of scientific value. Our advertisements are selected from the same viewpoint. We believe that if physicians do their job well, they hav little to fear from encroachments on the par of the cultists and irregulars.

"The subject of medical economics is not new. Individual physicians have always been concerned with economic problems of one kind or another and always will. Individually and collectively we are and should be interested in the various economic trends affecting medical practice. One of the functions of a state journal is to give expression to views on the various phases of the subject. No article has ever been barred from our pages because it dealt with an economic phase of medicine. A perusal of back numbers of the journal will show that economic subjects are by no means conspicuous by their absence. Contributions on this phase of practice are welcomed.

"It is our hope, however, that Minnesota Medicine will never allow medical economics to outweigh the scientific side of practice in its pages. When a physician becomes more interested in financial returns than in scientific attainment, he has lost in his professional ideals. So with a professional journal."

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EDITORIAL POLICY IN WEST VIRGINIA

It has been the editorial policy of the NEW ORK STATE JOURNAL OF MEDICINE that derogatory criticisms shall be avoided in both the itorial and the news departments. Some her state journals do not hesitate to indulge criticism that is almost personal, as is own in the quotation from *Colorado Medicine* page 672 of the New York State Journal of ay fifteenth. However, the policy of the *West rginia Medical Journal* is similar to that of the ew York Journal, judging from the following itorial in the April issue of the West Virginia urnal:

"The Journal has found it bad policy to ake editorial comment on objectionable legslation. This publication has acquired a rather ide circulation throughout the state and its ibscription list is no longer confined strictly the medical profession. Consequently, it ocasionally falls into hands that are not exactly iendly toward the membership of the West irginia State Medical Association. On sevral occasions in the past, extracts from the ournal have been distorted and used in legislative propaganda aimed to break down our state medical practice act. Fortunately, such efforts have not been successful, but the Journal still thinks it unwise to make any statements here that might be twisted into a weapon and used by those, innocently or otherwise, who hover on the outer rim of medical practice. It should be sufficient to say that more than a dozen bills were dumped into the legislative hopper to lower the standards for the practice of medicine in West Virginia. The fact that not one of these bills was passed by either the senate or the house is a good indication that the ethical doctors of this state are held in high esteem by the two legislative bodies.

"The position of the Association and the Journal on all matters pertaining to medical legislation can be stated in quite simple terms. We stand for any and all measures that seek to improve the field of scientific medicine. We stand against any and all measures that seek to break down or to lower the standards that have been built up through sixty years of experience."

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THE VALUE OF RESEARCH

Modern medicine demands comprehensive facilities which are afforded only by extensive experimentation, a wide range of talent, a mass of experience accumulated from thousands of clinical tests. Scientific progress has brought new concepts in the treatment of disease; has given the medical profession a long list of products that bring relief from pain, promote comfort, and alleviate distress.

The value of research in industry has made itself felt in the many lines. It is exemplified in the medical field through the offering of Eli Lilly and and Company, who were privileged to co-operate with the University of Toronto and to make available the first commercial Insulin in the United States; who synthesized and investigated a barbituric acid derivative marketed under the name of Amytal; who, through cooperation with the Harvard medical group, marketed a specific for pernicious anemia known as Liver Extract No. 343; who were pioneers in the quantity production of ephedrine products; and who after long clinical trial, presented Pulvules Sodium Amytal to the medical profession for the preanesthetic preparation of surgical cases.

Few names connected with commercial organizations command greater respect among physicians than does the name Lilly, which identifies an institution in which will be found the closest affiliation of research with practice and the finest examples of the economic service of science.—See page xii—*adv.*

VICHY CELESTINES

The Medical Profession will be interested to know that the Vichy Company of Paris has given special consideration to the needs of the individual physician, wherever located, in obtaining supplies of Vichy water for himself and his patients.

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The Vichy Company of Paris has expended large sums on improvements recently completed, at the bottling establishment at Vichy, whence the famed natural mineral water from Celestins Spring and also from the Grande-Grille and Hospital Springs is shipped to all parts of the globe.

Many American doctors have visited Vichy in France and have been impressed by the fact that patients, while taking the cure at the baths and the springs, can while away the time enjoyably at golf, tennis and other sports and enjoy the unexcelled attractions of the Casino and the beautiful Opera House—See page xxvii—*adv.*

ANTIPHLOGISTINE

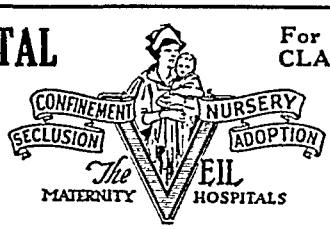
Many of the periodicals issued by pharmaceutical houses are mines of information, historical and cultural, as well as scientific.

The Bloodless Phlebotomist. Vol. VII, No. VI,—the organ of the Denver Chemical Manufacturing Company, Inc., is of unusual interest. Not only does it dwell on the uses of the company's product, antiphlogistine, but it devotes five pages to an illustrated article on "Anatomy in the Middle Ages," and two pages to reproductions of the famous cartoons as, a god, an angel, a man, and Satan, according to the stage of the illness of the patient." See page ii—*Adv.*

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THE ENDOCRINE GLANDS IN RELATION TO GYNECOLOGY; A REVIEW*

By LYNN LYLE FULKERSON, M.D., F.A.C.S., NEW YORK

KNOWLEDGE of the glands of internal secretion has increased with great rapidity during the past few years due to the efforts of many anatomists, biochemists and physiologists working in the laboratories of the universities, medical foundations, and commercial houses both here and abroad.

This knowledge is as yet far in advance of its clinical application. It has however, brought to the physician certain diagnostic and therapeutic uses with many others in prospect.

The activities of the various glands and the hormones that have been isolated from them are discussed in the literature chiefly by scientists with little or no clinical experience or a bias because of personal experimental work. It is after all the practicing physician who impartially decides the merit of all medical knowledge and the method of its application to the patient.

The purpose of this paper is to summarize the apparently proven facts concerning the different glands and hormones and give a clinician's view of their availability in the estimation of the constitution of women and variations from normal physiological processes as well as in correcting defects found.

According to Gudernatsch[1] the glands of internal secretion have certain physiological and histological features in common and their method of functioning appears the same, that is, through the production of a chemical substance or hormone which passes into the bloodstream and reaches a functionally associated organ and excites it to activity of a particular character.

Some of the glands if not all have definite chemical relationships to each other so that physiologically they form a system of interdependent units.

During the process of development, growth and differentiation the well regulated interaction of these glands brings about the formation of the normal organism.

"What regulates the endocrine glands?", is a question that cannot be answered. All of them must be considered as constituting an entity. Stockard[2] of Cornell University thinks that each individual inherits a peculiar endocrine make-up which cannot be altered but can be influenced.

The cerebrospinal axis, the automatic nervous system and the endocrine system function harmoniously together under normal conditions and but for external stimuli would doubtless maintain the balance and interrelationship inherited. The psyche affects the endocrine system, both the sympathetic autonomic and the vagal or antagonistic autonomic, which are closely related embryologically, influence it, the vitamins, which are of equal importance with the hormones modify it.

The most important glands concerned in female sex physiology are the pituitary, thyroid, adrenal and ovary, although the mammae must also be considered.

The Pituitary Gland. The pituitary gland has been shown to be of first importance in the gynecological field through its complete control of the ovary. It consists of four parts, the anterior lobe, the intermediate lobe, the posterior lobe and the pars tuberalis. The hypothalamus and the pituitary gland function dependently together. The anterior lobe appears to be the only portion that is essential to life. It yields four hormones or at least has four distinct activities. One, that of Evans and Long[3] of the University of California, stimulates growth and its deficiency results in infantilism. The second and third affect the ovary. The fourth influences pregnancy hypertrophy of the breasts and lactation according to Corner[4] or is metabolic or perhaps constitutes a fifth in Zondek's[5] diagram. Chiefly through the work of Phillip Smith[6] of Columbia University, Evans and Simpson,[7] and Aschem[8] and Zondek[9] the physiology of menstruation ovulation, impregnation and parturition has been found to be regulated by the influence of two of the four hormones of the anterior lobe of the pituitary.

Zondek terms one (prolan A) the follicle-rip-

*Read before the Broome County Medical Society, Binghamton, N. Y. April 7, 1931.

ening (Follikelreifungshormon) or ovulation hormone and the second (prolan B) the lutein-forming (Luteinisierungshormon) or luteinization hormone[10]. The former causes the development of a Graffian follicle in the ovary and the consequent and subsequent production of the follicle hormone or estrin as named by A. S. Parkes.[11]

Estrin produces growth of the uterine musculature with swelling of the endometrium and proliferation of its basal layers.[12]

The second anterior pituitary hormone causes the ruptured Graffian follicle to be transformed into the corpus luteum producing the lutein cells and the elaboration of two other hormones. That of Corner[13] of Rochester University produces the endometrial thickening characteristic of the premenstrual phase of menstruation or the formation of decidua if impregnation occurs and has been called by him progestin.

The second corpus luteum hormone, that of Hisaw[14] of the University of Wisconsin, produces relaxation of the pelvic ligaments in the guinea-pig with mobilization of the pubic bones. The name relaxin has been given to this hormone. It does not produce pregestational changes in the endometrium.

Zondek[15] summarizes a recent article as follows: "Ohne Hypophysenvorderlappen, ohne Vorderlappenhormone keine Sexualtätigkeit, keine Eireifung, kein Sexualrythmus! Ohne Vorderlappen Atrophie der Sexualorgane! Ohne Vorderlappen keine Konzeption! Bei Zerstörung des Vorderlappens Tod des befruchteten Eies!"

This may be translated, "Without the anterior pituitary lobe, without the anterior pituitary hormones no sexual activity, no maturation of the ovum, no sexual rhythm! Without the anterior pituitary lobe atrophy of the sexual organs! Without the anterior pituitary lobe no conception! With destruction of the anterior pituitary lobe death of the fertilized ovum!"

Kamm[16] and his co-workers have demonstrated that the pituitrin of the posterior lobe includes two hormones, alpha-hypophamine (oxytocin) which produces contraction of smooth muscle and beta-hypophamine (vasopressin) which has a pressor and a diuretic and antidiuretic action[17].

The posterior lobe controls sugar and water metabolism.

The hypothalamus rather than the pituitary has been shown by Smith[18] to regulate fat metabolism and its disturbance to cause obesity.

The Ovary: Three separate hormones have been found in the ovary but the action of only two is understood. Estrin is secretive in the follicle under the influence of prolan A, or the alpha hormone of the anterior pituitary gland. Progestin is secreted by the lutein cells of the corpus luteum because of the influence of prolan B, or the beta hormone, although the lutein tissue itself originates through the action of prolan A. Estrin produces the development of the endometrium which characterizes the interval phase of menstruation. It collaborates with progestin in producing the endometrium of the premenstrual phase. Menstruation results from degeneration of the corpus luteum through withdrawal of prolan B. If the ovum becomes fertilized the trophoblast cells are thought to form a hormone which stimulates the anterior pituitary gland to produce more prolan B, so that the corpus luteum goes on developing and the endometrium continues to grow under the continued influence of progestin. Labor results from failure of the trophoblast hormone.

The Suprarenal Glands: The suprarenal glands consist of two embryologically independent parts, the cortex which is derived from the mesoderm and the medulla which is derived from the ectoderm. The cortex is indispensable to human life. Recently Swingle[19] and Pfiffner of Princeton University and Hartman,[20] Brownell and Hartman of Buffalo University have prepared an extract or cortical hormone named by them cortin which will prolong the life of adrenalectomized animals indefinitely and has revived a moribund patient with Addison's disease.[21] It is given subcutaneously or intravenously in doses of 10 to 20 c.c. daily.[22] The isolation of epinephrin from the adrenal medulla by Takamine was an achievement the clinical importance of which is generally recognized. It is one of the three hormones the chemical composition of which is known. The other two are thyroxin from the thyroid gland and estrin from the ovary.[23]

The adrenal glands are not only essential to life but seem to be growth stimulating. The cortex appears to collaborate with the anterior pituitary in the development of the sex organs.

The medulla synchronizes with the pressor activity of the posterior pituitary. Both acting upon as well as in response to the influence of the vegetative nervous system, the medulla serves the individual in meeting emergencies.

Adrenalin reduces the coagulation time of the blood, increases the pulse rate and respiration, raises the blood pressure, increases the blood sugar, the blood lactic acid and basal metabolism.

With inadequate adrenals there is found a small cardiovascular system, low blood pressure, low blood sugar, prolonged coagulation time, and undeveloped genitals.[24]

The Mammary Glands: Corner[25] has recently shown that the proliferation of the mammary glands seen in pregnancy and lactation after parturition are the result of pituitary hormones.[26] He believes that the mammary glands must be first brought to full pubertal condition by the influence of estrin (ovarian follicle hormone) and finds that the luteal hormones are not necesary.

As yet no internal secretion has been isolated but it is likely that one or more exist as Can-

dela[27] has pointed out that injections of mammary extract may suppress estrus or change its rhythm, may produce atrophy of the ovaries and genital tract, may cause hypertrophy of the thyroid, breast, adrenals and the pituitary, increase weight and bring about sterility

The Thyroid· The function of the thyroid gland is to regulate metabolism De Quervain[28] ascribes to it the control and stimulation of tissue growth in general, control and stimulation of the functional processes of tissues, neutralization of toxic substances produced in the normal metabolism of the tissues and assistance in the defensive action of the organism against bacterial toxins

Specifically it controls oxidation, pulse rate and pressure, blood sugar, body temperature, brain and nervous system activity Through its vagus effect it regulates peristalsis perspiration and the flow of gastric juice.

Thyroxin, the hormone isolated from it possesses most of the activities of the whole gland One other hormone with no discoverable influence has been recognized and there is thought to be a third [29]

Abnormal Function Many instances of abnormal functioning of the glands of internal secretion are observed There may be an insufficiency of production of hormones because of hypoplastic, diseased or inhibited gland tissue, when the condition may be termed one of hypofunction, or there may be an overproduction of hormones because of overgrowth, new growths, diseases or over-stimulated gland cells, when the term hyperfunction best describes the condition, and again there may be a lack of balance between the several hormones elaborated in a gland, so that the term dysfunction or imbalance best describes the state of that gland

It is seldom that the physician can attribute the clinical picture to disturbance of a single gland for usually several are at fault

Furthermore, disturbance of function of the endocrine glands is only a part of a complicated functional derangement of the entire organism Neuroses are frequent Gastro intestinal derangements are usual The blood making organs are often defective, with resulting secondary anemia

Endocrine disturbance[30] of function may effect the generative organs by producing amenorrhea, oligomenorrhea, menorrhagia, metrorrhagia, dysmenorrhea or sterility

All these factors must be taken into consideration in explaining the menstrual disorders the hypoplasias and sterility

It is best to classify the clinical pictures according to the effects produced by insufficiency, overfunction or dysfunction of each particular gland

Abnormal Pituitary Function Following labor or abortion there is frequently observed a type of young woman who becomes obese, sometimes gaining a hundred pounds or more within a very short time After a period of amenorrhea of months or years she presents herself for examination She is found to have hyperinvolution of all the genital organs so that in some instances they resemble the infantile While the obesity is the result of disturbance of the hypothalamus, the genital hypoplasia results from anterior pituitary influence

These young women have oligomenorrhea or amenorrhea and with disappearance of the sex cycle, also sterility Enormous breasts are often present and since many times a history of a prolonged period of lactation is given the genital hypoplasia was formally termed lactation atrophy

This clinical syndrome is similar to that produced by Cushing[31] in female dogs by partial ablation of the anterior pituitary The experimental animals became obese the generative organs became hypoplastic and the sex cycle disappeared

The cause therefore seems to be an anterior pituitary deficiency

The even distribution of fat leads the clinician to suspect thyroid hypofunction rather than pituitary but the basal metabolism test fails to confirm the opinion since the rate is usually within the normal range

At puberty two types presumably due to pituitary insufficiency are observed One type is obese and resembles the postpartal picture just described The second type is that of the adiposogenital dystrophy of Frohlich

This girl is often tall and with long arms and legs She has delicate fingers, breasts enlarged to a disfiguring degree, a slender waist sometimes though not always she has marked fat deposits on shoulders abdomen, buttocks, and hips

Both puberty types have hypoplastic genitals and menstruate late, scantily, infrequently or not at all

Hyperfunction of the anterior lobe of the pituitary produces giantism or precocious genital organs and sex cycle before puberty and acromegaly if it develops after maturity

Abnormal Thyroid Function Thyroid hyperfunction may be accompanied by menorrhagia or oligomenorrhea or amenorrhea Excessive menstrual bleeding is seen more often

In my experience amenorrhea or scanty menstruation are more characteristic of thyroid hypofunction Menorrhagia is observed, however, in certain cases of hypothyroidism in which hyperplastic endometrium is obtained by curettage Here the hemorrhage is due to a persistence of the estrin effect as in puberty or climacteric bleeding although the thyroid is the primary cause [32]

Either hypothyroidism or hyperthyroidism are apt to produce sterility The influence upon the

ovary here is not clear. It may be through associated disturbance of the anterior pituitary and consequent failure of the pituitary hormones to activate the ovary in the normal elaboration of estrin and progestin.

Abnormal Ovarian Function: Hypofunction of the ovaries is observed in the amenorrheas following constitutional diseases and secondary anemias, also in dietary defects and accompanying disturbance of other endocrine glands.

Amenorrhea alternating with menorrhagia and metrorrhagia of ovarian origin may result from interference with function or disturbance of balance between the estrin of the follicle and the progestin of the corpus luteum. This clinical picture is often seen in women with retention cysts.[33]

Puberty bleeding[34] and the bleeding at the climacteric are apparently due to an ovarian deficiency. An absence of corpora lutea and a persistence of the Graffian follicle are reported by Novak[35] of Johns Hopkins University and others. The diagnosis of this condition is made by finding the characteristic Swiss-cheese pattern of the glands in the endometrium removed by curettage. The cause appears to be a continuance of the estrin effect without progestin activity since no corpora lutea are found in the ovary.

Abnormal Adrenal Function: Hypofunction of the adrenal glands, as observed in girls at puberty with Addison's disease, causes lack of genital development and failure of menstruation to appear. In adult women amenorrhea is often the earliest symptom of Addison's disease to be noted.

Hyperfunction in childhood is thought to produce precocious sexual development; in adult life it creates hypertrophy of the ovaries and exaggeration of the secondary sex characteristics.

Diagnosis: A complete physical examination of the patient including blood pressure is presupposed. Special note is made of the thyroid, the breasts, the distribution of fat and its amount in proportion to the stature of the patient, the degree of development of the generative organs, especially the uterus and ovaries.

If endocrine imbalance is suspected, laboratory aids are necessary. The most important is the basal metabolism test which measures thyroid activity. It is only accurate when performed by the Tissot method with outdoor air for inhalation as done by Dr. Bailey at the New York Post-Graduate Hospital and others, not room-air or oxygen. Every care should be taken to ensure that the test shows the patient's actual basal rate. The graveyards are said to be full of those operated upon because of improperly performed tests. Stander[36] of Johns Hopkins University and others have confirmed the normalcy of an increased basal rate during pregnancy. The average is quoted as high as thirty per cent above the normal non-pregnant woman in Baer's[37] series of cases.

Hemoglobin and blood morphology are important since most women with endocrine disturbance have a secondary anemia.

To appraise the pituitary, urinalysis, the blood sugar and a sugar tolerance test are required at the least and in some cases an *x*-ray study of the sella turcica.

Adrenal function is judged by hairiness, pigmentation, asthenia and the Addisonian syndrome.

Pelvic bimanual examination permits an estimation of the size and consistency of the ovaries. Retention cysts may explain a disturbed menstrual cycle, or a sterility.

Present Therapeutic Applications: These may be summarized briefly under hypoplasias, menstrual disorders, sterility and diagnostic tests.

Infantilism and Acquired Hypoplasia of the Genitals: As yet no standardized anterior pituitary hormone is available in this country although one is advertised in the German journals.

The gland substance given by mouth has little if any effect. If used at all it should be given in doses of 60 grains or more daily and the cost is prohibitive.

Ovarian substance is of little value given by mouth. Estrin given hypodermatically would entail too much expense and prolonged physical discomfort without appreciable clinical benefit.

If the basal metabolism is low, the administration of thyroid substance in indicated dosage offers most in these conditions.

Sterility: The correction of thyroid or pituitary insufficiency through weight reduction, where obesity exists; of hyperthyroidism by medical treatment or by operation; the correction of a hyporthyroidism by the use of the gland substance, or the correction of diet deficiencies, especially through the use of wheat germ with its vitamin E[38] may overcome a functional sterility.

After progestin becomes available, it may provide a method of preventing sterility and habitual abortion caused by excessive production of estrin, if such a functional cause exists, as now seems likely as judged from the work of Papanicolaou,[39] Parkes and Bellerby,[40] Corner and Allen,[41] and G. L. Kelly.[42]

Menstrual Disorders: Amenorrhea, hypomenorrhea, dysmenorrhea or menorrhagia may be corrected by the use of thyroid substance if the basal metabolism test shows its need.

Scanty and infrequent menstruation, amenorrhea and sterility all appear to be improved by reducing the weight of the obese regardless of the endocrine factor at fault. This should be done by diet where thyroid is not indicated, care being used to preserve a proper vitamin balance.

If anemia is present it requires correction. Estrin or ovarian therapy is not usually indicated since there is no advantage in forcing a woman to bleed until the cause of her disorder is removed.

Other Clinical Applications of Present Knowl-

edge The Ascheim-Zondek test is based upon the fact that a large amount of the anterior pituitary sex hormones are present in the urine during pregnancy. The concentration has been found to be approximately 10,000 mouse units per liter and begins immediately after fertilization of the ovum so that the test becomes positive as early as four days after the date of the expected menstruation

Ascheim and Zondek employ the following technique [43] Five female white mice weighing between six and eight grams and from three to four weeks old are injected with the slightly acidified morning urine of the patient in six divided doses varying respectively from 0 2, 0 25, 0 3, 0 3 to 0 4 c c The total quantity of urine injected varies from 1 2 c c in the first mouse to 2 4 c c in the fifth mouse On the first day the injections are given at 11 A M and 5 P M , on the second day at 10 A M , 2 P M , and 5 P M , on the third day at 10 A M At the end of four days, that is on the morning of the fifth day, the mice are killed and the ovaries examined with a hand lens and also by microscopic examination of serial sections blood-spots and yellow protrusions indicate pregnancy Investigating the accuracy of the test Parvey[44] found it in agreement with the clinical course in each of 191 cases This test is also positive with ectopic pregnancy, hydatidiform mole, and chorion epithelioma[45] and so becomes an important aid in recognizing these conditions

The Allen and Doisy test[46] for pregnancy is based upon the work of Stockard and Papanicolaou of Cornell University[47] and depends upon the demonstration of one mouse unit of estrin in 10 c c of a patient's urine The urine is injected into three castrated female white mice in five doses of 2 c c each over a period of two days Within forty eight hours vaginal spreads show changes characteristic of estrus If there is complete absence of leucocytes and mucus, and the smear shows only non-nucleated squamous cells or a preponderance of them, pregnancy is indicated It is a less reliable test than the Ascheim-Zondek test

The Siddall[48] test for pregnancy depends upon the effect of the anterior pituitary hormones and estrin in the blood of pregnant women, on the genital tract of immature mice and clinically is of less value than the other two tests

Clinical Applications in Prospect C F Fluhmann[12] of Stanford University has suggested a test based on the Ascheim-Zondek test for pregnancy which utilizes the blood of the patient and determines the presence of an abnormal amount of anterior pituitary hormones The test is positive in pregnancy, after castration by radiation or operation and after the menopause, also in certain women with menorrhagia and dysmenorrhea It should prove of value in determining the state of ovarian function

G L Kelly[49] of the University of Georgia has demonstrated that conception can be prevented in mature female guineapigs by the injection of a minimum dosage of 10 to 15 rat units of estrin, given immediately after copulation in divided doses of equal amounts over a six-day period Pregnancy of two weeks duration could be interrupted in practically all cases with a total dosage of 100 rat units

Animals pregnant four weeks were made to abort with a dosage of 100 to 150 rat units but with a high maternal mortality

In guineapigs pregnant 6 to 8 weeks from 300 to 1,150 rat units terminated pregnancy but resulted in the death of the mother Apparently these deaths were due to dystocia rather than to the injection of estrin

The conclusion then is that an excess of the follicle hormone (estrin) over the corpus luteum hormone (progestin) is incompatible with conception and with the continuance of normal pregnancy in the guineapig

A clinical application of this study to the problems of contraception and spontaneous and therapeutic abortion is a possibility of the future

Pharmaceutical Preparations Estrin may be obtained in ampules for hypodermatic and in some instances intravenous use, also as vaginal suppositories It is marketed by many firms under many names Doisy[23] of St Louis University and Butenandt of Gottingen both have produced a crystalline form of estrin ($C_{18}H_{23}O_2$)

Progestin is not yet available commercially in this country although a German product, "A corpus luteum hormone in oily solution," is advertised

Cortin is not yet obtainable except for experimental purposes

Several anterior pituitary extracts are to be had but as yet few are perfected so that one should use them cautiously, if at all Prolan A and prolan B are advertised as separated and standardized

Thyroid substance and thyroxin remain of widest application of all the endocrine products, although pituitrin is used extensively in obstetrics and the postoperative care of the surgical patient

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ORAL DIAGNOSIS OF IMPORTANCE TO THE MEDICAL PRACTITIONER

By SAMUEL CHARLES MILLER, D D S, NEW YORK, N Y

Prepared on the Occasion of the 100th Anniversary of New York University

The inter-relationship of medicine and dentistry is rapidly becoming evident in the minds of both practitioner and patient That many systemic conditions show oral manifestations and that local oral conditions may produce general disease has been continuously demonstrated At the New York University Clinic we have been recording hundreds of cases of rheumatism, neuritis, inflammatory arthritis, iritis, etc , which were improved or entirely cleared up with the removal of teeth showing definite rarefied areas at their apices However, the other oral possibilities related to general diagnosis have not been commonly stressed and are, therefore, very often omitted even in oral examinations

The story of the physician who advised the patient to take out all his teeth and was promptly obliged by the removal of a full upper and lower denture from the patient's mouth, is a common one, although not very instructive In this mouth, in spite of the fact that teeth failed to be present, the diagnosis may still be correct Radiographic examination of these edentulous areas reveal a surprising variety of conditions that may be related to the general disturbance (Fig 1) There may be impacted or unerupted teeth which are producing referred pains or are enclosed in a cystic membrane with a hematogenous infection present It is not uncommon to find these teeth entirely denuded of enamel in spite of the fact that they have never become exposed to the oral cavity We may find retained roots which have become entirely covered by bone and mucous membrane and which give absolutely no objective indications of their presence except through careful dental radiography The most important of these hidden areas, probably because it has been least stressed, is "residual infection" The occurrence of this has been recognized and emphasized by McCall [1] It has been found by observation of numerous cases that the extraction of a tooth, is not always the solution of the problem Very often a granulomatous or cystic sac is allowed to remain and although, admittedly, the majority of these are taken care of by the body resistance, it has been shown that these areas may remain for years sometimes even increasing in size and frequently acting as foci of infection At the clinic as well as at the office we have made it a point to remove these foci of infection with most gratifying results, when the general condition and the physician's advice warranted it

When the teeth are present I again find that there are many conditions which have not been sufficiently emphasized in their relation to unilateral or bilateral neuralgia The most important of these is traumatic occlusion or an improper biting balance, a condition which has been justly emphasized to the dental profession by Dr Paul R Stillman Due to the soft and cooked food diet which is becoming more and more common in civilized countries we find that the functional activity of the teeth is reduced and the biting surfaces do not receive the necessary attrition for occlusal adjustment The form of the newly erupted teeth is no more adapted to function in middle age than is the size and strength of the rest of the juvenile body When, due to insufficient function the teeth do not mill as age progresses, changes in the tissue around the teeth are rapidly manifested (Fig 2) This condition may also be brought on by improper dental restorations which change the line of occlusion, by extractions without placement of bridges (resulting in drifting), and, quite frequently, by the eruption of the third molars in arches not large enough to accommodate them This latter produces a forward pressure on the dental arch causing crowding, and disturbing the proper occlusion of the biting surfaces When traumatic occlusion is found in the presence of trifacial pain or referred neurotic symptoms it is best to have this feature corrected immediately This can most often be adjusted by judicious grinding by the periodontist but in some cases orthodontia and even extractions are indicated This special diagnosis should be placed in the hands of the dentist as early as possible

However, what is more common is to see this disbalance of the bite as a causative factor in periodontal disorders These disturbances are instituted quite early and I believe that the physician is very often the first to see them and should be able to determine their significance The perceptible loosening of the teeth and the flow of pus which have become synonymous with "pyorrhea" are the last stages of the disease and should be avoided if ideal results for the patient's benefit are to be courted

Nature has kindly given us a number of diagnostic signs, both clinically and radiographically, which, if we can read them, warn us sufficiently early of the approach of this unpleasant clinical picture The normal gingiva should present a healthy pink appearance which changes at a definite line (about 15 millimeters from the gum margin) to a distinctly darker pink at its junction with the alveolar mucous membrane The margin of the normal gingiva comes to a knife edge and festoons smoothly and symmetrically around the teeth A blunting of this margin or an irregularity in the marginal contour may be considered the initiation of periodontal pathology The healthy gingiva is not shiny and mucous but presents, rather, an appearance of stipling A



FIGURE 1—H. S., MALE, WHITE, AGE 36.

Sixteen film radiographic exposures of mouth in which the physician suspected focal infection of dental origin. The patient was referred to a dentist who placed bridges and crowns to fill in edentulous spaces. Six months after this, because all symptoms persisted, patient was referred for radiographic diagnosis. This revealed three impacted teeth and two pulpless teeth with periapical involvement. Removal of the three impacted teeth and the two suspicious non-vital teeth was followed by immediate cessation of general symptoms.

a—Impacted teeth.
b—Non-vital teeth with periapical involvement.
c—Non-vital tooth without periapical involvement.

It will be noted that all teeth appear in at least two exposures. The advantage of this is that we see each tooth from two angles and can thus arrive at a better interpretation without the interference of anatomical landmarks.

slight thickening of the marginal gingiva producing a shiny blunt edge is often the first definite clinical sign of a periodontal disturbance due to traumatic occlusion. This morphological change has been termed the "traumatic crescent" and appears at the margin of the gingiva opposite to the point at which the stress is being applied. If the disturbing factor is allowed to remain the gum margin thickens rapidly and forms a well outlined hypertrophy, very often without noticeable color change. This is referred to as festooning and is specially designated as "McCall's festoons" in deference to the man who first called attention to this diagnostic factor. Another most important manifestation of early periodontal disease is the appearance of "Stillman's Clefts." These are breaks in the margin of the gum which appear as if the edge were cut through with a

knife. These are due to traumatic stress on the tooth and, like our previous diagnostic factors, are due to an excessive pressure at a point on the tooth opposite to the lesion. Any deviations from the normal gum contour or color distribution should be considered carefully as they are most probably indications of deeper pathology.



FIGURE 2—M. L., FEMALE, WHITE, AGE 21
Photograph shows definite destruction of the tissue on the labial of the lower right central incisor. This is due to the strain being placed on this tooth alone in the protrusive or biting position

Although the aforementioned conditions are indicative of gingival disease they are the *initial* stages of periodontoclasia and therefore are not associated with any, but local symptoms. However, they indicate the presence of traumatic occlusion and call for its elimination to avoid more serious tissue damage.

Oral manifestations of many general conditions, especially of blood changes (purpura hemorrhagica, pseudo- and true leukemia, anemias, etc.) (Fig. 3), are often the first symptoms of the disease, and are quite commonly mistaken for Vincent's Infection. Various types of exanthemata, erythemas, and herpes, as well as dietary deficiencies show oral manifestations whose association with their mother illness is frequently overlooked. Syphilis, diabetes, nephritis and tuberculosis often show pathognomonic symptoms in the oral cavity. (Fig. 4) Pneumonia, measles and whooping cough may produce effects on the gums and teeth.

Vincent's Infection, then, cannot be confused with these if a few of its symptoms are related. First and foremost is the destruction of the interproximate papillae. This is accompanied by a rise in temperature, fetid breath, metallic taste, increased salivation and sometimes enlargement of the submaxillary and cervical lymphnodes.

Of all types of Vincent's Infection, the acute responds most rapidly to treatment, although the rationale does not differ for the acute, subacute or chronic types. I believe that all chronic cases of this disease have been acute at one time and, if treated at that stage, much unnecessary discomfort and tissue loss could be avoided. Although the abundance of the spirilla and fusiform bacilli in the tissue is important, their mere presence is not indicative of Vincent's Infection (phagadenic gingivitis). It has been shown that the organism is found in healthy mouths and I have seen it commonly associated with practically all lesions of the oral cavity where there is not an open freely washed surface. Although the Vincent's infection is usually seen in the presence of a Vincent's Angina we may have either occurring without the other. Since Vincent's organisms have been recovered in atypical forms of meningitis, mastoiditis, sinusitis, etc.; it is indeed valuable for the physician to be able to diagnose and hasten the eradication of the oral conditions. Vincent's Infection occurs quite often, nowadays, in the mouths of young girls due, most probably, to the prevailing habit of cigarette smoking and the common practice of excessive dieting, both of which tend to lower the tissue resistance.

Dietary disturbances, such as scurvy and rickets, produce oral manifestations. In rickets, because of its appearance so early in life,[2] the disturbance is usually manifested in the improper



FIGURE 3—V. C., FEMALE, WHITE, AGE 15
Gingival edema and discoloration associated with Purpura Hemmoragica.

formation or calcification of the teeth. Scurvy, on the other hand, appears as a gum condition showing a bluish bloating of the gingival tissue sometimes enlarging to almost cover the crowns of the teeth. (Fig. 5) The scorbutic gingivitis is not a rarity although it is seldom seen in its severe stages without general disturbances. It is

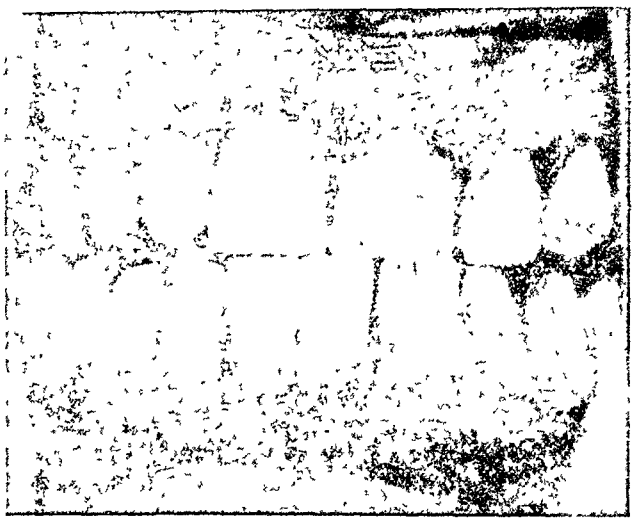


FIGURE 4—M. S., FEMALE, WHITE, AGE 15.
Gingivitis associated with diabetes. Radiograms of this case show considerable bone destruction, in spite of patient's age.



FIGURE 5—L. S., FEMALE, WHITE, AGE 43.
Scorbutic gingivitis. Note peculiar shiny appearance of tissue which is blue, bloated and easily injured.

most prevalent in New York among the Italians and Jews.

I have noted a decalcification of the teeth, most probably associated with a calcium-phosphorus disbalance, in housewives, all of whom claimed they ate whatever came to hand (which practically always turned out to be rolls or bread, and coffee). By insisting upon orange juice, milk and fresh vegetables in the diet, I have seen these arrested, although the destruction once produced, can only be repaired by artificial replacement. The patient is always referred to the physician for diet in any unusual cases, especially during childhood, pregnancy or lactation in order to avoid unpleasant sequellae of which the gingivitis and tooth dissolution are examples. It is important for the physician to impress upon the patient the value of a properly balanced vitamin-containing diet.

If this paper arouses a greater enthusiasm on the part of the physician for a closer relation between the medical and dental practitioner in the diagnosis of related conditions, I will feel amply repaid for my efforts.

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AMPUTATION OF THE LEG IN DIABETES

By R. FRANKLIN CARTER, M.D., F.A.C.S., NEW YORK, N. Y.

THE essential factors for the treatment of every patient with gangrene of the lower extremity and diabetes are present to a greater or less degree. And variation in the extent of these factors should determine the course of action.

Diabetes no longer can be given the position of dictator as to the surgery to be employed. Since the advent and use of insulin the diabetes can be controlled, and surgery therefore rests upon the two remaining factors: infection, and arteriosclerosis. The extremes of diabetes, acidosis and alkalosis are still encountered, but with less danger to the patient than before the use of insulin. Infection still materially influences the administration of insulin, but even in its extremes insulin and the proper administration of glucose may be expected to maintain the patient in the safety zone. Variations in the degree of diabetes are encountered to such an extent that the surgeon who is in association with competent medical assistance may almost disregard the diabetic factor. Keeping in mind only the extremes of acidosis and alkalosis and avoiding radical procedures when either of these states exist.

The presence of gangrene may be noted long before the surgeon is called in Its cause varies no doubt, but it is most certainly influenced by both arteriosclerosis and infection To what extend the diabetes, per se, contributes is doubtful One may contend that diabetes causes arteriosclerosis which in turn causes gangrene or that arteriosclerosis has caused the diabetes, and that the gangrene and diabetes are co existent in the same individual Whatever may have been the arrangement of the primary factors infection is sure to bring the request for consultation to the surgical department

When infection occurs in the presence of diabetes, arteriosclerosis and gangrene the surgeon quite naturally is not so much concerned with the early arrangement of the essential factors as he is with the present status of the patient, and what is to be done for the control of the infection and the spread of the gangrene

Anyone faced with such a situation and forced to adopt a plan of action could justify the course selected and pursued by reference to the voluminous literature of the subject There are other factors which, in some instances, become controlling besides a real surgical analysis of the situation If one wishes to amputate immediately, the patient may refuse, and if one wishes to temporize the medical staff may frown upon that in view of the severity of the diabetes, and if one should believe that the critical nature of the patient s condition makes the employment of any surgical procedure likely to be poorly tolerated the advent of death under those circumstances may leave in his mind that doubt that too little was done Also the presence of a death after radical procedure may leave in the surgeon's mind the wish that he had at least temporized or waited for the infection to subside The situation is trying because of its severity and lack of clear cut indices to the essential factors

Study of the essential factors by animal experimentation is difficult, and it has not been properly carried out To disassociate these factors and observe them is comparatively simple, but to combine them is much more difficult and only in combination can they be accurately judged as to the part they properly play

The extent, rapidity of increase, and duration of the gangrene can be accurately determined This, however, is of importance only in the absence of infection And the presence of gangrene without infection is unusual Dry gangrene is common, but this term does not indicate the absence of infection, merely the absence of putrefactive bacteria or sloughing

Arteriosclerosis may be assumed to be present in all patients of middle age or more And it is in such patients that gangrene is usually encountered Absence of pulsation in the dorsalis pedis and popliteal arteries is usually present However, the nature of the surgery to be employed cannot be determined by this physical sign

Infection, its duration, its extent, its cause of general reaction, its location, and its rapidity of increase after all should determine the immediate surgical procedure more than any other single factor While infection should receive major attention the other factors for consideration should not be overlooked But in any given patient the first determination of the surgeon should be based upon the infection and the surgical procedure to be employed likewise

An assertion that all infection of a virulent nature located in the soft tissues of the lower extremity should become localized before amputation of the extremity is the result of experience in these patients with both conservative and radical treatment During this experience insulin only has been of a material change

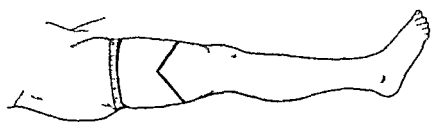


FIGURE 1

Shows the leg prepared for amputation, tourniquet applied and the line of incision made The incision extends directly through skin fascia and muscle in the direction of the bone Care is exercised in making the incision in avoiding retracting the skin or fascia away from the underlying layers

In the presence of a well developed infection of a gangrenous area in the lower extremity of a patient with diabetes amputation at the thigh will carry an unnecessarily high mortality And palliative surgical treatment by amputation of all the gangrenous and actively infected area will materially lower the mortality This procedure should be carried out without regard for the future function of the extremity The line of amputation should be carried back on the foot to an area in which thrombosis of the vessels does not exist and no flaps or undermining of the skin area should exist Cutting the area away as one would cut off portions of an apple, to reach the limit of thrombosis of vessels should be carried back on both the dorsum and plantar surface of the foot with the amputation of all the gangrenous toes back to the metatarsal head The shaft of the metatarsal bone should not be

opened but allowed to sequestrate in the event that further amputation is not required.

Elevation of the extremity and copious wet dressing should be employed during the few days interval in which the progress of the infection is to be determined. Should the infection subside, the gangrene fail to reappear and the diabetes be kept under control with the appearance of active healing of the open surfaces recovery with saving of the extremity may be looked for. However, reappearance of the gangrene may necessitate amputation of another toe or a portion of either surface of the foot.

The death of those portions of the foot that ordinarily receive the least blood supply is noticeable, viz., the fascia and tendons. If the fascia of the sole of the foot dies up to and in-

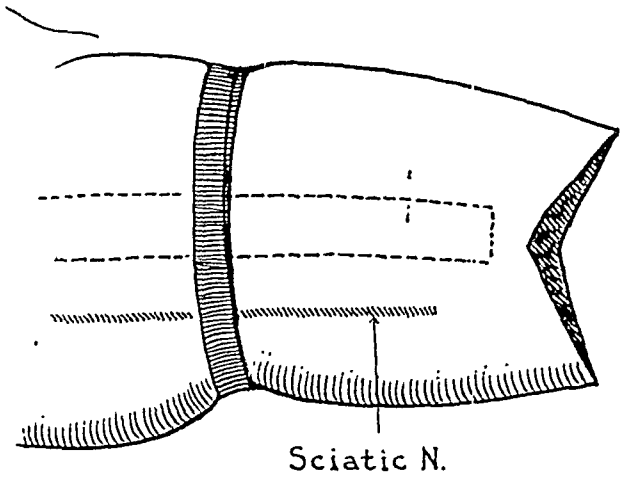


FIGURE 2

Shows the incision completed, vessels ligated, the soft tissues have been stripped back from the bone, the bone amputated, the nerve pulled down and amputated as high as possible. Then the soft tissues are allowed to fall into place over the bone end.

cluding the heel necessitating removal of all of the skin of the plantar surface of the foot, amputation above the knee is indicated. If the shaft of a metatarsal bone becomes infected, amputation is indicated. But only when there are no constitutional signs of infection as evidenced by temperature and lymphangitis. Wide exposure of the underlying dead fascia and wide drainage of an infected area of bone should precede amputation, if there are constitutional symptoms of infection.

The site of operation that is best suited for patients in this group does not vary. It should invaribly be above the knee. However, the type of operation is not so generally agreed upon and variations that include all methods between the simple guillotine and especially contrived flaps for covering the stump have been advocated.

In an experience which includes the use of various types of operation one is impressed by the results derived from the simple procedure

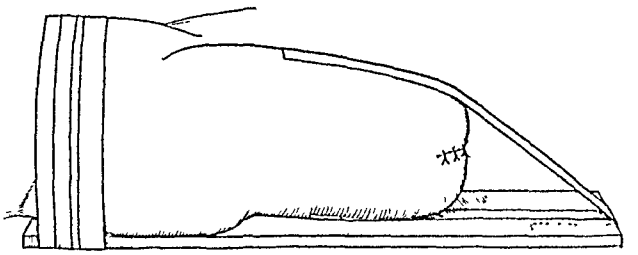


FIGURE 3

Enough gauze is placed over the cut surface to prevent infection, then adhesive strapping is begun above the line of incision, anteriorly, laterally, and posteriorly to make traction downward and thereby overcome the retraction of the muscles. A splint made as wide as the stump and long enough to extend from the crest of the ilium to ten inches beyond the stump is anchored by the weight of the pelvis to which it is strapped with adhesive. The lower end of the splint receives the pull from the adhesive exerting extension on the stump. Over all the strapping of the stump a liberal dressing of cotton is then applied with a loose circular bandage. And the first dressing should not be done for eight to twelve days unless there should be evidence of infection, viz., temperature elevation after the third day or severe pain and temperature. After the first dressing the splint and traction may be discontinued.

of a V-shaped incision with high amputation of the bone and closure of the skin edges only. In the evolution of the present method employed skin fascia flaps were first used to insure a good covering for the bone. Sloughing of the flaps resulted in an abandonment of this method. Following that the muscles were sutured over the bone, then the fascia, then the skin and retaining sutures of silkworn gut were placed through all layers. The fascia sloughed. Then the fascia only beneath the skin was sutured and still there were fascia sloughs. And then the skin and fascia only were closed over the bone with interrupted sutures of silkworm gut. Still there were sloughs which always seemed to be principally fascial. Finally the skin surfaces only were closed with interrupted sutures. And with high amputation of the bone, that is, fully three inches above the skin margin, and traction to resist the contraction of the stump soft tissues, sloughing has not been encountered and the final stump results in a much more ample covering for the bone end.

THE ADMINISTRATION OF QUININE HYDROCHLORIDE IN MULTIPLE SCLEROSIS*

By RICHARD M BRICKNER, M D, NEW YORK, N Y

From the Neurological Institute and the Neurological Department of the Vanderbilt Clinic New York City

THE use of quinine hydrochloride therapy in multiple sclerosis has given sufficient promise of benefit to warrant its being reported The theory upon which the treatment rests, as well as a tabulation of results obtained thus far, is described elsewhere (1,2) This communication will be concerned with the technique of administration of quinine, a procedure in which there are certain complexities, and which requires considerable care and constant supervision

At the outset, in the treatment of a patient with multiple sclerosis, one is likely to be pessimistically biased It is necessary for the physician to subordinate such prejudices as rigidly as he would a leaning toward undue optimism Quinine therapy in this disease is not only lengthy, but is beset by ups and downs which would, ordinarily, be too apt to cause a too early discontinuance of the therapy Quinine itself produces mild symptoms of toxaemia, which can in their turn, bring about accentuation of the signs of the multiple sclerosis,—a situation which requires recognition The disease, even aside from its tendency toward spontaneous remission, runs a course in which there are also daily fluctuations in the severity of the symptoms

The hydrochloride was chosen as the quinine salt to be used because it is the most soluble of the available preparations The initial dosage is five grains, three times a day This dosage, however, requires frequent alteration and the circumstances determining the changes demand continuous vigilance It has been found necessary that patients arrange to be seen at a minimum of once weekly, at least during the first two months of treatment All of the patients in the series have been able to manage to be seen thus frequently, even though the trip has sometimes been a troublesome one A few have found it simpler to be hospitalized for the initial period The therapist should also be available by telephone so that changing indications between visits can be promptly attended to

In assessing the merits of quinine treatment it has, of course, been necessary to try to distinguish between spontaneous remissions and therapeutic results The details concerning this distinction are given in the communication already referred to (2) The best criterion available has been the fact that most of the improvements under quinine treatment have occurred at a definite interval after the regimen was started,—namely, three to five weeks As would be anticipated, the improvements have been related to particular symptoms rather than to the patient as a whole Naturally, improvement is most apt to occur in the youngest of the symptoms of any particular patient, and there are a number of instances in the series in which the younger symptoms have disappeared, while the older ones have remained uninfluenced The best prognosis has been of symptoms about eighteen months old, or less However, many of those which are older have also responded,—usually after a treatment interval of several months Hence it will be seen that the patient must, in this instance, be looked upon rather as a group of symptoms than as a whole,—a necessary violation of the modern and generally satisfactory viewpoint For this reason, it has been found useful to take histories in a strictly chronological manner The following blank has been utilized, and from it, prognostic determinations can sometimes be made with fair accuracy

HISTORY BLANK

SYMPTOM	Date of Onset	Date of Remission	CHARACTER OF SYMPTOM	Previous Treatment	Date and Effect of Treatment
1st symptom					
2nd symptom					
3rd symptom					

Technique of Treatment

The initial dosage, as already stated, is fifteen grains of quinine hydrochloride daily,

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by mouth, in three capsules of five grains each. The majority of the patients will tolerate this dose, but in some, the amount must be greatly reduced. One must watch for symptoms of cinchonism; the chief ones are ringing in the ears, a feeling of fullness in the ears or head, mild neausea, headache; it is unusual to find all four symptoms in the same patient. The onset of even the mildest cinchonic symptom is the signal for temporary termination of quinine administration. The drug should be omitted for three to four days, after which it should be reinstated, usually in the same dose; it will frequently be found that an increased tolerance has been developed by the patient. If this has failed to occur, a smaller dose must be used. The following are the dosages which have been found most useful; the method of trial and error is the only one by which the correct amount can be properly estimated: five grains twice a day, five grains once a day, fifteen and ten grains on alternate days, fifteen and five grains on alternate days, ten and five grains on alternate days, two grains three times or twice or even once a day, five and two grains on alternate days. Occasionally it has been useful to give fifteen grains one day, ten the next, five the next, and no quinine the next; on the following day the cycle has started again with fifteen grains.

Since cinchonism will invariably accentuate the symptoms and completely block progress toward improvement, it is of first importance to detect it and to grade the dose according to the tolerance of the particular patient. In a series of more than twenty five patients, no two have had the same regimen, and no one has been maintained on an unchanged regimen for more than a few weeks.

Occasionally it is wise to interrupt the medication for three or four days without awaiting cinchonism, merely on the principle of giving the patient a rest from therapy. After patients have been on quinine for some five months or more, it is also wise to cut the dose down to the smallest amount compatible with maintenance of improvement. Too long an omission and too small a dose are both harmful, however, since patients sometimes slip back under such circumstances. No definite minimal dose can be described; it must be determined separately for each patient.

An occasional individual will be found who can tolerate larger doses than fifteen grains a day. In such instance, in the early weeks of treatment, twenty or twenty five grains a day may be given over short periods. On the other hand, situations are met with in which either there are profound emotional disturbances due to the disease itself, or there is an accompanying psychoneurosis. In either case the embarkation upon a new form of treatment may be marked by so severe an emotional reaction that the use of the therapy itself is threatened. In the two such instances thus far encountered, hospitalization for a week has been effectual in settling the patient sufficiently to permit of the institution of a regimen.

Rarely, patients will grow worse during the first one or two weeks of treatment, without cinchonism. In these cases, omitting the quinine for a week, with reinstatement of it at fifteen grains a day has caused the curve to change its direction and improvement has commenced. There are four factors which have accounted for regression during treatment: extraneous infections, such as boils, colds and grippe, the premenstrual or menstrual epochs, physical traumata and severe constipation. In the eighteen months of experience which we have had with quinine, one of these conditions or cinchonism has always been found to exist, with the exception of three symptoms in three very old patients; in these instances regression occurred for unknown reasons. With these three exceptions, there have been none but transitory regressions, correctly accounted for, and easily controlled. On the other hand, not all of the patients have improved.

Satisfactory improvement has been seen in symptoms as old as five years, but no symptom older than that has undergone any change. It is, of course, unfortunate that the symptoms with the best prognoses may not be the ones in whose cure the patient is most interested.

It is important to be certain that the patient is actually receiving the proper preparation. In the present series, all the quinine prescriptions have been filled at the same pharmacy, and it has been possible to have such assurance.

There is no evident indication for the intravenous use of quinine. The oral method gives the slow, fairly continuous absorption of the material which is probably preferable to a rapid instillation with evanescent effects.

There is no theoretical reason for considering that the treatment should be anything but continuous and permanent. Nothing has been learned, thus far, which permits of stopping quinine permanently and the present indication is that the patients will have to continue taking it indefinitely.

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SOME CONSIDERATIONS OF THE ETIOLOGY AND TREATMENT OF OBESITY

By C. W. NISSLER, M.D., EN SHUI TAI, M.D., AND BURGESS GORDON, M.D.,
PHILADELPHIA, PA.

From the Medical Service of Dr. Thomas McCrae and the Department for Diseases of the Chest, Jefferson Hospital.
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Read before a meeting of the Section of Medicine, College of Physicians, Philadelphia, Pa., Feb. 23, 1931.

THE consideration of obesity would be simplified if all cases could be explained on the basis of disturbance of the endocrine glands or excessive feeding and restricted exercise. The objection to such generalization is obvious. The failures in treatment indicate that management is difficult or that some mechanism must be explained before the problem is understood satisfactorily. This is emphasized in patients with so-called endogenous obesity, who fail to lose weight following the administration of glandular extracts and others with so-called exogenous obesity, who do not respond to reduced caloric intake and increased exercise.

In reviewing previous studies on overnutrition the most frequently discussed mechanisms are basal metabolism, water balance, respiratory quotient and the influence of heredity. There is almost general agreement that obese subjects require less food for maintenance of excessive fat than individuals of normal weight and there is a tendency to convert readily into fat the overabundant supply of food. According to McLester[1] the metabolic rate in adults, except in such conditions as myxedema and so-called adiposo-genital dystrophy, is essentially normal. In agreement with this are the findings of Topper and Mulier,[2] who note that the basal metabolism of overweight but otherwise average children is usually normal, with a tendency, in fact, toward a high normal level. It appears in the reports of other workers that a characteristic disturbance of metabolism may be disregarded in over-nutrition. This is especially significant in children because growth and increased activity of the sexual glands occur during the prepubertal period and yet so far as determined there is no typical variation in the metabolic rate. If important disturbances occur, it would be extremely hazardous to differentiate between variations in simple obesity and those resulting from involvement of the endocrine glands. In studies of the respiratory quotient Strause and his co-workers[3] found that the obese patient does not receive from his food the same specific dynamic action which the normal individual experiences. Additional evidence suggesting a departure from normal in the manner in which nutritive materials are metabolized is reported by Krantz and Means.[4] This refers especially to the stimulating effects of epinephrine on the metabolism of obesity. They state: "The respiratory quotient rises definitely less in obese patients than in normal subjects. This difference suggests that the obese oxidize a relatively greater amount of fat after epinephrine injection than do normal individuals." At present it is perhaps a matter of conjecture whether or not the respiratory quotient in the obese child is the same as the adult and if there is a difference the question of time and manner of onset is raised. DuBois[5] remarks pertinently that the explanation of the phenomenon of maintenance of normal weight under marked variation in bodily activity and food consumption would be an important step in solving the problem of obesity.

However the condition may be regarded physiologically the fact remains that overweight is potentially a serious disorder. It may be a forerunner of diabetes, a contributing factor in gall bladder disease, disturbances of the circulation, nervous manifestations and infections. And even more serious perhaps are the catastrophes that follow haphazard methods, fads and fancies in reducing the body weight. It seems that the unsettled knowledge of obesity justifies speculation.

In a report from the Chest Department of the Jefferson Hospital in 1928 it was suggested that a disturbance in sugar metabolism was possible factor in obesity.[6] An hypothesis was constructed from data obtained in comparing symptoms experienced by long distance runners[7,8] with those of obese individuals on restricted carbohydrate intake.[6] In certain individuals there were hypoglycemic-like manifestations accompianed by moderate reduction in the level of blood sugar. The response to small doses of readily available carbohydrate (increased strength and decreased hunger) was definite in several instances. The return of the blood sugar to normal occurred, but, in degree of responsiveness, was less striking than the cessation of hypoglycemic-like symptoms. The following questions were raised. Do certain obese individuals experience transient hyperinsulinism induced, as Harris[9] suggests, by habitual and excessive carbohydrate feeding? Is the tendency to restrict exercise a natural effort of the patient to prevent the occurrence of hypoglycemic-like manifestations? Is a vicious circle created in which overindulgence in carbohydrate and excessive insulin production are closely related? The latter because of excessive carbohydrate, the former induced by

excessive insulin? Or stated in another way: In the beginning the potential obese patient eats excessively because of pleasure and example. This is followed by an acceleration in the production of insulin which further influences the patient to increase the intake of carbohydrate. The result is a step-up in the output of insulin. The more insulin, the more starch; the more starch, the more insulin. Less work is attempted because exercise induces hypoglycemic-like phenomena. The ultimate effect is lassitude and the accumulation of unused fuel in the form of fat. If this is true a decrease in function of various glands, if such occurs, may be the result rather than the cause of obesity.

There are certain features in the hypothesis that may be considered without undue speculation. Of special interest is the effective use of repeated doses of insulin in malnutrition, as reported by Apple, Farr and Marshall[10] which suggests that gain in weight may be influenced artificially (hyperinsulinism) in a manner not unlike that considered in the present hypothesis. The question of heredity may also throw light on the problem. In a study of the immediate ancestry of over 500 obese women it was found that heredity was considerably less important than example and custom in eating. As to the history of exercise a sharp decline in the amount of work was noted with the corresponding trend in accumulation of body fat. Hunger and weakness during exertion were frequent, especially when starch had been used to excess for a number of years. The tabulation of food intake showed a high consumption of starch derived largely from cereals; the use of fat and protein was usually within normal limits. The charts indicated a wide variation in the daily intake. This was due, in part, to the individual's desire to reduce; it being his impression that this could be accomplished if only one meal was taken daily. These data indicate that very few patients continued on rigorous diets for any considerable period of time. Furthermore, the average daily caloric intake for one-two weeks was usually high, whereas on a single day it was frequently less than 500 calories. The figures on the sugar content of the blood showed that about 55 per cent were within normal limits; 15 per cent varied between 65-88 mg. per 100 cc. of blood and the remaining number were above 120 mg. The highest levels (175-285 mg.) occurred in patients with the longest history of excessive carbohydrate feeding. As for example, a patient 20 years of age, weighing 124.6 kg. showed a blood sugar of 254 mg., and her sister, 9 years of age, weighing 72.4 kg. had a content of 106 mg. In another family the mother, age 38, weighing 109 kg., the blood sugar was 285 mg. and in her daughter, 12 years of age, weighing 92 kg., the level was 112. In general, the normal or subnormal blood sugar levels were more common in individuals with recent histories of overindulgences. The lowest figures were noted most frequently in obesity of 2-3 years duration and in these hypoglycemic-like manifestations were most striking. On exercise there were several instances of transient reduction in the sugar level of from 5 to 20 mg.[11] However, such variations were not regarded as always indicative of the actual need for readily available carbohydrate since there were numerous patients (some with marked hyperglycemia) who suffered hypoglycemic manifestations and were relieved by dextrose. An explanation for this may be suggested in the report of Foshay,[12] who states that the blood sugar level may not correspond to the content of sugar in the tissues.

In further consideration of the hypothesis it may be suggested the effects of the so-called dextrose-moderately-low starch regimen,[6] the primary purpose of which is to reverse the vicious cycle as described. The regimen is as follows: The coperation of the patient is obtained through his own tabulations of symptoms and the daily intake of food at meal time and between meals. He is advised not to change his usual diet or habits in any way. When sufficient records have been obtained for a critical study of symptoms and dietary habits the customary intake of carbohydrate is reduced two-thirds. No change is made in the number of meals or in the previous consumption of fat, protein or water. So far as possible the total intake for lunch and dinner is equally divided. In order to relieve hunger and weakness and to provide sufficient calories between 20 and 40 gm. (82-164 calories) of dextrose* (Corn Products Refining Co.) are administered daily in divided doses (2-4 gms. every half hour from 9:30-11; 2:30-5; 8-9) between meals. It is assumed that this plan of administration of carbohydrate provides readily available energy so that the reduction in the amount of starch at meal time may be accomplished without disturbance. The patient is advised to walk regularly from one-half to one mile daily.

A satisfactory reduction in weight has been accomplished in over 65 per cent of women, the average loss being 1.5 kg. weekly. The failures have occurred usually in the uncooperative patients and those with considerable muscular development of the arms, legs and

* The lozenges are manufactured by Smith, Kline and French Laboratories, Inc., 105 N. 5th Street, Phila., Pa. The lozenges weigh 2 gm. each and are flavored with peppermint, lime, wintergreen and lemon.

buttocks So far as determined there have been no untoward effects other than a few instances of wrinkles in the older women, transient headaches at the beginning of the diet, constipation and a sensation of fullness in the stomach if the dosage of dextrose was excessive The majority have been free from mental depression and craving for carbohydrate A fairly constant reduction in high blood sugars (30 60 mg) was not uncommon following a loss in body weight In reviewing the events of patients treated over two years ago, it is perhaps interesting to note thirty-four instances of loss of 15-30 kg with relief from symptoms and no considerable gain in weight In these the fluctuations in blood sugar are essentially within normal limits

Obviously the hypothesis suggesting a disturbance in the sugar regulating mechanism in obesity is largely speculative Fallacies arising from errors in tabulation of food, conditions that may have influenced the blood sugar levels and possible effects of dextrose on diuresis and specific dynamic action, cannot be disregarded It would appear, however, especially in considering the results in treatment, that merely a redistribution of the total intake of carbohydrate favors a reduction in weight and relieves the abnormal desire for food This may suggest that calories as derived from starch are more responsible for the accumulation of weight than the excessive intake of fat, protein or water, that the occurrence of symptoms may actually be increasingly aggravated by overindulgence It would appear that a dietetic plan which provides readily available energy, as required for work is more helpful in treatment than rigid restriction of food and the use of glandular extracts

CONCLUSIONS

1 It appears that obesity is due primarily to decreased physical effort and the prolonged excessive intake of starch A disturbance in the sugar regulating mechanism due essentially to over-stimulation and "intoxication" is suggested as a contributing factor

2 It is suggested that disturbances of the endocrine glands are the results rather than the primary cause of overnutrition

3 A regimen consisting of a reduction in the usual intake of carbohydrate at meal time and the administration of dextrose in divided doses between meals apparently favors the loss of weight and the cessation of abnormal desire for food

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VIOSTEROL IN THE TREATMENT OF PSORIASIS

By SAMUEL MONASH, M D , NEW YORK, N Y

From the Department of Dermatology College of Physicians and Surgeons, School of Medicine of Columbia University, New York and the New York Skin and Cancer Hospital

It is a well known fact that psoriasis is not nearly so commonly met with in the tropics as it is in the temperate zone Whether this is due to the greater heat prevailing longer exposure to the sun, greater skin pigmentation or differences in diet are matters for experimentation and speculation The frequent beneficial results of sunlight and of ultraviolet radiation suggested the possibility of the disease being due to a deficiency in Vitamine D

In order to determine whether this were true, a number of psoriatics were treated with irradiated ergosterol or viosterol, the dosage given being 15 to 20 drops daily The patients were given either no local treatment or only boric acid ointment In four of the cases, while the patients were actively taking the viosterol, one for a period of two weeks one for six weeks and two for two months, new lesions appeared Since the dosage was a moderately large one, the outcrop

ping of new lesions tends to show that psoriasis is not due wholly to a deficiency of Vitamine D. Details of the cases follow:

Case No. 1: Mrs. A. G., age 44, guttate type, present on and off for the past eight years.

Date	Remarks	Dosage	Other Treatment
Sept. 20, '29		15 drops	None
Oct. 4	No change	20 "	"
Oct. 16	No change	20 "	"
Oct. 30	Lesions lighter	20 "	"
Nov. 20	Most lesions are improved, but few new guttate lesions have appeared on left leg in past week.		

Case No. 2: Mrs. I. W. G., age 39, generalized pea to quarter sized lesions, present on and off for the past nine years; disappears in summer on exposure to the sunlight, reappears in the winter.

Date	Remarks	Dosage	Other Treatment
Sept. 27, '29		20 drops	None
Oct. 23	Much improved..	20 "	"
Nov. 13	New guttate lesions have appeared on legs and forearms...	20 "	"
Dec. 11	No new lesions since last visit. Old lesions on arms have disappeared	20 "	Ung. Ac. Boric.
Feb. 24, '30	Lesions practically all gone. No recurrence until Sept. 25, seven months later, when she was given generalized alpine light therapy with marked improvement.		

Case No. 3: Mr. I. S., age 26; gyrate lesions over elbows, knees and back, present for the past three years.

Date	Remarks	Dosage	Other Treatment
Sept. 22, '30		15 drops	None
Oct. 22	Slightly improved....	20 "	"
Nov. 26	New lesions have appeared in the past two weeks.		

Case No. 4: Mrs. M. R., age 48; half-dollar circular plaques over knees and elbows for the past year; at present, in addition, acute generalized exacerbation.

Date	Remarks	Dosage	Other Treatment
Nov. 15, '29		15 drops	None
Dec. 2	Few new lesions on legs	20 "	Ung. Ac. Boric.
Dec. 23	No new lesions since last visit. Not much change in lesions	20 "	" " "
Jan. 6, '30	Slight improvement.		

The above case histories show distinctly that psoriatic lesions can appear in patients to whom has been supplied a considerable quantity of Vitamine D in the form of Viosterol. While following the patients, however, I was impressed by the fact that in general they showed some improvement under the treatment. This was especially true in Case No. 2 and still more so in the following cases:

Case No. 5: Mrs. E. G. M., age 31; generalized guttate lesions, present for the past 16 years.

Date	Remarks	Dosage	Other Treatment
Sept. 25, '29		20 drops	None
Oct. 2	No change	15 "	"
Nov. 13	Lesions involuting	15 "	Ung. Boric. Ac.
Dec. 11	Still improving... Lesions almost all gone.	20 "	" " "

Case No. 6: Miss E. F., age 9; guttate patches over elbows and knees for past four years; usually improved in the summer and under ultraviolet therapy.

Date	Remarks	Dosage	Other Treatment
Oct. 21, '29		15 drops	None
Nov. 13	Slight improvement	15 "	"
Dec. 2	Much improved. A few lesions have disappeared	15 "	Ung. Boric. Ac.
Jan. 21, '30	All lesions gone.		

Case No. 7: Miss L. L., age 19; generalized guttate lesions of one year's duration.

Date	Remarks	Dosage	Other Treatment
Oct. 2, '29		15 drops	None
Nov. 13	Much improved, all lesions involuting.		

During the past year I have been combining the use of viosterol with the usual anti-psoriatic ointments and have been much pleased with the results. The lesions present seemed to involute at a faster rate than under ointment therapy alone. As an adjuvant in the treatment of this stubborn and widespread disease, especially in those cases which are benefited by sunlight or ultraviolet light, the use of viosterol can be recommended. No untoward results were noted from its use in the dosage given over a period of months; however, it would be wise to give the drug for two months and then interrupt the treatment for a month before giving it again to prevent any possible symptoms of overdosage in sensitive patients.

THE VALUE OF THE ASCHEIM-ZONDEK TEST TO THE GENERAL PRACTITIONER*

By WILLIAM FILLER, M D, NEW YORK, N. Y.
From the Department of Gynecology, Bellevue Hospital, New York

OF the innumerable tests that have been brought forth for the diagnosis of pregnancy, the Ascheim-Zondek test is, by far, the most accurate and valuable in its application. My purpose in this paper is not, however, to present a series of cases to confirm the accuracy of the test. Its almost 99 per cent accuracy has been confirmed the world over. Nor do I intend here to dwell at length in the field of theoretical speculation, except as it directly concerns the practical application of the test by the general practitioner. My principal aim will be to present the Ascheim-Zondek test as a valuable adjunct to the diagnostic armamentarium of the general practitioner.

Forty cases in which the diagnosis of pregnancy was the point in question serve as the basis of this paper. With the exception of a few cases which were drawn from the Gynecological Division of Bellevue Hospital because of their rarity and intrinsic interest, these cases come from the offices of my colleagues. On the urine of each of these forty cases, I personally conducted an Ascheim-Zondek test, using the unmodified technique originally suggested by Ascheim and Zondek.

According to this technique, a voided morning specimen of urine, before any intake of food or fluid, is obtained from the patient. It should be collected in a clean bottle. Sterile specimens are not necessary. It is essential to impress upon the patient that she is to take no drugs for 24 hours previous to the collection of her urine, as the mice used in the test are very susceptible to drugs especially alkaloids. Five infantile female mice are used for each test. The mice should be approximately 3 weeks old and weigh about 6 grams. The mice receive six injections subcutaneously, laterally in the back, three on the first day—and three on the second, allowing a lapse of at least three hours between injections. With each injection, 2 cc of the urine is administered to mouse number 1; 25 cc to mouse number 2, 3 cc to mouse number 3 and mouse number 4, and 4 cc to number 5. One hundred hours after the first injection, the mice are killed with the illuminating gas and laparotomized. (Extensive experiments on mice which have been done by Ehrhardt to determine whether the test could be completed in a shorter time have thus far proved unsuccessful.) Friedman and Schneider have obtained results in 24 to 48 hours by the intravenous injection of urine into female rabbits.

The ovaries of untreated infantile mice are pale grayish pink in color and about the size of a pinhead. If the laparotomy discloses that all the ovaries have this appearance, the test is negative for pregnancy, regardless of the condition of the uterus. A positive result is recognized by the enlargement of the ovary to two or three times its normal diameter, and by its distinctly red or reddish pink color. This is accompanied by three definite reactions. Anterior pituitary reaction 1—Normal ripening follicles (ovulation reaction), anterior pituitary reaction 2—The ovaries grossly show the presence of fine purplish dots which correspond to hemorrhages into normal and abnormal follicles, and are apparently due to the intense congestion set up by the hormone (hemorrhagic cyst reaction), anterior pituitary reaction 3—The ovaries present a process of luteinization of the cells of follicles and the formation of abnormal structures resembling corpora lutea in which ovulation has not occurred and the ovum remains imprisoned. This may appear macroscopically as subiliary yellowish protrusions on the surface of the ovary (luteinization reaction).

Zondek has shown that the appearance of anterior pituitary reaction 1 alone is not characteristic solely of pregnancy. Consequently anterior pituitary reaction 1, unaccompanied by anterior pituitary reaction 2 and anterior pituitary reaction 3, is to be regarded as negative for pregnancy. The appearance of anterior pituitary reaction 2 and 3, even though they be present in only one ovary of the five mice used, is taken as positive evidence of the existence of pregnancy.

For the sake of clarity, I have divided the forty cases used in this series into five groups. The first and largest of these falls under the general heading of Early Suspected Pregnancy. The typical case in this class complained of delayed menstruation. In some cases, this was associated with other presumptive signs and symptoms of pregnancy. However, in the majority of cases, delayed menstruation was the only reason to suspect pregnancy. In the entire group, there were 20 cases, of which I found 10 negative and 10 positive results. The results in all twenty cases were later checked with the individual physician and proved, with the passing of time, to be prophetic. In some of the non-pregnant cases, I feel quite confident, after communication with their physicians, that by reporting these women negative for pregnancy so early I saved them, notwithstanding their physicians' admonitions against such practice, from the hands of unscrupulous abortionists and midwives.

Two cases in this group deserve special mention. *Case Number* 1—H M—age 42—married 3 years—gravida 0. Menstruation established at

* Read before the Bellevue Medical Society, February 2, 1931.

14; always regular. Last regular period in July, 1929. Missed August and September periods. Fearing pregnancy so late in life, she landed in the hands of an abortionist who graciously performed a dilatation and curettage. Following this, periods were irregular, occurring at 6 to 7 week intervals, until May. Missed May, June and July. This time she decided to consult a neighborhood physician before having another dilatation and curettage. She was tremendously obese, and, upon examination, the size of her uterus could not be determined with any accuracy. Morning nausea was present. The physician prevailed upon her to have an Ascheim-Zondek test done, which proved to be negative. It is now 10 months since she has menstruated and she still shows no signs of pregnancy. The value of the Ascheim-Zondek test in this is self-evident.

Occasionally, the urine of women in the menopausal period will produce an anterior pituitary reaction 1, so that if this reaction appears and the clinical history of the patient justifies it, the test should be repeated and the appearance again of only anterior pituitary reaction 1, should be taken as conclusive evidence of the absence of pregnancy.

Case Number 2—A.M.—age 29—last regular period August 24. Date of conception known to be September 1. Urine was obtained on September 24, one day after her period had failed to appear. The test proved to be positive after what was definitely known to be only a 23 days' gestation. This was the earliest positive test we got in our series, and, as far as we know, is the earliest Ascheim that has been reported in literature.

The reliability of the test is undoubted in a pregnancy that has existed more than four weeks. We have had a case in this series that was negative when the patient had missed her period one week, but because the patient was suspicious clinically of pregnancy, the test was repeated later. This time, it was found to be positive. Thus, the occasional appearance of a negative result in a case of very early pregnancy may easily be checked up by repetition of the test, because even in early pregnancies, before any positive signs have appeared, a persistent negative never occurs.

In the second group, I have included those cases in which the chief complaint has been Anomalous Bleeding, associated with other symptoms or definitely palpable adnexal pathology. There were 6 cases in this group. In 5 of the cases, a provisional diagnosis of ectopic pregnancy had been made, only 2 of which later proved to be ectopics. One of these cases gave us a positive Ascheim-Zondek. The other, an old ruptured ectopic, ruptured at least three weeks, gave us a negative result. Ascheim and others have demonstrated that the test will be positive as long as there is living placental tissue in biologic contact with the maternal blood. The test, therefore, has its greatest field of value in unruptured ectopic pregnancy, as it will give a positive reaction only when the embryo is alive or not longer than 8 to 10 days after its death. We might state here that the appearance of a positive Ascheim-Zondek during pregnancy is no indication as to the viability of the fetus. However, Stal has shown that in pathological pregnancy, the appearance of a negative Ascheim-Zondek is definite indication that the embryo is dead.

Because of their interest, I have chosen three case histories from this second group. *Case Number* 1—L.S.—age 19—single. Last regular period August 3. On August 10, had intercourse. On August 15, began to suffer from frequency of urination, burning, leucorrhea, and pain in both lower quadrants. Was examined August 17, and found to have acute urethritis, endocervicitis, bilateral salpingitis, and retroverted uterus. Smears taken from her urethra and cervix showed gram-negative intra-cellular diplococci. On September 1, bled scantily for one day, although she had always bled four days, with a moderate flow. On October 8, she complained that she still had not had her period, it being about nine days overdue. She also gave a history of morning nausea. On examination, the uterus was retroverted, slightly boggy and enlarged and adherent to palpably enlarged adnexal masses. She had colostrum in her breasts. An Ascheim-Zondek test was done and found to be negative. On October 15, she began to menstruate. My assumption in this case was that her anomalous menstruation and the colostrum in her breasts were due to the inflammatory condition in her ovaries and not to any abortive pregnancy.

Case Number 2—H.M.—age 22, married. Had a regular period June 28. Missed July and August periods. On September 1, complained of slight pains in the right lower quadrant and spotting. On examination, cervix was eroded, uterus was normal in position and size, and there was a tender adnexal mass on the right side. Provisional diagnosis of ectopic pregnancy was made. Patient objected to immediate operation because of the apparent insignificance of her symptoms. An Ascheim-Zondek test done was positive. An operation was then insisted upon and disclosed a right-sided, unruptured ectopic.

Case Number 3—L.P.—age 30—married. On December 2, patient was injured slightly in an automobile accident. However, she began to complain, soon after, of severe pain in the left lower quadrant. On examination, showed a left-sided mass. Menstrual history normal. Ascheim was negative. Patient operated upon, however, with provisional diagnosis of ectopic pregnancy, before the report of the Ascheim test was ready. The operation revealed a left-sided, chronically swollen and inflamed tube and ovary.

We come now to the third group in our series. In this group, I have placed those cases in which the chief complaint or finding on examination was an Enlarged Uterus. The differential in these cases has been between fibroid and pregnancy. There were 11 cases in this class, and all of them were gratifying in their accurate differential between fibroid and pregnancy.

I have selected 3 cases from this group as illustrative. *Case Number* 1—R.O.—age 44—gravida 11, para 8—had not been pregnant for nine years. Last regular period February, 1930. Bled scantily in March and April at her expected time. No presumptive symptoms. Insisted that she was not pregnant. On examination, uterus was the size of a three months' gestation. Ascheim-Zondek test done and found to be positive. Patient delivered of a normal baby in December.

Case Number 2—Q.O.—age 38—married 9 years—never pregnant. Last regular period May 8, 1930. Was scant; duration 4 days. Had been having hot flushes for last month. No presumptive signs or symptoms of pregnancy. On examination, uterus was enlarged to about 20 weeks' gestation. Ascheim-Zondek test done and proved to be negative. Had no bleeding in June or July. Patient operated upon with diagnosis of fibroid. Post-operatively, the diagnosis was confirmed.

Case Number 3—R.L.—age 39—married 15 years—gravida 3, para 3. Last pregnancy 7 years previous. Had been having regular menstrual periods. No history of amenorrhea. On examination, uterus was enlarged to about 10 weeks' gestation. Diagnosis of fibroid was made. Patient was operated upon. When the abdomen was opened, the uterus was found to be uniformly enlarged and soft and gave all indications of being an intrauterine gestation. The abdomen was closed without further manipulation. An Ascheim-Zondek test was requested, post-operatively. The test proved to be negative. Patient began to menstruate the sixth day post-operatively, the day of her expected regular period. We feel that the patient had a soft sub-mucous fibroid which is often difficult to differentiate from pregnancy, even when the abdomen has been opened. Together with this case, there was another one with an almost identical history. An Ascheim was done pre-operatively and found to be negative. Upon operation, the uterus was discovered to be quite soft and enlarged to the size of a three months' gestation. When opened, it revealed a soft intra-mural endometrioma filled with thick chocolate-colored fluid. We feel that the value of the Ascheim-Zondek test as revealed by these two cases can not be over-emphasized.

In considering the differential diagnosis between fibroid and pregnancy, we do not intend to minimize the judicious use of the *x*-ray in the diagnosis of pregnancy. Matthews has shown that an 85 per cent accuracy was obtained with the *x*-ray in cases of pregnancy between 16 and 18 weeks' gestation, and 100 per cent after 18 weeks' gestation. However, the superiority of the Ascheim-Zondek test is striking. First, it has an accuracy of 98.6 per cent after 4 weeks' gestation; second, it is done with no inconvenience to the patient; third, although the *x*-ray is safe so far as its effects upon the fetus are concerned, when given in the proper doses and by competent hands, the factor of safety plays no part whatsoever in the performance of the Ascheim-Zondek test.

In our fourth group, the Ascheim-Zondek test plays even a greater role, not only because of its diagnostic, but also because of its prognostic value. In this group, we have placed cases of Hydatidiform Mole and Chorioepithelioma. We have only 2 cases in this group, both of these hydatidiform moles obtained from the Gynecological Division at Bellevue Hospital.

Case Number 1—A.V.—age 21—gravida 1, para 0. Chief complaints, vaginal bleeding and abdominal pain after a period of two months' amenorrhea. On examination, there were grape-like masses protruding from the vagina. Pathological examination showed hydatid degeneration. Patient was curetted. Ascheim-Zondek test was done one day following the curettage. Test was positive. Two weeks later, another Ascheim-Zondek was done after complete subsidence of symptoms. This time the test was negative. Patient was discharged, cured.

Case Number 2—A.K.—age 44—gravida 10, para 8. Chief complaint, vaginal bleeding. Last regular period, June 10. Skipped July. Bled August 7 and 8. Week later, bled again for two or three days. At this time, a hard mass the size and appearance of a fist, presented itself at the vulva. Pathological examination revealed a hydatidiform mole. On September 23, patient was curetted; bleeding stopped after one week when she was discharged from the hospital. On October 22, while at home, patient began to bleed again and complain of marked weakness. Passed large clots on October 30. Readmitted to hospital. On examination, fundus was slightly enlarged. No adnexal pathology. Ascheim done and found to be negative. *X*-ray therapy given. A second Ascheim, performed after *x*-ray therapy, was also negative. Because of the continuation of bleeding, radium was inserted into the vagina. When radium was inserted, no curettage of the uterus was attempted, because of its extreme softness. Consequently, no curettings were obtained for examination. On what little examination was done at this time, there was no irregularity in the contour of the uterine cavity. Another Ascheim was done after radium and found to be negative. Repeated [illegible] Vaginal bleeding ceased [illegible] o improve and she was fi[illegible]ough the possibility of chorioepithelioma was considered, its

presence was eliminated by the persistence of the negative Ascheims. The service rendered by the Ascheim-Zondek test was immeasurable in that it enabled us to discharge the patient with the reasonable assurance that she was cured. Ascheims will be continued on this patient for over a considerable period to check up on any possible further developments.

A review of the literature on the subject repeatedly demonstrates the infinite value of the Ascheim-Zondek test in the diagnosis and prognosis of hydatid mole and chorioepithelioma. Rossler, Schultze-Rhonhof, Mack, Catherwood, Ehrhardt, Ascheim, Zondek, and Steckel have contributed valuable data in this connection. Rossler reports a case of a woman who had had a hysterectomy performed for chorioepithelioma. One and a half years later she gave evidence of metastatic involvement. An Ascheim-Zondek test done at this time was strongly positive. Patient died and autopsy revealed generalized chorioepitheliomatous metastasis. Mack and Catherwood report a case of chorioepithelioma with a positive Ascheim-Zondek after a complete hysterectomy had been done and the patient was free of symptoms. Two months later, metastasis appeared on the anterior vaginal wall. The patient was treated with radium and the Ascheim-Zondek test became negative. Later, the Ascheim-Zondek test was again positive. They lost sight of the patient—but their assumption, which we feel to be correct, was that the patient was not cured. Ehrhardt reports a case of a woman of 30 with a history of having expelled a hydatidiform mole two years previous to the onset of her present illness. She now had symptoms of a brain tumor. Gynecological examination revealed either a pregnancy or a chorioepithelioma. An Ascheim-Zondek test was strongly positive even in diluted urines showing high hormonal content. This seemed to favor the presence of a chorioepithliomatous pregnancy. Trepanation was done and the patient died. Autopsy showed chorioepithelioma and generalized metastasis.

An Ascheim-Zondek test is positive in cases of hydatidiform mole and chorioepithelioma in dilutions of the urine as high as 1 to 10. Occasionally, one may obtain a positive reaction in a hydatidiform mole even after expulsion of the mole, sometimes as long as two months after the expulsion, without evidence of chorioepitheliomatous changes. Ascheims should be done as a matter of post-operative routine on all cases of hydatidiform mole and chorioepithelioma every two weeks until the test appears negative.

In our fifth group, if group it can be called, we have only one case. This case we have isolated into a group because of its potential significance

Case History—L.M.—age 40 — married 17 years—gravida 0. Irregular menstrual periods since onset at 13. Last regular period August 26. Skipped period due September 23. On October 2, in order to determine whether or not she was pregnant, an Ascheim was done which proved to be positive. Began to bleed on October 10, the character, amount, and duration similar to a normal menstrual period. Because, in our series, we had never obtained a positive Ascheim in any case other than pregnancy or hydatid mole, we felt that this patient had a very early abortion. Unfortunately, we were unable to obtain a urine following her menstrual period.

From a personal communication with Dr. Ralph Kurzrok of Sloane Hospital, we learned that he too had obtained several such cases in which positive Ascheims had occurred in cases of prolonged sterility where the patient had gone over her period anywhere from a few days to a few weeks, but had later menstruated as usual. In these cases, Ascheims repeated after menstruation were found to be negative. All these cases had no apparent cause for their sterility. We feel, therefore, that there must be a type of sterility in which impregnation of the ovum by the spermatozoa does occur, but, through some defect, implantation into the uterine wall either does not take place or is of brief duration and an early unsuspected abortion follows.

With this point in view, it is advisable to study those cases of sterility of unknown etiology and the application of the Ascheim-Zondek test here may open the way to a still undiscovered field.

In conclusion—

1. Our series of cases has confirmed the accuracy of the Ascheim-Zondek test as obtained by previous investigators. Our accuracy was 95 per cent.
2. We have demonstrated the use of the Ascheim-Zondek test as a diagnostic aid to the physician,
   a. in making a positive diagnosis of pregnancy earlier than through any other means.
   b. in differentiating menopause from pregnancy.
   c. in differentiating ectopic pregnancy from adnexal disease.
   d. in differentiating fibroid of the uterus from pregnancy.
   e. in the diagnosis and prognosis of hydatid mole and chorioepithelioma.
   f. in the possible discovery of a cause of hitherto unexplainable sterility.

I wish to express my thanks to Dr. Frederick C. Holden for his constructive criticism and his kind cooperation in furnishing material for this article.

I also wish to thank Mr. Joseph M. Chernaik for the use of his laboratory and his able assistance in conducting these tests.

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ELECTRODESICCATION OF TONSILS HARBORING MONILIA KRUSEI (CASTELLANI) AND NONVIRULENT DIPHTHERIA BACILLI

By EDGAR R MAILLARD, M D, NEW YORK, N Y

From the Division of Laboratories and Research New York State Department of Health Branch Laboratory New York N Y

* Presented at the meeting of the New York State Association of Public Health Laboratories Albany, November 7, 1930

A HIGH SCHOOL girl, sixteen years of age, in the course of the annual medical examination by the school physician, was told that her tonsils were infected This young woman consulted me on August 19 and the history and findings were as follows

History The patient had had diphtheria eight years ago, and had made an uneventful recovery, following the administration of antitoxin From that time she complained of several attacks of "sore throat" Her appetite had been poor and her general health only fair, she tired much more easily on exertion than her classmates

Clinical Examination The general appearance was that of a fairly well developed but slightly undernourished girl Her mucous membranes were pale The tonsils were small, embedded and cryptic Spreading on the surface of the tonsils and pillars was a dense greyish white mucoid material which extended downward and to the posterior wall of the pharynx It could be removed only with forceps and was found to be very tenacious

Bacteriological Examination Both morphological and cultural examinations were made of the material recovered from the tonsils and pharynx Stained and moist unstained preparations with 25 per cent sodium hydroxide were examined, and morphologically typical diphtheria bacilli and oval refractile, budding yeast-like organisms were found A few mycelia were noted also Material was collected on Loeffler's coagulated blood serum medium and incubated at 37°C A diphtheria bacillus, which proved to be nonvirulent and a yeast like organism were isolated Further study of the morphology of this organism, as well as a determination of the biochemical characteristics, as outlined by Castellani[1] proved it to be *Monilia krusei*

Castellani[2] has reported several cases of tonsillitis in which the incitants were fungi, among them *Monilia krusei*, but no record has been found of the isolation of two such organisms from the same case

Treatment Electrodesiccation was chosen as the method of treatment since it offered the possibilities of sterilization and the removal of the tonsils at the same time This was obtained by the use of a high frequency current varying from 250,000 to 400,000 cycles per second One tonsil was treated at a time and the treatments were given at weekly intervals Cultural tests were made after each fulguration Each tonsil was completely removed on completion of the third treatment and no diphtheria bacilli were isolated thereafter The fungus still persisted, however, on the posterior surface of the anterior pillar and on the posterior wall of the pharynx The remaining treatments were directed toward the destruction of the fungus and this was accomplished following the ninth Several cultures taken after the final electrodesiccation showed no growth of diphtheria bacilli on Loeffler's medium nor of the fungus from material collected on Sabouraud's medium and incubated for seven days The treatments caused little inconvenience and the patient was able to attend her daily classes

Summary Tonsils harboring *Monilia krusei* and a nonvirulent strain of diphtheria bacilli were removed by electrodesiccation Cultural tests indicated that the organisms were eliminated during the course of treatment which lasted nine weeks

The continued presence of these organisms after each electrodesiccation which did remove a superficial layer of tissue showed that they were not merely adherent to the surface of the tonsil but had invaded the submucosa This observation together with the history of many attacks of "sore throat" indicated that these organisms did not exist merely in the state of harmless parasitism

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July 15, 1931

CONGENITAL HEARTS AT AUTOPSY

By PAUL COHEN, M.D., NEW YORK, N. Y.
From Strecker Laboratory, City Hospital, Welfare Island, N. Y.

DURING the past four years at City Hospital we have met with about one dozen congenital hearts out of nearly one thousand autopsies. Of these we desire to report eight cases.

The age incidence is noted in the following table:

Case No.	Age	No. of Cases
1 and 2	2 days	2
3	3 weeks	1
4	4 "	1
5	5 years	1
6	20 "	1
7	31 "	1
8	57 "	1

Of these, Cases 1 and 3 were found to present the usual common findings, viz.—large patent foramen ovale and patent ductus arteriosus;

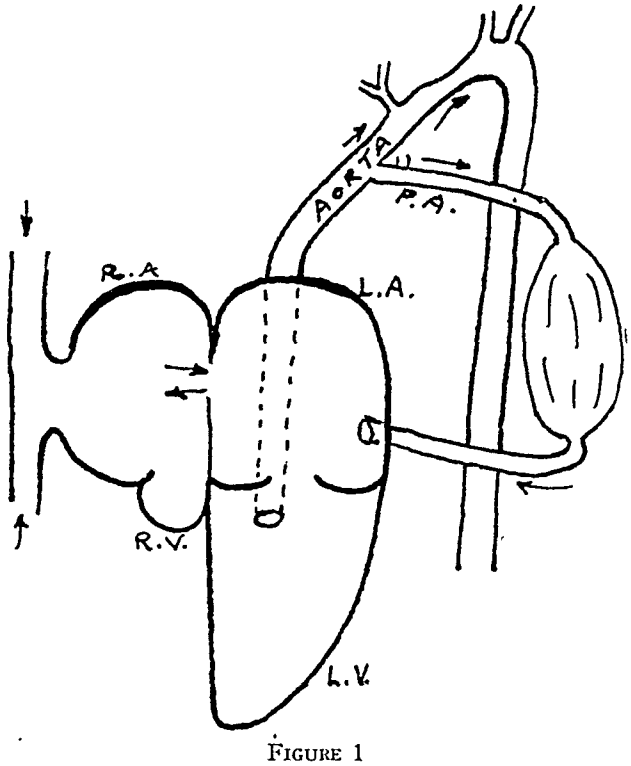


FIGURE 1

Case 2—Trilocular Heart with the pulmonary artery as a branch of the arch of the aorta.

the latter in Case 3 arising at the bifurcation of the pulmonary artery.

Case 4 presents in addition to the above findings, a defect in the upper part of the interventricular septum.

Case 8 is of interest only in the presence of a patent foramen ovale, although the patient died of rheumatic endocarditis at the age of 57.

The four remaining cases are of greater interest and will be presented in greater detail. See diagrammatic sketches.

Case 2 presents the pulmonary artery as a branch of the arch of the aorta. The right ventricle is ¼ inch in diameter. The foramen ovale is patent.

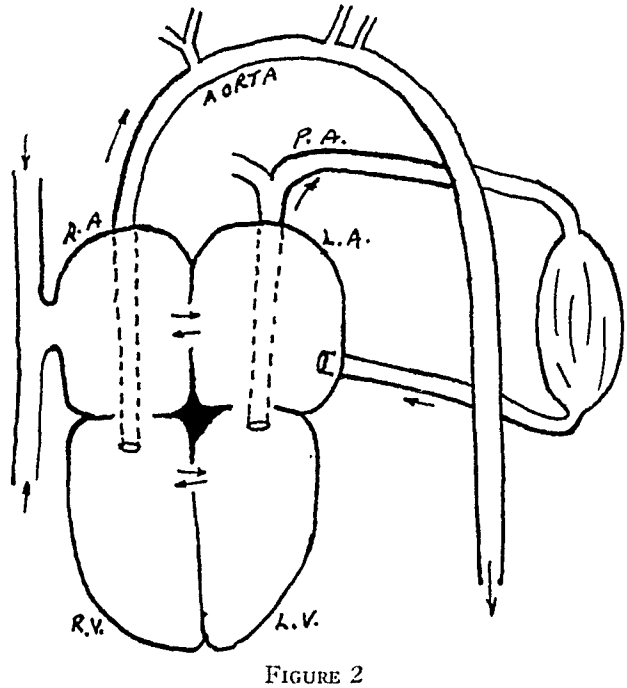


FIGURE 2

Case 5—Four-chambered Heart with defective septa and transposition of the aorta and pulmonary artery.

Case 5 shows the aorta coming from the right ventricle while the pulmonary artery empties the left ventricle. In addition the interventricular septum shows a defect and the foramen ovale is patent. Clinically this case, a boy, showed marked cyanosis and clubbing of the fingers and toes. There was a blowing systolic murmur heard over the precordium, but loudest over the pulmonic area. The liver and spleen were palpable; R. B. C. 7,800,000; Hbg. 120.

Case 7 shows the aorta arising from both right and left ventricles, the pulmonary artery arising from the right ventricle behind. The level of the pulmonary cusps is 5 cm. above the mouth of the artery, the intima above being lace-like in character, and the walls of the artery very thin. The great vessels of the neck are transposed. The interventricular septum has a defect in the upper portion. Clinically this case was a blue baby. Vegetations were found on the mitral valves.

Case 6. The heart is very large and globular, weighing 400 grams. The right ventricle is very large and comprises most of the heart. The aorta arises from the right ventricle. Both inferior and superior venae cavae open into the left auricle which lies behind the right auricle. The foramen ovale is patent, the ductus arteriosus is closed, the aorta has three

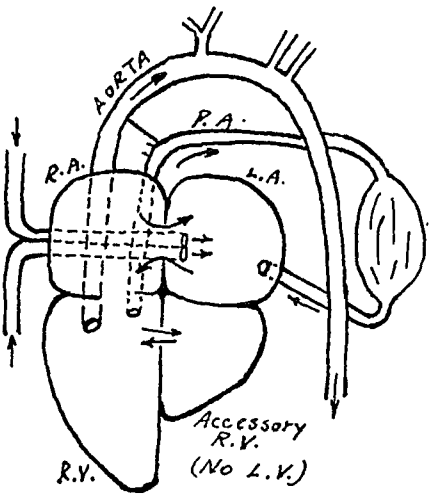


FIGURE 3
Case 6—Triloculai Heart with accessory right ventricle and anomalous origins of aorta and vena cavae.

There is a small accessory chamber immediately beneath the anterior portion of the aorta and communicates with the large right ventricle by a large opening. Posterior to the aorta is the opening of the pulmonary artery.

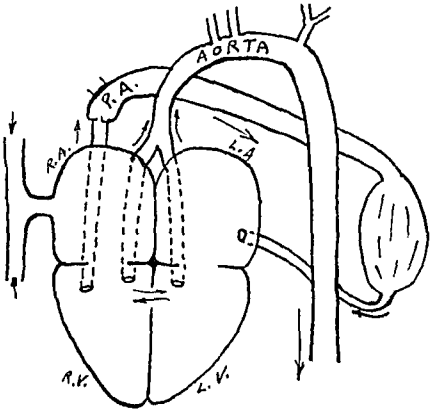


FIGURE 4
Case 7—Four-chambered Heart with defective septum anomalous pulmonary artery, double origin of aorta with transposition of vessels arising from aortic arch.

cusps, the pulmonary artery has two cusps. Clinically, the patient showed cyanosis and clubbed fingers and toes. There was a diffuse apical impulse, and a diffuse systolic thrill at the apex and in the left second space. Death followed pulmonary infarction secondary to thrombosis of the left femoral vein. Tuberculosis of the lungs was disclosed at autopsy.

COMMON DERMATOSES OF THE FACE

By IDA J. MINTZER, M.D., JAMAICA, N. Y.

From the Dermatological Department of the New York Post Graduate Medical School and Hospital, George M. MacKee, Director. Read before the Medical Society of the County of Queens, Forest Hills, New York, Feb. 24th, 1931.

THE purpose of this presentation is to consider the various methods of treatment that may be used in some of the more common dermatoses of the face, rather than to discuss the etiological factors. Many of these skin diseases are amenable to any one of several agents or their combinations. The subject will be considered under the following headings:

Anomaly of pigment as Freckles, Chloasma.

Anomaly of hair Development as Hypertrichosis.

Constitutional unbalance with local manifestations as Acne Vulgaris, Rosacea, Eczema.

Infections caused by

1. Pus organisms, as in Erysipelas, Impetigo Contagiosum, Sycosis Vulgaris.
2. Fungi, as in Tinea Barbae.

Dermatitis Venenata caused by plants and chemicals.

Constitutional or local infections as Syphilis, Lupus Vulgaris, Lupus Erythematosus.

New growths as Molluscum Contagiosum, Nevi, Epitheliomas

FRECKLES: Circumscribed collections of pigment, the size of a pinhead or larger. Freckles usually do not make their appearance before the sixth or eighth year, and may persist throughout life, being exaggerated each summer. The treatment consists of peeling the epidermis. Bichloride of mercury applied as a lotion in the strength of one half to four grains to the ounce of water or alcohol, dabbed on two or three times a day is of benefit. Hardaway (1) touches each freckle with a needle connected to the negative pole of the galvanic battery.

CHLOASMA: A condition that frequently occurs in women, especially during pregnancy and at the menopause, and is likewise seen in other derangements of the reproductive organs. When the disease is due to some systemic or internal disorder, it is likely to improve or disappear when health is regained. Sometimes the use of glandular products, especially whole ovary, are of value. The local treatment consists in peeling the epidermis with lotions containing salicycle acid or bichloride of mercury, or letting strong soaps stay on the patch all night in the form of a plaster. When the latter is used it is washed off in the morning and cleansed with carbon tetrachloride 5 per cent in alcohol, followed by a lotion containing bichloride of mercury 1:1000, or salicylic acid, 2 per cent in alcohol. Andrews (2). When the irritation causes discomfort, use cold cream until the reaction subsides.

HYPERTRICHOSIS: An increased hair growth in regions normally occupied by lanugo hairs. The hypertrichosis considered here is that which occurs on the bearded portions on the faces of females. At the onset epilation or irritants should not be employed. The plainly visible downy hair may be bleached with strong solutions of hydrogen peroxide. When the hairs are large, electrolysis is the only safe treatment. Eller and Satenstein (3). Radiotherapy should never be used because of the possible sequelae of radiation.

ACNE VULGARIS: Is characterized by a set of polymorphous lesions, such as comedones, papulopustules, superficial or deep follicular pustules, crusts and cicatrices. In most cases there is an associated seborrhoea. The disease usually occurs on the face and back of adolescents. The treatment should be constitutional as well as local. Fats and carbohydrates should be reduced in the diet, and water taken freely between meals. Bitter tonics, dilute hydrochloric acid and pepsin, and liver extract in the anemic, R. L. Sutton (4), are all of service. Pathological conditions in the intestinal tract or in other organs should be corrected, and attention paid to the general hygiene of the patient. Locally, the patient should be advised against the use of greasy creams. Comedones must be expressed and pustules evacuated. Of the remedial agents, sulphur 2 to 8 per cent is the best, and may be used in the form of an ointment or lotion. One of the most valuable methods of treatment, is to stimulate the sluggish skin until a mild dermatitis is produced. This is accomplished by washing the face with tincture of green soap and hot water for three or four successive nights, and applying an ointment containing sulphur or resorcin, 5 to 60 grains to the ounce of lanolin or cold cream. When reaction occurs stop treatment and apply soothing applications as zinc oxide in liquor calcis, or calamine lotion. The treatment is resumed when the reaction subsides., until after a number of courses, the desired effects are obtained. Andrews (5). Roentgenotherapy in acne, gives excellent results. MacKee (6), J. C. Michael (7). It should be used according to the MacKee standard, one quarter skin units, unfiltered, once a week, and with few exceptions, sixteen weekly treatments should not be exceeded. All indolent cases, accompanied by an oily seborrhoea, deep seated destructive lesions or hypertrophic scarring, are greatly benefited by *x*-rays. Ultra-violet light is useful, especially where the affection is superficial, acutely inflamed, and no notable comedones; but recurrences are the rule, and so far no other form of treatment has given the good and fairly rapid results obtained by the *x*-rays. Vaccines and bacteriophage, D'Herelle (8), in pustular acne is said to be of value.

ROSACEA: A chronic disorder of the skin of the nose and the flush areas of the face, characterized by congestion, acneiform lesions, telangiectasis, and if the condition persists, hypertrophy of the skin of the nose. Rosacea may occur alone or be superimposed upon a persistent acne vulgaris. The treatment here too should be constitutional as well as local. Highly spiced food, hot tea and coffee, and hot soups should be avoided. Bowels should be regulated and digestive disturbances corrected. Locally, lotio alba is effective in all stages of the disease. The dilated venules may be treated by electrolysis, which is the method of choice, scarification or electrodesiccation. Distance application of ultra-violet light twice weekly, with first and second degree reactions are beneficial. *X*-rays are of some benefit. In the third or rhinophyma stage, the early lesions can be cured by bipolar endothermy. Each nodule or enlarged sebacious gland is penetrated with the needle, and the current is then turned on for the time necessary for coagulation. After several treatments, the nodules contract and the nose gradually returns to normal. Eller (9). At this stage fractional doses of unfiltered *x*-rays given weekly, for several weeks may prevent a recurrence. In the more advanced cases surgical endothermy is an ideal method of treatment, though a sharp scalpel may be used to remove the redundant tissue.

ECZEMA: The most common type observed is the erythematous variety. The skin is infiltrated, dusky red. The forehead, cheeks, eyelids and nose are most commonly affected. This type may progress to other phases of the disease in which the skin is crusted and exudative. The treatment during the acute stage should consist of local applications of soothing oils and creams, until the acuteness subsides, and in addition it is desirable to apply subfractional doses of *x*-rays to each cheek and occasionally to the forehead. After the acute stage has passed, roentgen therapy becomes of increasing importance for the control of the squamous infiltrated lesions of chronic facial eczema.

ERYSIPELAS: An acute streptococcus infection of the skin and subcutaneous tissues. The constitutional treatment of erysipelas is largely symptomatic. Rest in bed together with a simple nutritious and easily assimilated diet is essential. Locally, constant wet dressings of boric acid solution, or saturated solution of magnesium sulphate, or aluminum acetate, etc., is soothing to the patient at first, though later may cause discomfort. Ichthyol in ointments or in aqueous solution, 10 to 25 per cent is very popular. Solutions of phenol, iodine, silver nitrate, etc., have been variously used in attempts to stop the spreading of the disease, but frequently did more harm than good on account of their irritating qualities. Since the advent of effective erysipelas antitoxic sera, all other methods of treatment in the acute stages of the disease have become of secondary importance; and likewise, injections of streptococcus erysipelatis toxin, may be used for the prevention of recurrences in cases of chronic recurrent erysipelas. In the latter cases focal infections should be sought for in the sinuses, teeth and tonsils.

IMPETIGO CONTAGIOSA: A contagious disease which may occur at any age, but is most common in children. The treatment of this disease is comparatively simple. All that is necessary is strict cleanliness with soap and water, open pustules when present, remove the crusts, and the application of ammoniated mercury 3 to 10 per cent, or sulphur ointment in the same strength, 2 or 3 times daily. In the stubborn cases ¼ or ½ skin units of unfiltered *x*-rays, frequently hastens the cure. *X*-ray treatment is particularly useful in adult males, where the disease is recalcitrant because of the beard. Andrews (10).

SYCOSIS OF THE BEARD: There are two types; tinea barbae, which is a fungus infection, and sycosis vulgaris, which is a bacterial infection of the hair follicles of the bearded region, and occasionally of other hairy regions. Sycosis vulgaris may be the simplest or the most difficult disease to cure. In some patients rapid involution is caused by a 10 per cent ammoniated mercury ointment, without even manual epilation, whereas in others, permanent alopecia established by *x*-rays, together with all kinds of local antiseptics and vaccines, fail to result in a cure. The treatment in the acute stage should consist of hot applications of boric acid solution, applied several times daily, with a soothing ointment between applications. When the acuteness subsides, hot bichloride of mercury dressings, 1-2000, and ammoniated mercury ointment may be substituted. *X*-ray is a most valuable form of treatment to be used as an adjunct to the above measures, though sometimes the disease develops a tolerance to *x*-rays after 8 or 10 such treatments in which case the exposures must be increased to produce a temporary alopecia, and in very stubborn cases, nothing short of a permanent alopecia will help.

TINEA SYCOSIS is not a common disease. No other single remedy is as effective in this disease as *x*-rays.

DERMATITIS VENENATA: May be caused by various substances of animal, vegetable and chemical nature, in persons of known susceptibility. A common cause of acute dermatitis about the forehead, eyes, face and neck is found in proprietary hair dyes and in furs, and also in the analin dyes found in the face powders and rouge. The treatment in the acute stage when edema and vesiculation are present, is soothing wet dressings. This may be changed to astringent preparations, as carbolated or mentholated calamine lotion when the acute symptoms subside. In the case of dermatitis caused by poison ivy, the patient may be immunized with small doses of rhus toxicodendron during the poison ivy season. Schamberg (11). In all cases the recognition of the irritant, and the avoidance of coming in contact with it is essential.

LUPUS VULGARIS: This is a true tuberculosis of the skin, which in the majority of cases begins in early life. Under pressure with the diascope, the inherent brown color of the individual nodules of which the patch is composed is seen. This peculiarity is characteristic and important in diagnosis. Lupus vulgaris is a difficult disease to clear up. The systemic treatment is of great importance, and the rules laid down for the management of tuberculous patients, apply to those suffering with the disease located in the skin. This should consist of generalized ultra-violet light baths, cod liver oil, nutritious food, rest and out-door life. Tuberculin given over a long period of time is of value. Salt poor and high vitamine diet is reported to give excellent results. Gold injections have also given good results in the hands of some clinicians. Locally, complete destruction of the diseased patch by electrodesiccation and thorough curettment,

followed by ultra-violet is probably the most effective treatment. When the involved areas are larger or accompanied by ulceration and hypertrophic scarring the cutting current is more suitable, though the cosmetic results are not so good. Kromayer light applied to the affected patch in sufficient dosage to produce an intense local reaction, has cured a small percentage of cases. Refrigeration by carbon dioxide snow, requires repeated treatments to bring about results. The reaction and pain are severe. The results that are reported from the use of the finsen light used in the Finsen Institute at Copenhagen and other European centers, cannot be duplicated anywhere else in the world. In certain cases results can be obtained with radiotherapy, but the untoward results, as atrophy and telangiectasia are so common, that it is inadvisable to use this form of treatment, if other measures can be employed.

LUPUS ERYTHEMATOSUS: This is a chronic, for a short time inflammatory process terminating in atrophy. The disease consists of erythematous infiltrated patches covered by adherent scales. These plaques spread at the periphery and heal in the center with atrophy, scarring and telangiectasis. It most frequently occurs in young adults on the bridge of the nose and flush areas of the cheeks, in the form likened to a butterfly. The treatment of lupus erythematosus has been more successful in the last few years, since the addition of the various gold preparations to our therapeutic realm. Gold and sodium thyosulphate is the most stable and least toxic preparation. Schamberg and Wright (12). The compound is injected intravenously every 5 or 10 days over a considerable period of time. This compound is now used locally with considerable success. Locally, in the acute cases, soothing wet dressings followed by lotio alba is beneficial. After the acuteness subsides topical applications of salicylic acid 5 to 20 per cent in alcohol, painted on the lesions 2 or 3 times daily, until considerable peeling is induced. These applications are renewed after the subsidence of each reaction, until after a number of courses the infiltration disappears. Carbon dioxide snow gives good results, both from a curative and cosmetic standpoint. Eller (13). Radium and *x*-rays should not be used because of the possible radiodermatitis and its sequelae.

SYPHILIS: Chancre, maculo-papular and gummatous lesions are not uncommon on the face. The disease should be investigated and the treatment is the same as for similar stages of the disease on any other part of the body.

MOLLUSCUM CONTAGIOSUM: An infectious type of epithelial overgrowth, consisting of one or more papules, with a central depression, from which a caseous plug, called the molluscum body, may be squeezed. It most commonly occurs in children. The condition is treated simply by the manual expression of the molluscum body from each individual lesion, and by applying carbolic acid to the central cavity with a toothpick, or the lesions may be treated by curettage, followed by painting the bases with carbolic acid or iodine. Healing occurs within a week, leaving no scar.

VERRUCA PLANA JUVENILIS: Occurring on the face is often mistaken for lichen planus. This variety of warts can readily be treated by desiccation without any anesthesia, using a small cold spark. The dried-up warts are then removed with a dull curet, and the bases painted with tincture of iodine. Daily painting with a salicylic acid in collodion, 1 to 8, or rubbing with an ointment containing 5 per cent of both salicylic acid and resorcin is generally successful. The internal administration of mercurous iodide, one-sixth or one-quarter grains three times daily has proven successful. H. Fox (14), C. T. White (15). The various arsphenamine injections seem effective in some cases.

NEVUS FLAMMEUS: Portwine marks vary in size and color and are never elevated above the surface of the skin. The best treatment for this condition is carbon dioxide snow. With small doses applied frequently, very excellent results can be obtained with a minimum of scarring. Using Dr. Lorıat Jacob's (16) apparatus, the pressure is accurately controlled by a spring gauge. Many authorities advocate the compression technic with the Kromayer light, though equally good results follow distance radiation with the air-cooled ultra-violet light. With either compression or distance therapy, blistering doses are necessary, and should be repeated at frequent intervals before the erythema of the preceding treatment subsides. *X*-rays and radium therapy should not be used in the treatment of this condition, MacKee (17), because of the unsightly scarring and the possible sequelae of radiation.

ANGIOMA CAVERNOSUM: In this type of vascular nevus the deep vessels, especially the deep veins, are involved. The lesions appear at or shortly after birth, are round or irregular in contour, and are elevated in varying degrees above the surface of the skin. Occasionally the condition undergoes a slow spontaneous fibrosis or is cured as a result of accidental traumatism, but this often results in more scar formation than when treated with radium, from which remarkable results are obtained. There are various other methods of treating these lesions, such as, refrigeration with carbon dioxide snow, *x*-rays, bipolar endothermy or general surgical procedures. Radium, however, gives such good results that it is the method of choice.

FLESHY, PEDUNCULATED SOFT MOLES Flaccid appendages sparsely pigmented and usually nonhairy These lesions may be removed without hazard by grasping the mole with a pair of forceps, freezing it with ethyl chloride, and clipping it from the base with a pair of small scissors The larger moles may be removed by a scalpel under local anesthetic

NEVUS PILOSUS These nevi may or may not be pigmented In all hairy nevi the hairs should first be removed by electrolysis, which often results in obliteration of the lesion The larger moles may be removed by transfixing the lesion in several directions with the needle attached to the negative pole, using a current of 2 or 3 ma

BLACK OR BLUISH BLACK MOLES These are the most dangerous type of nevi from the standpoint of malignancy They are generally nonhairy and vary in degree of elevation It almost always is a dormant melanotic cancer and should be left untreated unless it shows some evidence of increase in size or deepening of pigment, or if it is exposed to irritation from friction The treatment should be most radical, for any palliative measures may result in general metastasis and death The best method is to remove the lesion intact with the high frequency cutting current, circling wide for one-half or three quarter inches out from the lesion, Radium is then applied to the original site of the lesion, and to the surrounding area, as well as heavy doses of filtered *x*-rays to the glands which drain the affected site The endotherm knife is preferable to the ordinary surgical incision in that the lymphatics and capillaries are sealed by the heat of the current simultaneously with the removal, thus lessening the chance of metastasis

BASAL CELL EPITHELIOMA These lesions develop slowly, are relatively benign and do not metastasize If left untreated it acts as a rodent ulcer leading to mutilation, and if in the vicinity of the nose or eye, which is a frequent location, it will destroy the cartilage or the eye In treating basal cell epitheliomas, a variety of methods may be used, such as *x*-rays, radium, electrocoagulation or surgical excision Results can only be obtained if all the cancer cells are destroyed Electrocoagulation and curettment is an ideal procedure It is not only a rapid but thoroughly destructive method and leaves a minimum of scarring Irradiation also gives excellent results with a minimum of scarring and perfect cosmetic results, with no pain or shock to the patient MacKee (18)

PRICKLE CELL EPITHELIOMA This presents a more difficult problem than the basal cell type It is malignant and has a tendency to metastasize early The most common location is the lower lip, and occurs more often in men past forty The malignant neoplasms may be preceded by single keratosis, though there are occasionally multiple foci This type of cancer must always be treated in the most radical way for a cure Surgical removal with the endotherm knife, followed by radium to the primary site and heavy doses of filtered *x*-rays to the glands which drain the affected area, give the best results MacKee (19) *X*-ray or radium alone may cure skin cancers, and have an advantage over surgery because of the better cosmetic results, but the combination of surgical removal with irradiation give the greater percentage of cures

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July 15, 1931

HOW CANCER PATIENTS ARE TAKEN CARE OF BY THE CITY OF NEW YORK*

By IRA I. KAPLAN, M.D., NEW YORK, N. Y.

From the Division of Cancer, Department of Hospitals, City of New York, Dr. J. G. Wm. Greff, Commissioner. * Delivered over Radio Station WNYC, April 15, 1931.

EVER since early civilization the state has assumed the burden of caring for the health of its citizens. The diagnosis of a disease and the application of some curative measure by no means sums up what is required in caring for the sick, especially for those suffering from cancer. The more obscure the causes and the cure of a disease, so much the more interested in its study must the state necessarily be. For this reason it is that the increasing ravages on life, due to cancer, have compelled the people to look to the state for protection.

New York City has accepted this responsibility by establishing a Division of Cancer in the Department of Hospitals. This Division concerns itself with the diagnosis, treatment and care of cancer patients applying to the municipal hospitals for help.

First, it provides proper care for those, who, due to economic conditions beyond their control, are unable to care for themselves. Secondly, it offers its patients the most up-to-date treatment with those curative means which have proven of value in the campaign on cancer. Thirdly, it possesses a broad educational aspect for both the lay and the professional public. And fourthly, it offers a wonderful teaching medium for enhancing the efforts of the physicians of the City to control the disease.

Unfortunately, cancer has from time immemorial been considered a loathsome disease that subjects the victims to an ostracism more deadly than the malady itself. Thanks, however, to a more enlightened era of public education, people are becoming more sensible towards the sufferer from cancer, and as this disease is (as far as we know) neither contagious nor infectious, the cancer sufferer need no longer be assigned to the meanest quarters of the home. As far as we know, cancer in the human being is not hereditary, therefore, families need not have any fear on this account if one of their members is a cancer victim.

Cancer patients are divided into three groups: the incipient or early case, the chronic, and the advanced or hopeless case. It is with the incipient early case that medicine can do the most; a great deal can be done for the chronic patient to ameliorate his condition; while the hopeless can only be helped to pass away with a minimum amount of torture and suffering.

Although the cause of cancer is still unknown, we have learned by observation and experience that up to the present time the most effective treatment is given by surgery, *x*-ray or radium, or a combination of all these methods. Positive cure in cancer depends on two factors—an early diagnosis and prompt appropriate treatment.

Patients come from several sources to the units established by the Cancer Division. They may come directly through some fear, or sudden discovery of a growth, or following some cancer educational campaign. They may be referred by the wards of the hospital wherein the cancer unit is established, or by outside clinics and hospitals, or the family physician.

When a patient first comes to the cancer unit he is thoroughly examined and every scientific means necessary is made use of to establish the diagnosis of his condition. When the diagnosis is made he is given the proper advice as to treatment, and if he accepts this advice such treatment is carried out. Due to close association between the cancer units and the general hospital, the service of the staffs is available to these patients so that they may receive the best surgical and medical care in addition to the most up-to-date radiation treatment that their individual condition may require.

To be effective, though, the treatment of cancer must be instituted early. Therefore, the patient who comes to the cancer clinic early stands the best chance to be cured.

How are we to know cancer? Not all abnormal conditions are cancerous, but it is better to be skeptical and get a physician's advice and find the condition to be a harmless one than to wait until the disease is rampant throughout the body. Any abnormal growth appearing anywhere on the body, which persists in growing or ulcerates, should receive attention. Any long-persisting sore on the lip, tongue or mucous membrane of the mouth, and abnormal lumps or tumors appearing on the body, in the breasts, on the side of the neck, or in the armpits, should be reason enough for medical examination. Any interference with normal body functions, such as abnormal menstrual activity, persistent constipation (especially with bloody stools), persistent heartburn, and bloody vomiting require immediate medical consultation.

By taking care of early abnormal conditions, cancer development can be arrested or prevented.

The Division of Cancer already has established several units and others are being

created for carrying on this work. To take care of many unfortunate men and women suffering from cancer who find themselves in a desperate predicament due to economic and social conditions over which they have no control, there is a Cancer Social Service attached to the Division of Cancer. This Social Service sees to it that the patient comes regularly to the clinic for treatment and observation, takes care of the social and economic needs of himself and his family, and, by preventing the loss of his job, keeps his family from suffering hardships while he is being cared for medically. It looks after the spiritual and mental happiness of those to whom can be given only custodial care in an institution for hopeless cases.

The units already established for cancer work are the Radiation Therapy Department at Bellevue Hospital, 26th Street and First Avenue; the Cancer Clinic, 124 East 59th Street; the Brooklyn Cancer Hospital, 109 Cumberland Street, Brooklyn; and the Custodial Cancer Hospital on Welfare Island.

In the near future, the new Radiation Unit at Lincoln Hospital, East 141st Street and Southern Boulevard, Bronx, will be opened for the care of cancer patients.

The Cancer Division is always on the lookout for a real cancer cure and is constantly testing out proposed remedies, but both the public and the physician are warned against quacks and pseudo-specialists who attempt to treat patients with secret remedies or insufficient quantities of radium. It is essential that the patient go to ethical, well-trained physicians for advice, or, when economic conditions require it, come to legitimate cancer clinics, such as those of the Department of Hospitals, for proper advice and treatment.

Cancer does not always have to be treated in hospitals. In many instances the condition can be treated while the patients remain ambulatory; that is to say, the patients can come and go from their homes for the necessary treatment. But the patients must remain under observation even after the local condition is controlled.

The public should not try advertised cancer cures because in this way they may delay proper treatment until it is too late. Anyone who feels the slightest suspicion that he is developing cancer should immediately secure advice from a competent physician or directly from the City's cancer service.

As I said at the beginning of this talk, New York City—through the Cancer Division of the Department of Hospitals—is doing all in its power to check the ravages of this dread disease. It offers cancer victims every known facility for the amelioration of their condition. It seeks to educate the public as to the severity of cancer's menace and to teach the physicians of the City the most modern methods of coping with the disease. It undertakes research in the hope of discovering the cause of cancer and bringing to light an adequate cure.

But the City's efforts can meet with success only if the public becomes thoroughly awakened to the significance of this very real health hazard and takes steps to bring to immediate and scientific treatment all suspected cases.

DECAPSULATION OF THE EPIDIDYMIS

By MAURICE MELTZER, M.D., NEW YORK, N. Y.
From the Department of Urology, Broad Street Hospital, New York.

THE purpose of this presentation is to introduce a new and modified technique of Hagner's operation. Decapsulation of the epididymis has been practiced by the author for three years and he is convinced that, in acute epididymitis, the procedure is an improvement and more rational than epididymotomy.

The treatment of acute epididymitis, most commonly secondary to gonorrheal infection, is quite standardized. As soon as this complication occurs, all local treatment is discontinued. The patient is placed in bed and the following routine usually is employed: elevation of the scrotum, application of an ice-bag to the affected region, hot rectal irrigations for the coexisting prostatitis and seminal vesiculitis, bland diet, forced fluids, attention to intestinal elimination, appropriate medication for pain and temperature, intramuscular injection of Aolan (milk) to induce protein reaction, or intravenous injection of mercurochrome or sodium iodide combinations. The palliative measures, separately or combined, usually result in subsidance of the acute congestion and mild inflammatory process in the epididymis.

Palliation usually is seen within a week. *In many instances, despite faithful application of palliative measures, the inflammatory process persists and small punctate abscesses form in the epididymis, some of which coalesce to form a localized conglomerate abscess or multiple abscesses.*

Any part of the epididymis may be affected. Clinically, progression of the inflammation with abscess formation is recognized by continued and often increased local pain and tenderness. Absorption from the suppurative focus results in chills, fever and general malaise. This combination of local and general symptoms, when unrelieved by palliative treatment, is Nature's way of calling attention to the necessity for drainage. Surgical drainage rather dramatically and quickly terminates the patient's invalidism. Some prefer continuance of palliative treatment, but experience has shown the fallacy of such judgment, because the patient's return to normalcy is unduly prolonged. From an economic standpoint, surgical drainage is not only desirable but the surest and most rapid way of restoring the patient to his usual vocation.

Surgical treatment for acute epididymitis is that described by Hagner in 1902. The operation is designated as "Epididymotomy."

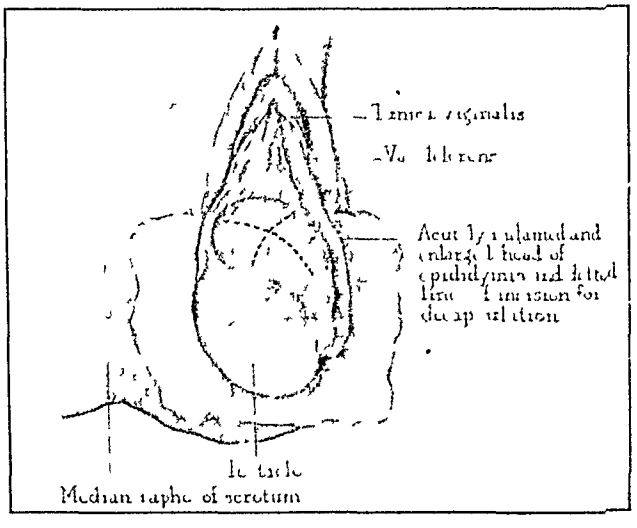


ILLUSTRATION 1

The well-known technique of epididymotomy is here described to bring out the limitations of mere puncture of the epididymis:

A dorsal incision is made on the affected scrotum, the tunica vaginalis sac and contents freed and delivered. The tunica sac is opened, releasing a varying amount of coexisting inflammatory hydrocele fluid; the tunica vaginalis usually is excised to its neck along the spermatic cord and the cut edges sutured. The tumefied and tense epididymis is now exposed. The usual procedure is to make multiple punctures with a Hagedorn needle. Extravasations of blood or droplets of pus ooze through these openings. The tumid area is thoroughly punctured and extra punctures usually are made in regions where pus is found. All bleeding points are securely tied, the testicle replaced in normal anatomic relations and the scrotal sac closed with drainage.

Epididymotomy usually is followed by cessation of symptoms in a few days and the patient is out of bed in about one week. In the writer's experience, however, some patients have had acute recurrences and were confined to bed for a longer period. *It therefore seemed reasonable to infer that continued pain or recurrence of symptoms most likely was due to tension and faulty drainage of pus, retained by the acutely inflamed fibrous capsule of the epididymis.*

About three years ago, with this thought in mind, the writer in the course of an epididymotomy incised and stripped back the capsule. The technique is analogous to renal decapsulation. Decortication not only suspends all tension upon the swollen epididymis, but also exposes any abscess foci. Decapsulation, rather than simple epididymotomy, has been practiced by the writer ever since. No recurrences have been noted and relief of symptoms is quicker. Careful search of the literature reveals this to be the first description of any attempt to visualize and facilitate drainage of pus in the epididymis.

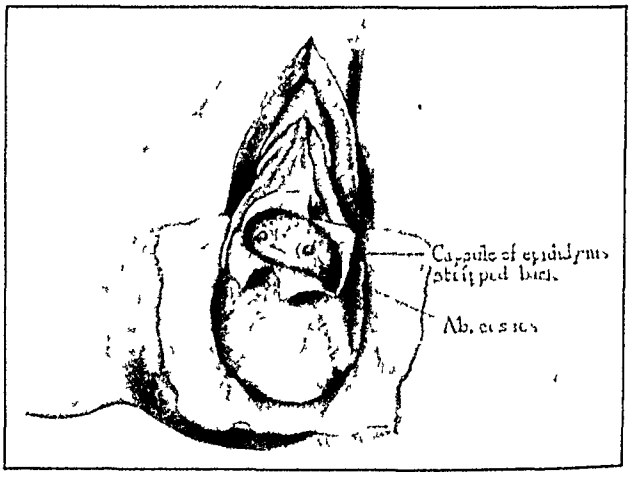


ILLUSTRATION 2

Decapsulation of the epididymis makes a more surgical procedure of Hagner's operation. *Not only does decortication immediately remove tension upon the acutely swollen tubules of the epididymis, but stripping-back of the capsule also reveals any abscess areas.* These readily can be probed and drained and topical applications of mercurochrome, hexylresorcinol or metaphen made to them.

AUSCULTATION OF THE ABDOMEN IN THE DIAGNOSIS OF HYPERMOTILITY

By NEIL C. STEVENS, M.D., GLEN COVE, N. Y.

AUSCULTATION of the abdomen is a valuable method of diagnosing hypermotility of the stomach and intestinal tract and is an aid in the differential diagnosis of a few other intestinal conditions. Although it is so simple and so instructive, the writer has never seen it employed by any physician or surgeon nor heard of it being taught in any medical school. Its chief value is in determining the presence or absence of hypermotility.

Hypermotility is a very common condition. It is often noted in fluoroscopic and x-ray examinations, but owing to the comparatively small number of cases x-rayed, it has not received the consideration it deserves.

Hypermotility is one of the commonest causes of indigestion. It can cause discomfort, gas, pain, nausea, heartburn etc. Most commonly it is associated with rather frequent bowel movements, i. e., two or three a day. Sometimes the hypermotility is so pronounced that it causes a spasmodic condition of the intestine with resulting constipation. These cases are usually treated by cathartics and colon irrigations which tend to increase the hypermotility and spasm.

The causes of hypermotility are organic, such as, peptic ulcer, cholecystitis gallstones, chronic appendicitis, and adhesions, and functional due either to nervousness or fatigue.

Hypermotility that does not cease in a few days after the administration of sedative drugs is in all probability due to an organic and not a functional cause. Duodenal ulcer and chronic appendicitis are common causes. Post-operative adhesions are a frequent incitant to spasm and hypermotility.

Most cases of acute abdominal distress of functional origin, if not due to constipation and hyperacidity, are caused by hypermotility. Functional hypermotility begins most commonly in the third decade at a time when individuals are subjected to the unaccustomed stress and strain of existence. Many cases begin after a period of prolonged fatigue or nervous tension. It is a common condition among stockbrokers. It seems to be associated quite often with over-indulgence in alcohol. Sea-sickness is an illustration of an extreme degree of hypermotility.

Functional hypermotility can simulate a number of acute abdominal conditions, and in some cases it is of importance to know whether increased peristalsis is present or absent. In the beginning of an acute appendicitis there is pain, tenderness, slight or marked rigidity in the right lower quadrant, nausea; there may be a slight rise in temperature and pulse rate. In many cases of acute indigestion there is pain in the right lower quadrant, tenderness, distension which may simulate rigidity, nausea and vomiting. The temperature may be slightly elevated. Perhaps we see the case in the middle of the night when it is not easy to have a blood count done. Shall we let the case go till morning or shall we advise immediate removal to the hospital?

Very often the presence or absence of hypermotility will decide the question for us. Nature makes every effort to protect an inflamed appendix. She quickly draws the omentum over and around it; she throws the muscles of the abdominal wall into spasm to secure as much protection as possible and she slows down the peristaltic action of the intestine, so as not to further traumatize the inflamed organ. So in the large majority of cases of acute appendicitis hypermotility is absent. If it is present we may feel reasonably sure that we are dealing with a case of indigestion.

Diagnosis. If one listens with a stethoscope at an arbitrary point of the abdomen—one inch to the right and one inch above the umbilicus, one will hear from three to six faint gurgles or tinkles per minute in the normal individual. The number of tinkles may vary somewhat according to the temperament of the individual and according to the time of day. Peristalsis naturally is more active for an hour or two after meals. But the normal stomach or intestine never emits loud, harsh or prolonged gurgles. To one who has accustomed himself to this method, the distinction between normal and abnormal sounds is marked and easy of recognition. In some cases of marked functional disturbance the gurgle is loud, continuous and apparently never ceases. Sounds heard over the stomach are of higher pitch than those heard over the intestine. Sounds heard over the epigastrium, unless very loud, are not audible in the right or left lower quadrant and vice-versa.

CASES

Case 1—School boy aged 9. Apparently healthy, somewhat nervous and slightly underweight. Subject to periodic and violent attacks of indigestion, simulating appendicitis. In one attack narrowly escaped operation. X-ray of intestinal tract revealed a transposition of intestines. No note was made of hypermotility. Weight at the time of X-ray 59 pounds. Slightly anemic and very nervous. The boy was taken to a pediatrician who made

a diagnosis of tuberculosis on a positive intracutaneous tuberculin test. Ordered rest. On auscultation of abdomen the hypermotility was extreme, loud and continuous. Luminal grains one-quarter, t. i. d. were given, rest advised. Weight increased from 59 to 64 pounds. Nervousness and twitching of face disappeared. Hypermotility considerably diminished. Child is improved,

Case 2—Man 35 years. Has been troubled with gas for the past two years. For the last year the trouble has been aggravated. Has been under considerable nervous strain. About three months ago was advised to go to a medical clinic where his gastro-intestinal tract was X-rayed completely, besides a complete phyical examination. Nothing pathological was found. He was told to take soda and warned not to let his bowels become constipated. On auscultation of abdomen, marked hypermotility was noted. This was almost continuous. He was treated with luminal and belladonna. Inside of a week he reported that the discomfort had practically ceased.

Case 3—Business man, 32 years old, has been complaining of discomfort and pain in upper abdomen for past year. He is troubled a good deal with gas. Tongue is coated most of the time. Bowels move twice a day. Pain is worse for an hour to an hour and a half after eating. A diagnosis of ulcer was made, but repeated X-ray examinations have failed to show any ulcer. The only positive finding was hypermotility. He has been treated with alkalies and diet for the past year with no improvement. Auscultation revealed a marked hypermotility with no quiet intervals. After four days, treatment with luminal and belladonna, reported that his symptoms had almost disappeared.

INCIDENCE OF FRACTURE OF THE SKULL WITHOUT DEFINITE CLINICAL SIGNS

By SAMUEL I. MULLER, M.D., LONG ISLAND CITY, N. Y.

THE classical symptoms of fracture of the skull commonly noted in major accidents and in the texts, are seldom seen in the course of even an active general practice. The fractures of the skull, to which we refer in this article, have as their only point of similarity, with the aforegoing, their production by an external force.

The etiology of these fractures was trauma occurring in daily activities of life, such as while walking, slipping on icy sidewalks, being pushed, falling from short heights and as applied to children during the course of play.

The symptoms were very mild. *Vomiting* sometimes occurs, consisting usually of one occurrence and not forcible, *Headache* of mild character, lasting from a few minutes to a few hours was present in some. *Pain,* if present, was limited to the site of the injury and then sometimes only on pressure, if a contusion or slight abrasion were present. *Swelling* was generally absent or very slight if present. In only one instance of this recorded series was *bleeding* and *laceration* present. This was the only instance of diagnosis of fracture of the skull, without any symptoms of any kind, made without *x*-ray examination. The fracture was visible through the laceration. Aside from the evident injury there was no complaint of any kind that would lead one to suspect fracture.

It is to be particularly noted that there was no unconsciousness, no nasal or aural bleeding and no changes in the pupillary reactions or size.

The diagnosis was made by *x*-ray examination. To cite more definitely, several clear cut examples have been selected.

Boy H., five years of age, was pushed by his older brother down a flight of stairs. He was found at the doorway of the house, crying from fright. A small swelling was noted over the occiput, on the right side. There was no other symptom present. *X*-ray examination made to satisfy the parent disclosed a small fracture of the occipital bone, running from the basilar suture to the masto-occipital suture on the right side and still another smaller similar fracture on the left side, on which side, there were no symptoms at all to be observed. The boy refused to remain in bed after the first day and went on to a complete recovery.

Boy C, aged ten years, fell from a fence, about four and one-half feet high, while playing, hitting the back of his head. He complained of mild headache. There were no other symptoms, other than pain on digital pressure to the area of contact of skull and ground. *X*-ray examination disclosed a comminuted fracture of the occipital bone, with lines of fracture radiating toward the lambdoidal suture.

Girl W, age twelve years, was pushed over a

small cement coping, a foot high and struck the back of her head She vomited once and disclosed on examination a very slight abrasion with almost no swelling There were no other symptoms An x-ray examination disclosed a fracture of the occipital bone, running upward toward the lambdoidal suture

Mrs B, age 35 years, was hit on the top of the head by a sash window ventilator falling from the roof of a trolley car, a distance of something more than two feet She complained of hysteria and pain on digital pressure to the site of injury Two weeks after the accident an x ray examination disclosed a fracture of the left parietal bone, almost parallel with the coronal suture and joining it at its junction with the sagittal suture, the bregma

Mr B, age 41 years, while walking, slipped striking the back of his head He complained of headache lasting one day and feeling of pressure on his head X ray examination disclosed a fracture of the left parietal bone, running almost parallel with the sagittal suture and joining the lambdoidal suture posteriorly

Boy G, age eleven years, while playing in a lot fell on a stone and received a laceration of the scalp, left parietal region, two inches long, with much bleeding He was brought in by his sister, walking While cleansing and shaving the area preparatory to sterilization and suture, the wound edges were separated, debris removed from the wound, the skull table distinctly seen with a very evident linear fracture of the left parietal bone, running parallel with the sagittal suture There was absolutely no other symptom of fracture of the skull other than the actual visualization of the fracture through the open wound The mother refused to hospitalize the boy and he went on to an uneventful recovery

Thus far all the enumerated cases have had no neurological symptoms of any kind, since their respective accidents

In the examples enumerated the usual habits of life were not interrupted because of the symptoms, if any, complained of Only on the findings of the x-ray examination were quiet, rest, the application of an occasional ice bag to the head ordered for a few days, more as a precautionary measure than a necessity

We can conclude that in the presence of fracture of the skull, per se, without injury to the underlying brain or its coverings, without compression from swelling or displacement of the bone, there are few symptoms if any, to lead one to suspect the presence of such fracture This can be more readily understood from a study of the structure of the skull itself and the fact that through it, is explained the absence of displacement in the presence of fracture of the cranial bones, which initiated from a force of minor character The importance of knowing the presence of such fractures is a matter more of prevention, the possible avoidance of complications of infection and an explanation of some of the otherwise obscure neurological symptoms, hardly possible without this known pathology Otherwise unexplained syncope or convulsions would be understood and a means of cure pointed out by the relief of local pathology

It is of further interest to note that most of the above findings were missed with the application of the usual technique of skull examination The x ray exposures were then made with the subject lying face upward the tube tilted at a 20° angle at a distance from the subject of 25 inches (exception Mrs B, P 9), with the tube centered so that a line from it passes almost through the foramen magnum of the occipital bone The end result is a film which shows the entire occipital bone with its foramen magnum the various portions of the temporal bone, the posterior portions of the parietal bones, with all their sutures There is nothing original about this technique It is mentioned because of its superiority in obtaining findings, in this portion of the skull, frequently missed by other exposures In some phases of practice these cases present a medicolegal interest of definite importance

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For list of officers of County Medical Societies, see this issue, advertising page xxii.

VACATION TIME

Medical editors and advertisers take no vacations, and an increasing number of physicians make serious plans to catch up with their professional literature by reading their Journals during their vacations. Whether or not the readers accomplish all that they plan, their intentions encourage the editors to maintain the winter standards of the NEW YORK STATE JOURNAL OF MEDICINE during the summer months. Only in one respect will the editors feel a handicap,—few county societies or committees hold meetings, and so the pages of the News department may be limited. But all the other departments will be as full and as interesting as ever.

THE NEW YORK STATE SANITARY OFFICERS ASSOCIATION

The twenty-first annual meeting of the State Sanitary Officers Association, held in Saratoga Springs on June 30th, recalls the essential service rendered to public health by the organization The Association is an outgrowth of the annual official conference of health officers conducted by the State Department of Health beginning in 1901 in accordance with Section 21 of the Public Health Law The Association itself was organized in 1910 at the time of the annual conference for the purpose of enabling the health officers of the towns, villages and small cities to discuss their common problems with freedom, but before they had formed an organization they had taken a deep interest in the newer developments of sanitation and public health

Over one half of the doctors in the rural sections of New York are health officers and have always taken an active interest in public health discussions in the medical societies of the counties and state In fact, they were the first body to suggest the practice of those forms of public health which are now considered commonplace While the health officers in those early days were ambitious to do good public health work, they were powerless in their position between indifferent boards of health on the one hand and an unequipped State Department of Health on the other, yet under these adverse conditions the health officers themselves took action to improve the practice of public health in their communities

The germ of the organization of health officers was the custom of the secretaries of the county societies to hold an informal dinner at some time during each annual meeting of the State Society The leaders in these conferences were health officers who were also secretaries of their county societies, and thte principal topic discussed was the relation of family physicians to the practice of public health The conferences were modest affairs, but the ideas of leadership there expressed later developed into the fundamental policies of two major committees of the Medical Society of the State of New York—that on Public Relations, and that on Public Health and Medical Education—while the custom of the annual conferences of county secretaries has been continued by the State Society

The Health Officers Association entered the field of legislation during the year following its organization, when it introduced a bill in the legislature protecting the health officers against malpractice suits The Association had no support at all from other organizations, and yet the legislature passed this bill, but the Governor vetoed it for no discoverable reason The success of the health officers was a demonstration of the willingness of the legislators to give serious heed to public health measures

When the revision of the Public Health Law was under way in 1912 and 1913, it was the definite stand taken by the Health Officers Association that secured the passage of the bill The Commission appointed by Governor Sultzer to suggest revisions of the public health law had not given sufficient publicity to their deliberations, and as a result the legislative committee of the State Medical Society opposed the bill without having studied its contents However the officers of the Health Officers Association had attended the hearings of the commission and had been consulted in an essential way while the bill was in the process of drafting The final demonstration of their influence occurred in the hearing before the Legislative Committee when the health officers showed that both they and their colleagues in the County Medical Societies were whole hearted in their support of the bill

This story of the support of modern public health measures and methods by the rural health officers forms a background illustrating the present policy of the health officers The Health Officers Association in its meeting on June 30, 1931, reaffirmed its support of the plan for county health departments, but it also adhered to the plan to retain the present system of a board of health and a health officer in every town, village and city, which should have concurrent jurisdiction with the county departments The Health Officers felt the need of developing local initiative and responsibility in public health matters especially in sanitation and the ordinary control of communicable diseases The health officers believed that this local leadership could come only when provision is made for its exercise

CANCER PREVENTION

The prevention of cancer is a problem which belongs to the medical profession almost exclusively Tuberculosis is greatly affected by one's mode of living and methods of work, and its incidence and progress are lessened by the higher standards of living which go with education and culture and an improved financial status Cancer on the other hand, is progressive and a spontaneous cure is not to be expected, but when it once gets a start, it will continue to spread until it destroys life, unless it receives skillful treatment by a physician

The reduction in the menace of tuberculosis, following campaigns to educate the people, has led to reasonable expectations that similar results will follow the education of the people regarding cancer. The essential point to be emphasized in tuberculosis prevention is that of early diagnosis and treatment. This same principle holds good for cancer.

Today, the word cancer inspires the same fear that the word tuberculosis, or consumption, aroused a half century ago. Physicians can now talk with an assurance that was absent in the previous generation when tuberculosis was known in only its fully developed stage. Actual experience has shown that when a lecture on cancer is announced to a woman's club, the majority of members will stay away. They expect to hear nothing but doleful helplessness and fateful doom.

There is no need that a lecturer frighten the people, for they are in a panicky fear already. It may even be true that a description of the signs of incipient cancer does harm, either by arousing a fear that will keep the patient away from the doctor, or by lulling the patient into a false security when the signs of cancer are not absolutely positive.

A physician giving a popular lecture on cancer is on safe ground if he confines himself to the preclinical signs of cancer. He can explain that most cancers begin as persistent scabs, sores, lumps, or discharges which are not cancers, but are readily curable. It may not even be wise to tell the people that these are potential cancers, for malignancy develops in them only about once in five hundred cases. However, if everybody could get rid of these troublesome conditions, few cancers would develop. Hopeful lectures along this line make a good start in the campaign against cancer. (See page 922.)

DR. JOHN OSBORN POLAK

Dr. John Osborn Polak of Brooklyn, who died suddenly and unexpectedly on June twenty-ninth, aged sixty-one, belonged to the entire medical profession. A born teacher, and a recognized authority in gynecology, he delighted to accept invitations from medical societies to address the members with friendly intimacy. He had the happy faculty of clothing scientific principles with attractive simplicity, and transparent clearness. He was a central figure in the post-graduate courses of the Medical Society of the State of New York.

LOOKING BACKWARD

This Journal Twenty-Five Years Ago

Effects of Light on Infections: An example of hope deferred and unrealized expectations is afforded by the following abstracts from an editorial in this Journal of July, 1906, on the effects of light on infections:

"Weak solutions of eosin in the presence of sunlight have been found to have a decided effect upon certain micro-organisms and ferments, which are not elicited in the dark. Diastase and trypsin are especially susceptible. The toxins of diphtheria, tetanus and snake venom are destroyed or rendered less toxic by this action. A solution of a fluorescent substance injected into the superficial tissues of an animal, and exposed to the sunlight, causes a destruction of the tissues and sloughing, which would not occur in the dark with the injection alone or in the sunlight without the injection.

"Mice were injected with a virulent culture of trypanosoma and then with a weak eosin or erythrosin solution, and exposed to sunlight for seven hours daily. Three days later no trypanosoma were to be found in the blood. The control animals, kept in the dark, died with blood swarming with parasites. The sun-exposed animals recovered. When infected animals were not injected with the fluorescent body until the day following the infection they died in four days, despite the sun exposure.

"This work is still in an experimental state, but it promises interesting revelations. Just how far its therapeutic value may reach, is difficult to determine; but we can see in it a powerful therapeutic agency."

The editorial fortunately ended with the following warning:

"It is to be hoped that conclusions will not be arrived at until experiment and study have thrown more light upon the subject."

MEDICAL PROGRESS

New Methods of Scarlet Fever Serum Therapy.—Friedemann, Schmerel, and Lukas state that while there is widespread agreement in regard to the prompt effectiveness of scarlet fever serum the largeness of the dose necessary to produce defervescence has hitherto stood in the way of its general introduction into practice, from 15 to 50 c c or more being required, according to the gravity of the case Intramuscular injection of such amounts is impracticable not only because of the high cost but also because the ordinary practising physician has not sufficiently large syringes for such dosage In addition the probability of serum sickness following must be taken into account The good results reported by certain Russian workers from intralumbar serum therapy induced the authors to try that method They were able in 5 cases to overcome all the acute symptoms of intoxication by one tenth of the amount of serum that would have been necessary for intramuscular administration Since, however, the technique of the intralumbar method of injection is too complicated to be suited to general practice the authors conceived the idea that intravenous injection might give the same good results They soon proved in 26 cases (16 adults and 10 children) that the same low dosage worked more quickly intravenously than intramuscularly, and that the exanthem usually disappeared after 6 hours instead of 24 48 hours In addition, the temperature dropped to normal in 6 7 hours in most cases The best practical value lay in the lessening of the number of cases of serum sickness, only 2 such occurring, and these very light in contrast with 8 or 9 severe cases observed after intramuscular administration Moderately severe cases of scarlet fever require 2 to 3 c c of serum in children and 3 c c in adults, severe cases 3 to 5 c c in children and 5 c c in adults It must be assumed that in intramuscular administration most of the serum does not enter the circulation but remains bound at the site of injection—a disadvantage not met in intravenous injection Care must be taken that the serum is free from carbolic acid and tricresol, which many firms add as disinfectants Since some persons have a congenital idiosyncrasy for any horse serum, a test should be made in advance with an intracutaneous injection of 1 c c Hypersensitive persons react within 10 minutes with an urticarial reddening In such subjects and also in all who have previously suffered with serum sickness, intravenous administration is contraindicated — *Deutsche medizinische Wochenschrift*, May 1, 1931

Health Advice Indicated in the Earlier Manifestations of Cardiovascular Disease — Kenneth A MacKenzie considers more particularly the management of cardiac disorders revealed by the periodic health examination, and in which symptoms are either absent or such as to cause little or no concern He emphasizes the facts that many of the distressing features in these disorders are psychic in origin and must be treated by mental measures, and that pessimism in regard to cardiac therapy is not justified The tolerance of the patient is the best guide to the degree and amount of rest and exercise most suitable Moderate exercise is usually well tolerated, strenuous exercise should be forbidden The patient has a right to get a definite opinion as to what he can do with safety, whether he can play tennis or golf, and whether he can walk one mile or five There is no special diet for organic heart disease, In arteriosclerosis a diet low in proteins and total calories is most satisfactory, provided it is not reduced too low Focal infections should be eradicated when possible, especially those of the teeth and tonsils, but deeply seated infections, as of the gallbladder, appendix, prostrate, tubes, etc, should be dealt with conservatively, as eradication is a serious matter The indications for symptomatic treatment are obvious For insomnia, simple hypnotics such as hot drinks, bromides, luminal, etc, are indicated For mild anginal pain nitroglycerin, bromides, chloral, etc, may be given Digitalis has no place in this class of patients Psychotherapy is a factor of major importance A painstaking history and physical examination will convince the patient that you are interested in his problem, and will establish confidence Positive assertions of normal findings, such as "Your lungs are normal, your pulse is strong and regular," act as helpful suggestions A half-hour talk with the patient is the most valuable part of the consultation The main object of this is to combat fear, which is harmful and should be avoided Frankly state your findings, admitting the patient's disability, but in a manner which will cause the minimum of fear Such statements as "People with a defect like yours live for many years and enjoy life," "Your defect is not serious, but worth looking after," are true and helpful One must attack the subconscious and the procedures suggested are effective weapons — *Canadian Medical Association Journal*, May, 1931, xxiv, 5

Treatment of Angina Agranulocytotica — According to Karl Neidhardt, angina agranulocytotica is known to be characterized by leucopenia and relative lymphocytosis The total number of leucocytes may fall to 100 per cubic millimeter In the smear, cells of the myeloid system are al

most wholly missing. The absolute lymphocyte count, however, is customarily below normal. Neidhardt presents an illustrative case in a woman of 42 whose symptoms began with the usual chill and rise of temperature accompanied by a characteristic bilateral follicular angina. Leucocytes, which were 2800 at the onset, fell to 500, 97 per cent of which were lymphocytes. Granulocytes, that is to say, cells of myeloid character, were almost entirely absent in the smear. The blood picture, together with the feverish angina, slight icterus, and normal platelet count, led to a diagnosis of angina agranulocytotica. In view of the patient's very grave condition and the unfavorable prognosis, it was decided to try the effect of the irradiation of the bone-marrow. The patient was accordingly given 5 per cent of an erythema dose under hard filtration on both the lower leg and the thigh. The leucocytes rose in 2 hours to 800; they were 1700 after 8 hours, and had reached 3800 on the second day. A second irradiation was given on this day, on the upper and lower arm, which brought the leucocyte count to 9200, 6 hours later. The number of granulocytes increased in the blood, simultaneously, being 16 per cent 24 hours after the first irradiation and 34 per cent on the following day. Meanwhile the percentage of lymphocytes declined until it was only 22 on the third day after the first irradiation. Later on a true leucocytosis of 20,000 was reached, with a great increase of granular forms, which is shown in a graph. The patient's recovery proceeded pari passu with the change in the blood picture. There could be no question but that this was a true angina agranulocytotica. Angina with lymphathic reaction and also an aleucemic form of leucemia could be excluded. The prognosis of angina agranulocytotica is known to be very poor, over 90 per cent of cases terminating fatally. The dramatic change in the condition of the patient in this case after stimulation of the bone-marrow by irradiation points to the desirability of employing roentgen rays in the future in all cases of agranulocytosis.—*Münchener medizinische Wochenschrift*, April 24, 1931.

Pyretotherapy: Advantages and Disadvantages of the Various Methods of Producing Therapeutic Fever at the Present Time.—J. Cash King lists and discusses the following methods of producing therapeutic fever: (1) Injection of foreign proteins and other toxic substances; (2) malarial inoculations; (3) diathermy; (4) high frequency electrostatic field; (5) hydrotherapy. The injection of foreign proteins and other toxins is very painful and many times there are disabling local results. Malarial inoculations have a mortality of from 1 to 5 per cent, give the patient a disease difficult to cure, and the intensity and severity of the attacks cannot be controlled. Furthermore, the desired strain of plasmodium is often not available, medicinal treatment cannot be given simultaneously, and certain individuals are immune to malaria. To avoid the disadvantages of these methods the author and his collaborators worked out the diathermic method, and in November, 1929, reported their results in 12 cases, in which eight to twelve treatments were given at intervals similar to the malarial paroxysm. At the present time two of these patients are carrying on their original occupations and five have maintained or shown further improvement. The results in these cases afford conclusive evidence that the benefits derived in the past from fever therapy have been entirely due to the accompanying elevation in temperature and not to any associated biochemical or pathological change. If a therapeutic measure is to occupy a permanent place in medicine, it must afford the simplest, quickest, and least expensive known method of bringing about the desired result. It is not certain that diathermy meets these specifications. The high frequency electrostatic field as a means of producing therapeutic fever can be dismissed until it is rendered simpler and less expensive. The general body temperature can easily be raised to any desired point by the use of certain forms of baths. Any full-sized bathtub serves the purpose. After the patient has been in the water for a few minutes, hot water is allowed to run in slowly, while the excess water is permitted to run out through the overflow drain. Thus the water is kept at the highest temperature the patient can stand—if possible, 110°F. A mouth temperature of 103.5° to 104.5° can usually be obtained in an hour or less. During the bath the temperature should be taken every ten minutes. By keeping the patient carefully wrapped and in a warm room the temperature can be maintained without difficulty. King concludes that pyretotherapy has an important place in therapeutics, but is not a panacea.—*Physical Therapeutics*, April, 1931, xlix, 4.

The Action of Radon in Chronic Rheumatism.—In the past, say Rathery and Monnery, in the *Bulletin de l'Académie de Médecine of* April 14, 1931, the radiotherapeutic action of radon (radium emanation) has not been susceptible of general application because of the lack of precision in dosage and methods and consequently uncertain results. Since 1929, these authors have taken up the question of its use from both a biological and clinical point of view. Radon, being a very diffusible and soluble gas, can be administered either through the lungs or by ingestion. The latter mode has been chosen as better adapted for precise dosage. The radon is obtained by means of a special apparatus invented by Lepape, which liberates a definite amount of radon from a known weight of a radium salt in aqueous solution. It is dissolved in a certain volume of water, and a known quantity of the

latter is given to the patient to drink. Thus the amount of radon introduced into the organism is known as exactly as is necessary. Treatments consisted of 150 to 300 millimicrocuries per day. They were administered to 25 rheumatic subjects with various articular symptoms, subacute or chronic, the cases being classifiable as those of gouty hyperuricemic, type, of simple chronic rheumatism, and of arthritis deformans. All were kept on a fixed diet, poor in purins. They were given daily, usually for a month, the required amount of radioactive water to drink, all at one time, with all other forms of medication excluded. Regular records were kept of 24-hour urine, showing variations of diuresis and of excretion of urea, total purins, and uric acid. At the same time precise dosage made it possible to evaluate the variations of these elements in the blood. In the great majority of cases, radon caused: (1) increased diuresis, usually reaching its maximum in the second week; (2) increased excretion of purins and uric acid, mostly running parallel; (3) no appreciable change in urea elimination; (4) a lowering of blood uric acid, sometimes by as much as 40 percent, always coinciding with increased excretion of the same. It appears that rheumatism causes a functional hyperactivity of the kidneys that is elective for elimination of uric acid. In all but two far advanced cases the findings were very favorable. Always there was a sedative action, usually very prompt; in some cases this was the only perceptible result; but frequently there was a local action on the tissues, with diminution of swelling or restored motility of articulations. The general condition improved, the patients gained weight, and the differential blood count underwent favorable modification. Treatment should begin with the weak doses and increase gradually. The amount of radon used was somewhat greater than that in thermal waters, but still not very far from these.

Physiological Principles in the Treatment of Asthma.—R. J. S. McDowall, writing in the *Practitioner*, May, 1931, cxxvi, 5, points out that in the treatment of asthma the indication is for procedures which stimulate the sympathetic nerves and dilate the bronchi. For this, subcutaneous injection of adrenaline (0.5 mg.) has become almost routine. The sympathetic may also be stimulated by cold sponging with rough towelling or by asphyxia. In emergency temporary asphyxia may be produced by having the patient put his head under the bed clothes; this may abort an attack. Atropine, which acts by paralyzing the nerve endings of the vagus, is of special value in cases of nervous origin, but it is of no avail when the stimulus to the vagus is chemical. Inhalants, such as stramonium leaves, are harmful in the long run, as they leave the bronchi more sensitive than before. In the prevention of an attack regular exercise and stimulation of the skin, produced electrically or mechanically, is most important. A cold bath should be recommended, as in that way the suprarenals are stimulated. The evidence that asthma may be related to the entrance from the bowel of foreign proteins, which may sensitize the body to nervous and chemical mechanisms, calls attention to the necessity for careful attention to the diet, especially anything that interferes with protein digestion. Hence fats and excessive consumption of carbohydrates should be avoided. Meat and meat extracts, which stimulate the gastric secretion, are advantageous. Nasal treatment, which has been extensively advocated, seldom effects a permanent cure. Every effort should be made to discover hypersensitivity to any class of substances or circumstances which aggravate or alleviate the condition. If the gastric secretion is defective, hydrochloric acid and pepsin are indicated, and have been found valuable in children. The fact that experimentally increased hydrogen ion concentration dilates the bronchi suggests that substances tending to produce an acidosis, such as ammonium chloride and aspirin, may be valuable. Where the pulse is slow and the skin dry thyroid extract may be expected to stimulate the sympathetic. Attacks may be controlled almost indefinitely by ephedrine (5 to 15 centigrams), but adrenalin is ineffective after ephedrine. Two drug treatments have not been adequately tried. Since a reduction in blood potassium has been described in asthma, potassium therapy appears to be indicated and deserves a thorough trial. There is good experimental evidence in favor of minute injections of pilocarpine. In cases in which the symptoms are due to sympathetic exhaustion, which cannot be relieved by stimulating, a secretion of adrenalin, absolute rest, nervous depressants, or even hypnotics, are indicated.

On a Common Type of Chronic Colitis which is Seldom Recognized.—Aldo Castellani recalls that in 1905 and 1906, while in Ceylon, he observed cases of pyrexial colitis, at times with severe diarrhea, but without pus and blood in the stools. As etiological agents he found and described two organisms, which he called *B. ceylonensis* A, and *B. ceylonensis* B. This type of colitis is not confined to the tropics, but is common in the subtropics and the temperate zones. During the past four years, he has observed 81 cases of this condition, which is characterized by recurrent attacks of diarrhea, usually non-dysenteric; vague abdominal symptoms between the attacks; general fatigue and nervousness. The disease may persist for years. A positive diagnosis can be made only by bacteriological methods. The blood of every suspicious case should be tested for *B. ceylonensis* B, *B. ceylonensis* A, and *B. metadysentericus*. When the agglutination is higher than 1 in 80, repeated examinations of the stools will often reveal, sooner or later, the presence of

metadysentery organisms, though many examinations may have to be carried out before a successful one is obtained. The prognosis is bad, unless a correct diagnosis is established. The treatment is best carried out in a hospital or nursing home. It should begin with a dose of castor oil. Intestinal disinfectants, such as salol and kerol capsules, are useful in some cases. Preparations of acidophylus bacilli are occasionally helpful. Autogenous metadysenteric vaccines are of great value, though good results may also be obtained with stock metadysentery vaccine containing *B. ceylonensis* B, *B. ceylonensis* A, and *B. metadysentericus.* It should be given in small doses two or three times a week, for at least six weeks. The course should be repeated after an interval of from two to four months. In temperate climates milk is the best diet; in the tropics the diet should consist of albumen water, rice water, toast water, chicken broth, panpeptone, and peptonoids.—*Practitioner,* May, 1931, cxxvi, 5.

The Problem of Arterial Hypertension in Urinary Retention.—G. Wüllenweber, writing in the *Klinische Wochenschrift* of April 18, 1931, says that the origin of hypertension in prostatic hypertrophy is often given too mechanical an explanation and the hypertension considered a result of pressure injury to the kidney, where the pelves have been subjected to pressure, whereas the reversibility of the blood pressure in the disturbance of kidney function that is actually present and demonstrable shows that we must be dealing at the outset with purely functional matters. Moreover, the dependence of the pressure in the kidney pelves upon the bladder pressure has recently been demonstrated manometrically. To understand renal injury with high blood pressure, it is not necessary to conceive a stasis or an actual back *flow* from bladder to ureter, pelvis, and calyx—however common this procedure may be. The pressure relations in bladder, ureter, pelvis, and kidney with their effect on arterial blood pressure are closely connected in a reflex way, and may react as a unitary system. The most frequent cause of urine retention, clinically speaking, is prostatic hypertrophy. There seems to be little in the literature concerning the stage of such hypertrophy at which increased blood pressure first makes its appearance. On the basis of three illustrative cases, Wüllenweber shows that in urinary retention hypertension with all its sequels can be found without the patient having suspected that he was ill. In one case, retention had led even to maximal trabeculated bladder, dilatation of ureters, contracted kidney, and arterial hypertension without the patient having experienced the slightest subjective symptoms on the part of the urinary organs. Here the bladder in its efforts to help itself had formed trabeculae that increased the intravesical pressure, all unknown to the patient; this had led to compensatory measures on the part of the general organism, expressed in the arterial system as hypertension and cardiac hypertrophy. Hypertension may exist before residual urine is present. These cases teach the importance of examining the prostate in every case of hypertension. It seems very pertinent to ask whether the indication for operation in the prostatic patient should be determined —as is now generally done—practically exclusively according to the degree of urinary retention in the bladder, or whether we should instead inquire (which is far more important) whether the entire arterial system is not threatened with danger, even though there is no residual urine, and no appreciable difficulty in urinating.

The Hydrogen Ion Concentration in the Blood of the Aged.—Giulio Maragliano, writing in the *Riforma medica* of April 27, 1931, says there is a tendency today to recognize a life cycle in every individual, which begins with the vagotonia of infancy, expressed in alkalosis, and ends with the sympathicotonia of old age, expressed in acidosis. With a view to testing the correctness of this current impression, that the blood of aged persons exhibits an acid orientation, he made a study of the hydrogen ion concentration in a group of subjects whose ages, with one exception, ranged between 54 and 90, one man of 45 being included in the study because of premature senility. Using an electrode of the Verain type with a small bubble of hydrogen, he first obtained in a series of youths values approximating the classic value of 7.35 at a temperature of 18° C. (64.4° F.), which is accepted by all authors as a mean normal value. He took the blood to be examined from the ulnar vein alone, and did not subject the patients to the annoyance of the withdrawal of arterial blood in addition, in view of the slightness of the difference in pH (0.01 to 0.04 according to other authors) between the two bloods, and the danger of producing a painful hematoma. He was careful to choose only patients who were not suffering with any diseases in which the value of the pH tends to be displaced. All the individuals were affected with arteriosclerosis in greater or less degree; one suffered with senile dementia, one was blind, one an idiot, one exhibited dorsal kyphosis and one an advanced stage of senile involution. The blood was withdrawn in the morning on a fasting stomach, before the patients had been subjected to any muscular fatigue. In every case the values obtained were on the side of acidity and never on that of alkalinity. In 4 cases the pH was 7.30, and hence within physiologic limits; in 6 it ranged between 7.29 and 7.27; in 5 it was between 7.25 and 7.20; in a single case (the kyphotic patient, a man of 88 in a state of mental childhood) it had an average value as low as 7.15 after many tests had been compared. Although the number of cases studied was not large, it is certainly justifiable to conclude that in the blood of the aged a clear orientation toward acidity can be established.

LEGAL

OPERATION WITHOUT CONSENT

By Lorenz J Brosnan, Esq
Counsel Medical Society of the State of New York

Every human being of adult years and sound mind has the right to determine what shall be done with his own body, and a surgeon who performs an operation without his patient's consent commits an assault, for which he is liable in damages, except in cases of emergency where the patient is unconscious, and where it is necessary to operate before consent can be obtained"

This language is taken from an opinion of one of the most distinguished jurists in the United States, Chief Judge Cardozo of the Court of Appeals of this State It is incumbent, therefore, upon a physician to obtain the consent of the patient before operation For his own protection, this consent should be secured in writing and witnessed by some disinterested party The written consent obtained should give the surgeon discretion to perform any operation which in his opinion he deems necessary within the surgical field From the standpoint of prudence and to protect himself against subsequent claims the surgeon should in the case of a married woman not only obtain her consent but also the consent of the husband

A physician should be especially careful not to operate upon a minor or an insane or incompetent person without the consent of the parents or guardian of the minor or the committee of the incompetent In the Medico-Legal Principles, which appear as Appendix II to the Principles of Professional Conduct of the Medical Society of the State of New York, the rule is stated in Sec 14 as follows

"Where a person to be operated upon is a minor or incompetent, the consent of someone legally authorized to give such consent should be obtained Parents or guardians of minors are persons legally authorized in cases of minors and a committee or guardian in case of an incompetent"

The rule that consent to operate must be obtained in the first instance does not, of course, obtain in cases of emergency where the patient is unconscious and where it is necessary to operate before consent can be obtained

We stress in this editorial the necessity for written consent since experience shows that there is a certain class of patients who will repudiate an oral consent, leaving the surgeon in the position where he is compelled to put his word against the word of the patient and perhaps several members of the family It should be remembered that the question as to whether the operation was skillfully performed or whether it benefited the patient does not in any wise affect the patient's right to sue the physician if prior consent to the operation has not been obtained from the patient It is interesting to examine some of the cases where patients have sued physicians on the cause of action of operation without consent, and to note the rulings which the courts have made in these cases

In Minnesota an action was commenced against a physician and surgeon for claimed operation without consent upon the following state of facts The defendant, a physician and surgeon of high standing, was consulted by the plaintiff who complained of trouble with her right ear An examination disclosed a large perforation in the lower portion of the drum membrane and a large polyp in the middle ear, which indicated to the doctor that some of the small bones of the middle ear were probably diseased The defendant at this time also examined the left ear, but because of foreign substances in it was unable to make a full and complete diagnosis The defendant suggested operation and the plaintiff consented, understanding that it was only her right ear which required treatment At the hospital the defendant made a more complete and extended examination of the left ear which showed that this ear was in a more serious condition than the right ear upon which the defendant intended to operate This examination revealed a small perforation high up in the drum membrane, hooded and with granulated edges, and the bone of the inner wall of the middle ear was diseased and dead The defendant thereupon called this condition to the attention of the plaintiff's family physician who was present and who confirmed the diagnosis of the defendant The defendant thereupon performed an operation on the plaintiff's left ear, removing a portion of the drum membrane and scraping away the diseased portion of the inner wall of the ear This operation was in every way successfully and skillfully performed

The plaintiff however, claiming an assault and battery upon her person, sued the defendant and the jury returned a verdict in her favor for some $14,000 The defendant moved to set aside the verdict on two grounds, first, that it was against the weight of evidence, contrary to the evidence and contrary to the law and, secondly, that it was excessive The court denied the motion so far as it related to the weight of the evidence, but granted

the motion on the ground that the verdict was excessive. From this decision both plaintiff and defendant appealed. The decision was upheld in the higher court on the ground that the verdict was excessive, but the court pointed out that the defendant physician should not have operated on the left ear without the plaintiff's consent, holding that a physician and surgeon however skillful or eminent could not violate the bodily integrity of a patient by a major operation, placing him under an anesthesia and operating upon him without his consent or knowledge. The court also pointed out that this was not an emergency operation and that the defendant was not in a position to invoke the rule that where a person was injured to the extent that he was rendered unconscious and his injuries required prompt surgical attention, the physician called in to treat could do so without obtaining prior consent. It was urged by the defendant's attorney upon the court that the act of the defendant was not a battery in that it was not predicated on an evil intent but rather on a desire to effect a cure of this plaintiff's condition; but the court held that the operation being performed without consent made it wrongful, and if wrongful it was unlawful.

In a case in one of our Southern States, an infant eleven years of age accompanied by his adult sister was operated on by the defendant for adenoids. The evidence tended to show that the operation was performed at the request and in the presence of the child's sister. During the administration of the anesthetic the child died. An action was instituted against the defendant doctor by the parents of the deceased child, the complaint among other things alleging that "no person whomsoever had any authority to permit defendant to perform any operation upon their child and plaintiff and his wife had no knowledge that any operation was contemplated by anyone, especially by defendant at this time."

At the trial the defendant was not able to show that the plaintiffs had any knowledge of the fact of the contemplated operation nor was there any proof that the operation was an emergency one. Upon this state of facts the court instructed the jury, "If you believe from the evidence that the daughter of the plaintiffs took the child to the defendant for the purpose of being operated upon and you believe that the defendant in good faith performed the operation with ordinary care, your verdict must be for the defendant and this, too, notwithstanding there was no consent from the parents that the operation should be performed." The jury returned a verdict in favor of the defendant and the plaintiff appealed. In the higher court it was held that the charge of the lower court above quoted was erroneous since it placed the liability of the defendant on the same basis as if the parents had consented, and made the consent of the daughter as effective as that of the parents although they had never lodged such authority in the daughter; and it was further held that the only way that the daughter could consent to the operation and bind the parents to such consent would be if such authority had been delegated to her and she had acted as an agent under the circumstances.

An instance of the rule releasing the physician from the necessity of obtaining a consent where an emergency exists, is found in a case in Michigan where the plaintiff, a boy fifteen years of age, while crossing railroad tracks was hit by an engine and thrown under the wheels of the car. His left foot was mangled and crushed. Shortly after the accident the plaintiff was taken to a hospital and, after communicating his name and address to the attending surgeons, lapsed into complete unconsciousness. An examination and consultation by four surgeons was made and they decided that prompt surgical treatment was necessary. Thereupon the defendant surgeon was called and he concluded from his examination that an immediate amputation was necessary to save the boy's life. There were no relatives of the infant present, and the defendant knowing the distance from the hospital to the infant's home decided that there was not time enough to get there, procure consent and return to operate. The defendant finally amputated the foot and the boy's life was saved.

Thereafter an action was instituted by the parents, claiming that the defendant should not have amputated without their consent. The jury returned a verdict in favor of the defendant physician, and on appeal the judgment below was affirmed, the higher court saying in part: "Taking into consideration the condition in which the plaintiff was when the defendant reached him, we have no hesitation in holding that the defendant was amply justified in treating this case as an emergency and his conduct should be viewed in the light of legal principles governing such cases." The court also said that the work of a physician is highly humane and largely charitable in character, and no rule should be announced which would in any way tend to deprive those suffering from their services.

In another case in one of our Western States the plaintiff, a youth seventeen years of age, had a tumor on his left ear about the size of an egg. He consulted the defendant physician, a specialist, who advised operation. Three days later the plaintiff, accompanied by his aunt and sister, returned to the hospital to submit to the operation. In the course of the administration of the anesthesia, the boy died. Subsequently an action was begun by his father, claiming that he had not authorized the operation. There was a verdict in favor of the doctor which was affirmed in the higher court, the court stating that there was nothing in the record to indicate to the doctor that the father did not approve of the aunt and sister going with

the boy to the doctor to be operated upon and that under the circumstances disclosed the defendant should not be held liable because he did not obtain the consent of the father prior to the operation

In passing, it might be noted concerning this ruling that while the court in this case absolved the physician from the necessity of obtaining a written consent from the father, it is obvious that it did so since the record showed that the father had practically delegated the aunt and sister of the boy to act in his behalf so far as consent to operative interference was concerned

At this point it should be stated that where a minor comes to a doctor's office alone, and after examination the physician advises operation, such operation should not be performed until the physician has seen one or both of the parents and obtained their consent It is extremely unwise to rely upon the statements of minors that they have talked the matter over with their mother and father and that the latter have consented to the operation

In a case in New Jersey the plaintiff applied to the defendant, a physician, to operate on the plaintiff's left groin At the time fixed for operation the defendant and his assistants noticed that the plaintiff had a ruptured right groin which was in a more serious condition than the left He thereupon proceeded to operate upon the right groin, but by reason of the fact that the plaintiff came out of the anesthetic he was unable to continue the operation on the left groin This operation he intended to perform on the next day, but the plaintiff failed to appear and subsequently sued for alleged assault and battery

The plaintiff recovered a verdict of $1,000 in the trial court and the defendant appealed The Appellate Court reversed the judgment below, holding that before anesthesia had been perfected it was comparatively simple for the surgeon to solicit the consent of the patient during an operation, but now while the patient is unconscious it is of course impossible The court held that in the absence of a representative chosen by the patient, the surgeon selected by the patient becomes the patient's representative while the patient is under the anesthesia The court applied the maxim, "that one is presumed to accept that which is beneficial to him," and said that it was inconceivable that had the patient known the true condition of the right groin and the possibility of death by strangulation he would not have consented to the operation performed or relied on the judgment of the surgeon The court concluded that the operation was not in any sense against the will of the patient, nor was it an operation of a different sort than that which the patient had consented to undergo

Sufficient has been shown from these cases and the principles there enunciated to demonstrate the necessity of a surgeon obtaining consent prior to operation No surgeon can say with any degree of certainty what patient will claim that an operation was performed without his consent and, therefore, as a routine matter the written consent should be obtained in all cases

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CLAIMED NEGLIGENT PLASTIC OPERATION ON NOSE

A young woman, twenty-four years of age, consulted the defendant who specialized in rhinoplastic surgery, with respect to the possibility of improving the appearance of her nose It was of the negroid type, flat based, saddle shaped, with an over-bulbous tip and unusually broad nostrils The doctor informed her that an operation might succeed in giving her a more shapely nose and she entered a hospital to have such operation performed

Under a local anesthetic of novocaine with adrenalin, the doctor reduced the bulbousness of the tip of the nose by intranasal incisions, removing a quantity of cartilage The doctor narrowed the broad bony base of the nose by intranasal incisions and sawing through the frontal processes of the right and left maxillae The width of the nostrils at the tip was reduced by nasal excisions and suturing The nose was packed with sterile gauze and immobilized with a cast and adhesive plaster The patient remained in the hospital for five days under the doctor's care

He also treated her after her return to her home, and when he last saw her about four weeks after the operation the nose was nearly healed and much improved in shape

The patient subsequently returned to the doctor's office complaining that the change in shape had not come up to her expectations, and asking that the doctor give her further operative treatment He advised against it and heard nothing more from the woman until a suit was started against him charging malpractice in that he had caused her nose to become permanently disfigured and marred, and claiming an impairment of the plaintiff's health An answer was interposed denying all allegations of negligence, but before the case could be reached for trial the defendant died A motion was made by your counsel and an order obtained from the court marking the action abated, thereby finally terminating the matter

NEWS NOTES

MEETING OF THE COUNCIL, JUNE 2nd, 1931

In accordance with Chapter IV of the By-Laws, the new Council convened in the Syracuse Hotel, Syracuse, June 2nd, 1931, at the close of the Annual Meeting of the House of Delegates with the following members present:

Drs. William D. Johnson, Charles G. Heyd, Daniel S. Dougherty, John A. Card, James F. Rooney, Arthur W. Booth, Nathan B. Van Etten, Harry R. Trick, Arthur J. Bedell, Thomas P. Farmer, Charles H. Goodrich, James E. Sadlier, Charles D. Kline, Herbert L. Odell, Frank vander Bogert, Augustus B. Santry, E. Carlton Foster and W. Ross Thomson.

The first order of business being the election of an Executive Committee to carry on during the interim between meetings of the Council, Drs. John A. Card, Arthur J. Bedell, Louis A. Van Kleeck, Augustus B. Santry and W. Ross Thomson were nominated by the President and were elected. Election of members of the Standing Committees was referred to the Executive Committee. It was decided that at the next Annual Meeting, one Session should be devoted to *x*-ray, and one Session to Physical Therapy.

Respectfully submitted,
D. S. DOUGHERTY, *Secretary.*

EXECUTIVE COMMITTEE MEETING, JUNE 2, 1931

Immediately following the adjournment of the Council the Executive Committee met and organized by electing Dr. William D. Johnson, Chairman, and Dr. John A. Card, Vice-Chairman. On motion duly made, seconded and carried, Dr. Orrin Sage Wightman was appointed Editor-in-Chief, Dr. Frank Overton, Executive Editor, Mr. Lorenz J. Brosnan, Legal Counsel, and Mr. Thomas A. Clearwater, Attorney. Dr. Charles H. Goodrich was made Chairman and Drs. Daniel S. Dougherty and Charles Gordon Heyd members of the Committee on Publication.

Drs. John A. Card, Daniel S. Dougherty and Frederic E. Sondern were appointed a Committee to prepare the Budget for the coming year and submit it to the Executive Committee for approval at the next meeting.

Respectfully submitted,
D. S. DOUGHERTY, *Secretary.*

EXECUTIVE COMMITTEE MEETING, JUNE 18, 1931

The regular meeting of the Executive Committee was held at the State Society rooms Thursday, June 18, 1931. Drs. William D. Johnson, John A. Card, Daniel S. Dougherty, Frederic E. Sondern, William H. Ross, Arthur J. Bedell, Louis A. Van Kleeck, Augustus B. Santry and W. Ross Thomson were present.

The following budget prepared by the Budget Committee was approved, and the Trustees were recommended to make the necessary appropriations:

BUDGET, JULY 1, 1931, TO JUNE 30, 1932

Rent	$2,900.00
Telephone	200.00
Postage	600.00
Stationery and Printing	900.00
Salaries	18,000.00
Contingent Fund	1,200.00
Annual Meeting—Printing and Postage, Stenographer for House of Delegates, and Exhibitors' Entertainment	2,000.00
District Branch Programs, printing and postage for mailing paid through Secretary's Office	700.00
Auditor	600.00
Traveling Expenses — General, President and Secretary	5,000.00
Traveling Expenses, A.M.A. Delegates	3,000.00
Counsel—Salary	14,000.00
Counsel—Expenses	300.00
Secretary—Honorarium	3,000.00
Secretary—Expenses	600.00
Executive Officer's Salary	9,000.00
Executive Officer's Expenses	1,500.00

STANDING COMMITTEES

Legislation	6,300.00
Medical Economics	2,000.00
Public Health and Medical Education	8,500.00
Public Relations	3,000.00
Medical Research	150.00
Scientific Work	500.00

SPECIAL COMMITTEES

Physical Therapy	800.00
Periodic Health Examination	1,000.00

DISTRICT BRANCHES

For Annual Meetings as allowed under the By-Laws	2,000.00

SPECIAL APPROPRIATIONS

Conference of County Secretaries	600.00
Conference, Executive Committees of District Branches	200.00
Christmas Bonus	600.00
Tri-State	100.00

JOURNAL

Printing and Cuts	35,000.00
Postage—Mailing Journal	3,600.00
Postage—General	400.00
Commissions	8,000.00
Traveling Expenses Advertising Manager	300.00
Honorarium—Editor-in-Chief	500.00
Executive Editor—Salary	5,000.00
Executive Editor—Traveling and Incidental Expenses for Reportorial Work	500.00
Dr. Stedman (Medical Progress Dept.)	1,200.00
Rent	1,658.00
Salaries	4,420.00
Extra Clerical Work for Executive Editor at Patchogue	500.00
Telephone	200.00
Subscriptions to Journals	250.00
Wrappers for Journals	600.00
Stationery and Printing—General Office Supplies, including Furniture, Fixtures, etc.	800.00

DIRECTORY

Printing Directory	14,000.00
Wrapping and Delivery	1,700.00
Postage	700.00
Commissions	700.00
Stationery, Printing and Expenses	700.00

(This budget was approved by the Trustees on June 26, 1931—Editorial note.)

The following members of standing committees were nominated by the President and duly elected. (The chairmen had already been elected by the House of Delegates, and are listed on page 767 of this Journal.

Legislation—Drs. John J. Buettner and Marshall Clinton.

Medical Economics—Drs. Frederic E. Elliott, Morris Rosenthal, Donald S. Childs, and Joseph P. Garen.

Public Health and Medical Education—Drs. George W. Kosmak, John O. Polak, Mahlon H. Atkinson, Leo F. Schiff, William A. Groat, Martin B. Tinker, Clayton W. Greene, and Edward G. Whipple.

Public Relations—Drs. Oliver W. H. Mitchell, Augustus J. Hambrook, George M. Fisher, and William H. Ross.

Medical Research—Drs. Augustus B. Wadsworth, Burton T. Simpson, Simon Flexner, Winfield W. Scott, Edwin MacDonald Stanton and Frederic E. Sondern.

Scientific Work—Dr. Henry S. Patterson.

The following special committees, appointed by the President, were confirmed by the Executive Committee:

Periodic Health Examinations—Dr. C. Ward Crampton, Chairman and Drs. Walter D. Ludlum, Walter A. Calihan, Nellis B. Foster, Guy H. Turrell, Harlow Brooks, Luther F. Warren Nelson G. Russell, Joseph D. Olin and Marion C Potter.

Physical Therapy—Dr. Richard Kovacs, Chairman, and Drs. Philip L. Forster, Guy H. Turrell, Frederic E. Elliott, Lee A. Hadley, George A. Leitner and Virginia C. Tannenbaum.

Prize Essays—Drs. Edwin MacD. Stanton, *Chairman*, Edgar A. Vander Veer and Stanhope Bayne-Jones.

To Revise the Constitution and By-Laws—Drs. Charles G. Heyd, John A. Card, Daniel S. Dougherty, Harry R. Trick, Thomas P. Farmer, James F. Rooney, and Walter D. Ludlum.

To Study the Ways and Means of Establishing a Retirement Fund for the Benefit of Members—Drs. William M. Patterson, Chairman, Nathan Ratnoff, Floyd S. Winslow, William H. Ross, and Dan Mellen.

To Study the Nurse Problem—Drs. Nathan B. Van Etten, *Chairman*, Andrew Sloan, J. Richard Kevin, George W. Kosmak, George R. Critchlow, Arthur S. Chittenden, George L. Brodhead, and Robert P. Munson.

Press Relations—Drs. Samuel J. Kopetzky, Edward C. Podvin, Alec N. Thomson, and Carl Boettiger. The appointment of the remainder of this Committee to be left until the fall.

To Draw Up Suitable Resolutions on the Death of Dr. E. Eliot Harris—Drs. John A. Card, Chairman, Daniel S. Dougherty and William H. Ross.

Woman's Auxiliary—Drs. John A. Card, Chairman, James N. Vander Veer and Homer J. Knickerbocker.

Insurance—Drs. John A. Card, Chairman, Charles G. Heyd and Frederic E. Sondern.

Dr. James N. Vander Veer was re-appointed as a representative from the State Society to act

with the State Department of Health in the campaign against Venereal Diseases.

The appointment of the Committee on Certification of Specialists was deferred until the fall.

The President, Secretary, Chairman of the Committee on Arrangements, and Chairman of the Committee on Scientific Work were appointed a Committee to decide the date of the next Annual Meeting, May 23rd being tentatively approved by the Executive Committee.

D. S. DOUGHERTY, *Secretary.*

PUBLIC RELATIONS COUNTY SURVEY, NUMBER 19—STEUBEN

MAY 27, 1931

Steuben County, New York, is situated in the center of the southern tier of counties bordering the northern boundary of the State of Pennsylvania. A total population of 82,671 was shown by the Census of 1930. The County contains 1401 square miles of territory and ranks sixth in size in the State of New York. It is essentially agricultural although there is considerable industrial activity to be found in the cities of Corning and Hornell.

There are eighty physicians practicing within the County at the present time distributed as follows: 18 in Corning, 22 in Hornell, 8 in Bath, while the remainder are well scattered in the smaller communities and rural sections. Of this number of physicians, there are 72 who are members of the Steuben County Medical Society.

The County is served by four general hospitals. Two in Hornell, namely: the St. James Mercy and the Bethesda; Bath Hospital in Bath; and Corning Hospital in Corning. All of these institutions are equipped with modern appliances. The Bath Hospital is more or less of a semi-private institution, being managed and operated by Doctors H. J. Wynkoop and Zeno Selleck. The Steuben County Tuberculosis Sanitarium is located at Bath. It is known as the Pleasant Valley Sanitarium and is operated under the direction of Dr. D. P. Mathewson. The capacity is 45 beds: 19 men; 14 women; and 12 children. The total number of persons receiving treatment during the year 1930 was 104, while the total operating and maintenance cost for the same period was $40,360.16.

The County of Steuben supports two public health nurses who divide the territory between them and work under the direction of the District Supervisor of the State Department of Public Health, Dr. John A. Conway and his assistant, Miss Hazel Stewart. The county nurses arrange for the holding of public clinics of various kinds including chest, mental, pre-natal, orthopedic, toxin-antitoxin, child consultation, dental, venereal, well-baby, etc. All clinics are conducted by specialists sent in for the most part by the State Department of Health, except as follows:

The dental, venereal and well-baby clinics are conducted by the health officers of the cities of Corning and Hornell, the county nurses being privileged to bring in county cases, whose residences are outside these cities, for examination or treatment. The chest clinics are conducted by Dr. D. P. Mathewson, Superintendent of the Steuben County Tuberculosis Hospital. In addition to the chest clinics that are held at regular intervals, the State Department of Health conducts an additional clinic with the aid of a portable *x*-ray, to which anyone in the County is admitted. We find that these State clinics are being patronized to a greater extent each year.

The County of Steuben maintains three laboratories with State aid, located at Corning, Bath and Hornell, affording to the County the following services, conducted under the direction of R. J. Shafer, M. D., and five assistants:

1. Examination of specimens submitted to determine presence of communicable diseases.
2. Regular bacteriological examinations of all milk produced and sold in the County.
3. Examination of all public water supplies at regular intervals.
4. Facilities used to assist physicians in the diagnosis of disease.
5. A total of 32,175 specimens examined during the year of 1930.

The laboratories also serve the New York State Department of Health as supply stations, furnishing physicians and health officers with antitoxine and sera. Immune sera for measles and poliomylitis are prepared by the Steuben County Laboratories for the New York State Department of Health.

The total cost of operation and maintenance of the laboratory system for the year 1930 was $10,875.00 which is paid in part by the New York State Department of Health.

The school districts of the cities of Corning and Hornell and village of Bath employ full-time school nurses. Other school districts in the County are taken care of by the County nurses.

In the spring of 1930 the Public Relations Committee of the Steuben County Medical Society sponsored the organization of the Steuben County Council on Public Relations made up of representatives of all organizations in the county interested in the maintenance of good health.

The purpose of this group was to disseminate accurate and reliable information on health subjects using whatever means might be available A Lay-Executive Committee was appointed consisting of the following Elmer E Meadley, Secretary of Corning Chamber of Commerce, Chairman, Mrs H C Bates, Corning, N Y, E R Hardenbrook, County Commissioner of Public Welfare, Dr E W Woodbury, Dentist and Miss Jessie M Ferguson, Supt of Davenport Home, Bath, N Y, Mrs Shirley E Brown, and Mrs Olive G Buisch of Hornell N Y who is General Manager of the *Evening Tribune Times*

This Committee prepared a definite program which was submitted to the members of the Steuben County Medical Society in October, 1930 The Society approved the program and the Committee has proceeded to carry out its plan This included the preparation of short articles by the members of the Steuben County Medical Society for syndication to the newspapers within the County who agreed to publish the articles regularly as released

It also involved the organization of a speakers' bureau among the members of the Medical Society for the purpose of giving addresses before various gatherings or organization meetings This work is now getting under way and has already shown promise of being very much worth while

Respectfully submitted,

PUBLIC RELATIONS COMMITTEE
H B SMITH, *Chairman*, Corning, N Y
GEORGE TAYLOR, Hornell, N Y
GUY PARKHURST, Bath, N Y

FOUR COUNTY MEETING

A joint meeting of the Medical Societies of the counties of St Lawrence, Franklin, Jefferson, and Lewis was held at the St Lawrence State Hospital, Ogdensburg, N Y, on June 25, 1931 A morning and an afternoon session were held, with a social luncheon at noon One hundred and twenty-five doctors were present, or sixty per cent of the membership of the four societies

The program was of great practical value to the members of the societies It was on the general subject of mental disease, and had been prepared by Dr P G Taddiken, Superintendent of the Hospital The official program was as follows

MORNING SESSION

Reception Building—10 15 *a m* (*Standard time*)

Address of Welcome — P G Taddiken M D, Superintendent

The Detection of the Future Neurosyphilitic Before Mental Symptoms Are Evident, — Harold H Berman, M D, Senior Assistant Physician

The Early Recognition of Mental Disease, — Leo P O'Donnell M D, Senior Assistant Physician

Mental Hygiene Clinics—Their Value and Uses, — Paul C Lybyer, M D, Director of Clinical Psychiatry

The Medical and Psychiatric Treatment at the St Lawrence State Hospital, — Harry J Worthington, M D, First Assistant Physician

The Results of Treatment — William L. Cudmore, M D, Senior Assistant Physician

CLINIC

Presentation of Typical Cases—Manic Depressive, Dementia Praecox (Schizophrenia), Psychoneuroses, General Paralysis etc etc.

Luncheon at 1 p m, Reception Building

AFTERNOON SESSION
2 15 p m

Demonstration of Spinal Anesthesia in Operations, — John E Free, M D, Consulting Surgeon, St Lawrence State Hospital (Operating Room—Main Building) 2 15 p m

Demonstration of Laboratory Methods, Lumbar Punctures and Tryparsamide Intravenous Treatment — Harold H Berman, M D, Senior Assistant Physician

Because of the length of the program there will be no general discussion After the morning session the writers of the papers will hold themselves available to answer any questions

Through the courtesy of the Ogdensburg Country Club, the privilege of the Golf Course is extended to those attending the meeting The Golf Club is situated eight miles from the City of Ogdensburg on the Ogdensburg-Morristown Road—Route 37

The papers of the sessions will be short and we hope, from the viewpoint of the general practitioner, practical

The Reception Building, Southwood, for tubercular patients, and the Nurses' Home, opened this year, are modern, fire proof, up-to-date structures, well adapted for the purposes intended All are invited to inspect these as well as the other buildings

Occupational therapy activities are carried on in the wards of the hospital and in various classes, and at Crafts, a pre industrial shop recently opened Arrangements will be made for those interested to visit this department

ANNUAL HEALTH OFFICERS' CONFERENCE

The annual conference of the Health Officers and Public Health Nurses of the State of New York was held in Saratoga Springs from Monday to Wednesday, June 29 to July 1, 1931.

This was the thirty-first conference, the first being held in 1901, the year of the establishment of the NEW YORK STATE JOURNAL OF MEDICINE. These conferences are official. The Public Health Law of the State, December 21, provides that the expenses of the Health Officers be paid by the municipalities which they represent. It is also the custom that the expenses of the Public Health Nurses be paid by the organizations that employ them.

The attendance at the conference was fully up to the usual standard, about 500 health officers and an equal number of public health nurses being present. Practically all those that attended were housed in the Grand Union Hotel, which followed its usual custom of opening one week in advance of the regular season in order to accommodate the delegates. The custom of housing everybody under one roof was most successful in promoting good fellowship and interest in the meetings.

The conference is to public health what the annual meeting of the Medical Society of the State of New York is to the private practice of medicine. The sessions were held both mornings and afternoons, with the evenings given largely to social functions. One of the most valuable and happy features of the conference was the acquaintances made and confidences exchanged while the participants sat on the spacious verandas.

The program included both scientific public health and also the practice of administrative medicine, or the duties of municipalities and voluntary organzations and the methods of their activities. The scientific program included discussions on the following:

Child hygiene and guidance.

The relation of constitution to disease.

The newer developments in milk inspection.

The common cold.

The parts of the program relating to administrative medicine were devoted largely to the duties of public health officers and voluntary organizations in their capacities as patients of those engaged in the scientific practice of public health.

The topics discussed included the following:

The Control of Syphilis in Rural Sections (see this Journal of June 1, 1931, page 720).

The Cooperation of the Public in Diphtheria Prevention.

The Public Health Program of the Mayor's Conference.

Methods of Cooperation in Health Services.

County Departments of Health.

The Relation of Public Health Nursing to the Practice of Medicine.

The State Sanitary Officers' Association held meetings on two afternoons and Tuesday evening. This organization was founded twenty-one years ago and has developed an increasing field of activity. The principal topic of the discussion was the County Department of Health and its relation to the local health boards in villages and townships. It seemed to be the consensus of opinion of the health officers that county departments of health were necessary in order to provide a staff of experts in public health, but also that the local boards of health and health officers should be preserved in their autonomy in order to develop a local initiative and responsibility. (See editorial, page 909).

The President of the Medical Society of the State of New York was recognized with a prominent place in the opening of the conference; and the intimate relation of the family doctor to public health work was emphasized throughout the conference.

CANCER COMMISSION IN CALIFORNIA

The following description of the formation of a Cancer Commission by the California Medical Association has been received from Dr. A. R. Kilgore, Secretary of the Commission. This action will be of interest to the physicians of New York State in view of the endorsement of cancer prevention by the House of Delegates (Journal, July 1, page 840).—*Editor's note.*

"At its annual meeting on April 27, the California Medical Association authorized the creation of a permanent Cancer Commission to represent the Association in all phases of the organized fight upon the increasing menace of this disease.

"As its first objective, the Commission plans to review and bring widely to the attention of the profession in California the most modern methods of diagnosis and treatment of cancer, and especially of early cancer, since it is obvious that increasing numbers of patients with early cancer are seeking advice.

"Later efforts will be directed toward education of the lay public on the signs and symptoms suggestive of early cancer. The establishment of specially equipped clinics and hospitals will be encouraged as well as more extensive clinical and laboratory research.

"It is a source of gratification to be able to inform you that the Commission has already been appointed, and that its plans of organization are well under way.

"The present members of the Commission, as appointed by the President of the California Medical Association are —

"Dr Charles A Dukes, Oakland, Chairman, Dr Lyell C. Kinney, San Diego, Vice chairman, Dr Alson R Kilgore, San Francisco, Secretary, Dr Harold Brunn, San Francisco, Dr Orville Meland, Los Angeles; Dr. William Ophuls, San Francisco, Dr C G Toland, Los Angeles; Dr H J Ullmann, Santa Barbara; Dr A H Zeiler, Los Angeles, Dr Junius B Harris, Sacramento, President of California Medical Association

ASSOCIATED PHYSICIANS OF LONG ISLAND

The ninety-ninth regular meeting of the Associated Physicians of Long Island was held on the afternoon of Saturday, June 20, at the South Shore Yacht Club, Freeport, Nassau County, with the President, Dr H C Courten, Richmond Hill, presiding Thirteen new members were elected, as follows

Frederick C Courten, M D, Richmond Hill,
Harry C Card, M D Jamaica;
Frank N Dealy, M D, Flushing,
Alexander S Walker, M D, Jamaica,
James H Watt, M D, Little Neck,
Stanley S Lamm, M D, Brooklyn,
Paul C Eschweiler, M D, Brooklyn;
Stanley D Banks, M D, Brooklyn;
Henry D Fearon, M D, Brooklyn,
I Theodore Rosen, M D, Brooklyn,
Theodore R Miner, M D, Brooklyn,
Bruce B Preas, M D, Rockville Center,
William C Brons, M D, Queens Village

The general program of the meeting was "Mosquito Elimination and Control in Nassau County," and was in charge of Dr A D Jaques, of Lynbrook, Treasurer of the Nassau County Mosquito Elimination Commission Dr. Jaques placed the working fleet of five boats at the disposal of the members, who enjoyed the afternoon on the Bay inspecting the work of ditching and draining the salt marshes and oiling the stagnant pools The Commission had almost completely accomplished the elimination of the salt marsh mosquito, the most troublesome variety, during the fifteen years of its existence, but the greatest obstacle now encountered is the "Improvements" now under way by which great areas of low marshland are filled with sand dredged from the bay, and thereby often enclosing stagnant pools, which require frequent oiling The newly-made land will become residential districts within a few years, but during the period of development it is a breeding ground for mosquitoes

The members enjoyed a social dinner in the early evening, after which Dr Jaques explained the work of mosquito elimination, illustrating it with moving pictures of the work in actual progress

JAMES COLT HANCOCK, *Secretary*

DISTRICT BRANCH MEETINGS

Conferences with the officers of the District Branches have been completed, and there follows a program of the annual meetings for this year

First	October 7	Newburgh
Second	November 19	Brooklyn
Third	September 16	Sharon Springs
Fourth	October 21-22	Glens Falls
Fifth	September 29	Rome
Sixth	September 22	Waverly
Seventh	September 24	Rochester
Eighth	October 1	Olean

The Fifth District could not definitely decide that the meeting should be held in Rome until the officers confer with Dr Bernstein

JOSEPH S LAWRENCE
Executive Officer

ROCKLAND COUNTY

The June meeting of the Medical Society of the County of Rockland was held at the Rockland Country Club, Sparkill, New York, on Wednesday, June 24, 1931 Approximately forty-eight members were present, including honorary members and guests

Dr Samuel G Gant, former professor of Proctology, Post-Graduate Hospital, New York City, was the speaker for the day The doctor presented many phases of his important and fascinating subject "Practical Proctology" which proved to be of considerable interest to the general practitioner

Doctor Gant also provided the entertainment by telling stories and performing sleight of hand tricks The doctor proved as eminent in entertaining as he is in his profession

The treasurer reported 53 members in the Society, nearly all of whom are in good standing

Two new members were elected to the Society

A delightful dinner was provided by Doctor George A Leitner, who acted as host

The afternoon continued in gaiety and fun which gave the members of the Society an all-round good time

W. J RYAN, *Secretary*

THE DAILY PRESS

PREDICTING POPULATIONS

An editorial writer in the New York *Herald Tribune* of June 23, is evidently in sympathy with his associate, the cartoonist, whose drawing on "Birth-Control" was copied in the May fifteenth issue of this Journal. The writer, in discussing predictions of populations, says:

"Scientists and super-scientists and pseudo-scientists are constantly warning the world that the human race is dying out or overbreeding, or that the white race is about to be submerged, or that the cultured upper classes are not perpetuating themselves, and portraying a grim, dark future for poor mankind. The various ebullitions in the last few days of what is gloriously called the International Union for the Scientific Investigation of Population Problems are no better and no worse than the usual run. The fact is that there is not yet any such thing as a 'science of population.'

"We refuse to pale with alarm. The so-called upper classes have probably been dying out consistently since the origin of the human race. Wealth and leisure, which might be expected to make many children a simpler problem, have never been an inducement to large families. So far as the historians can peer into the recesses of history, they have always led rather to restriction upon multiplication; and the result has not yet been disastrous for human society. Out of some mysterious wells of human talent emerge ever new strains to utilize new opportunities; and the evidence is not unanimous that it is wholly a misfortune that the sons of wealth and genius do not always reproduce their kind. There are mysteries here that science has not yet pulmbed; possibilities of human development which have not been tapped. The true scientist stands baffled and a little awed before the enigma which others call the science of population."

WELLS OF INSPIRATION

James J. Montague, in his column "More Truth than Poetry," in the *New York Herald Tribune* of June 10, has the following verses suggested by a news note that Dante and other geniuses were in the habit of meeting in the local drug stores:

"In the days when there wasn't an 'anti'
To awaken the national ire—
In the time when the late Mr. Dante
Plucked his lilting and lyrical lyre,
If of themes for an epic his bosom was bare,
And he felt like a nip of good hock,
To the old corner drug store he used to repair
For a neighborly chat with the 'doc,'
And when he returned to his quiet abode
He would pick up his stylus and turn out an ode.

"John Keats, in his meek adolescence—
'Ere he wrote about song birds and elves—
Knew the name of each extract and essence
That the drug store contained on its shelves.
He was skilled and adept in the mixing of pills
For the shoemaker, blacksmith or cop,
And he first heard the nightingale's nocturnal trills
Through the door of his little old shop.
And there mandragora and poppy and thyme
He mingled, while clothing his fancies in rhyme.

"Today not a measure comes rippling
From the depths of the pharmacist's store.
For the habit of neighborly tippling
Is practiced within it no more.
And perhaps that is why that so rarely one meets
With the songs that so limpidly flow
As they did in the eras when Dante and Keats
Plied their pens, in the long, long ago.
Times change with the ages, alas, and today
No undying classic the drug stores purvey."

SEWAGE OF NEW YORK CITY

New York is often quoted as using one of the most primitive of all methods of sewage disposal —that of emptying it into the immense bodies of running waters which surround and penetrate the city What might have been the condition of the City is set forth in the following editorial in the *New York Herald Tribune* of July 7

"New York began with an unrivaled harbor, with many miles of splendid watercourses running everywhere through the territory upon which the city now stands with shores which could have been preserved for park and residential ends with countless natural beauties which could have been woven into a city plan fully adequate for supporting not only her present but her future population, but there has never been a plan and most of the opportunity has been wasted

"The best that we can do now is to rescue as much as possible from the consequences of lack of foresight and regulation Sewage and garbage disposal is an obvious way to begin, we cannot recover the gentle meadows of Hoboken or the sylvan shores of the East River, but it is possible to purify the open sewer which we have made of the waters amid which we pass our lives, and which is defiling not only the city but the beaches in New Jersey or along the Sound where we might otherwise take refuge"

The City is now developing a consistent plan of sewage disposal, and is building a first great unit on Ward's Island in the upper East River Concerning it the editorial continues

"Breaking ground for a sewage reduction plant may not be among the most inspiring of ceremonies, nevertheless, if the pent up millions of New York know what is good for them, they will hail the rites to be undertaken this afternoon on Ward's Island as a ray of hope amid an almost stygian darkness Even the immense Ward's Island plant will not do everything, for it represents only the beginning of a full program which is not expected to be finished until 1960 But it is something, and if we have to wait thirty years for a proper answer to the sewage problem, we can at least use the time in attacking the problems of garbage disposal and other forms of city planning which must be met before New York becomes the kind of city that it ought to be

STICKY STREETS

Wherever asphalt tar is used on roads there will be trouble with its sticky surface on hot days The newspapers recently described the plight of a cat whose feet were held tight by the tar on a sticky road A similar fate befell a woman according to the following editorial in the *New York Herald Tribune* of July 6

"New Yorkers endure a lot of inconvenience without a word of complaint, which no doubt explains why it took a near accident to bring out the fact that sticky streets are an unnecessary evil A few days ago a woman narrowly escaped being run down by a taxicab at a crossing when her shoes stuck fast in the soft tar She extricated herself finally, but her shoes were ruined Her complaint to the Street Department elicited the information that gangs of men with sand carts are supposed to go about the streets and sprinkle sand on the sticky places The wonder is that more protests have not been forthcoming from women at least, whose slender heeled shoes sink into the tar with disastrous results Dodging traffic is enough of a problem, without having it made more difficult by a sticky impediment By all means let us have the tar sprinkled with sand, the sooner the better"

HITCH HIKERS

Since physicians spend much of their time on the public roads, they will approve the laws described in the following editorial in the *New York Sun* of July 2

"The campaign against hitch hikers goes steadily on In Pennsylvania they are now liable to a fine of $2 or imprisonment for one day, under a provision of the amendments to the State's motor vehicle code which Governor Pinchot has approved A year ago Governor Roosevelt signed the Bartholomew bill, making it unlawful for a person to stand in a roadway for the purpose of stopping a private vehicle to solicit a ride Other states have similar laws A bill introduced in the Legislature at Concord, New Hampshire, provided that all hitch hikers using the highways of the State must pay $3 20 to register with the Secretary of State and $2 30 for a license from the Motor Vehicle Commissioner Other provisions were that they must carry a metal sign announcing their proposed destination, be provided with an emergency can containing one gallon of gasoline for automobiles in difficulties, and be equipped with two head lights and a tail-light if traveling at night Obviously nine nomads out of ten would trust to their own legs rather than comply with such conditions"

BOOKS RECEIVED

Acknowledgment of all books received will be made in this column and this will be deemed by us a full equivalent to those sending them. A selection from this column will be made for review, as dictated by their merits, or in the interests of our readers.

HEART DISEASE. By PAUL DUDLEY WHITE, M.D. Octavo of 931 pages, illustrated. New York, The Macmillan Company, 1931. Cloth, $12.00. (Macmillan Medical Monographs.)

RESISTANCE TO INFECTIOUS DISEASES. An exposition of the biological phenomena underlying the occurrence of infection and the recovery of the animal body from infectious disease, with a consideration of the principles underlying specific diagnosis and therapeutic measures. By HANS ZINSSER, M.D. Fourth edition. Octavo of 651 pages, illustrated. New York, The Macmillan Company, 1931. Cloth, $7.00.

TEXT-BOOK OF PHYSICAL THERAPY. By WILLIAM BENHAM SNOW, M.D. Volume I. Octavo of 708 pages, illustrated. New York, Scientific Authors' Publishing Company, 1931. Cloth, $10.00.

MEDICAL ADMINISTRATION OF TEACHING HOSPITALS. By EMMET B. BAY, M.D. Octavo of 136 pages. Chicago, The University of Chicago Press, 1931. Cloth, $2.00. (Medical Economics Series.)

THE SEX FACTOR IN MARRIAGE. A book for those who are or are about to be married. By HELENA WRIGHT, M.B., B.S. 12mo of 122 pages. New York, The Vanguard Press, 1931. Cloth, $2.00.

THE MODERN HOSPITAL YEAR BOOK: The Hospital Reference Book, 10th edition, 1930. Quarto of 973 pages, illustrated. Chicago, The Modern Hospital Publishing Co., Inc., 1930. Cloth, $2.50.

TREATMENT OF INJURY BY THE GENERAL PRACTITIONER. By CLAY RAY MURRAY, M.D., F.A.C.S. Two volumes. 12mo of 412 pages, illustrated. New York and London, Harper & Brothers, 1931. Cloth, $5.00. (Harper's Medical Monographs.)

RECENT ADVANCES IN THE STUDY OF THE PSYCHONEUROSES. By MILLAIS CULPIN, M.D., F.R.C.S. Octavo of 348 pages. Philadelphia, P. Blakiston's Son & Co., Inc., 1931. Cloth, $3.50. (The Recent Advances Series.)

FOOD ALLERGY: Its Manifestations, Diagnosis and Treatment with a General Discussion of Bronchial Asthma. By ALBERT H. ROWE, M.S., M.D. Octavo of 442 pages. Philadelphia, Lea & Febiger, 1931. Cloth, $5.00.

THOMSON & MILES' MANUAL OF SURGERY. By ALEXANDER MILES, M.D., LL.D., and D. P. D. WILKIE, M.D., F.R.C.S. Eighth edition. Volume 1, General Surgery. 12mo of 574 pages, illustrated. New York and London, Oxford University Press, 1931. Cloth, $3.80. (Oxford Medical Publications.)

BREAST-FEEDING. By MARGARET EMSLIE, M.B., Ch.B. 12mo of 142 pages, illustrated. New York and London, Oxford University Press, 1931. Cloth, $2.00. (Oxford Medical Publications.)

THE SIGNIFICANCE OF WATERBONE TYPHOID FEVER OUTBREAKS, 1920-1930. By ABEL WOLMAN and ARTHUR E. GORMAN. Octavo of 82 pages. Baltimore, The Williams & Wilkins Company, 1931. Cloth, $2.00.

FIGHTING DISEASE WITH DRUGS: The Story of Pharmacy. A Symposium. Edited by JOHN C. KRANTZ, JR. Octavo of 230 pages, illustrated. Baltimore, The Williams & Wilkins Company, 1931. Cloth, $2.00.

HEALTH ON THE FARM AND IN THE VILLAGE. A Review and Evaluation of the Cattaraugus County Health Demonstration with Special Reference to Its Lessons for Other Rural Areas. By C.-E. A. WINSLOW, Dr.P.H. Octavo of 281 pages, illustrated. New York, The Macmillan Company, 1931. Cloth, $1.00.

TEXT-BOOK OF HISTOLOGY for Medical and Dental Students. By EUGENE C. PIETTE, M.D. Octavo of 466 pages, illustrated. Philadelphia, F. A. Davis Company, 1931. Cloth, $4.50.

MEDICAL JURISPRUDENCE. By ALFRED W. HERZOG, Ph.B., A.M. Quarto of 1051 pages. Indianapolis, The Bobbs-Merrill Company, 1931. Cloth, $15.00.

INSOMNIA: An Outline for the Practitioner. By H. CRICHTON-MILLER, M.A., M.D. Octavo of 172 pages. London, Edward Arnold & Company; New York, Longmans, Green & Company, 1930. Cloth, $4.20.

HYPERTENSION AND NEPHRITIS. By ARTHUR M. FISHBERG, M.D. Second edition. Octavo of 619 pages, illustrated. Philadelphia, Lea & Febiger, 1931. Cloth, $6.50.

THE DOCTOR AND HIS INVESTMENTS. Financial Policy and Technique for the Physician. By MERRYLE STANLEY RUKEYSER, B.Lit., M.A. 12mo of 330 pages. Philadelphia, P. Blakiston's Son & Co., Inc. [1931]. Cloth, $2.50.

MEDICAL CLINICS OF NORTH AMERICA. Vol. 14, No. 6, May, 1931. (New York Number.) Published every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues): Cloth, $16.00 net; paper, $12.00 net.

INTERNATIONAL STUDIES on the Relation between the Private and Official Practice of Medicine with Special Reference to the Prevention of Disease conducted for The Milbank Memorial Fund. By SIR ARTHUR NEWSHOLME, K.C.B., M.D. Volume 2. Octavo of 249 pages. Baltimore, The Williams & Wilkins Company, 1931. Cloth, $4.00.

A SYSTEM OF BACTERIOLOGY IN RELATION TO MEDICINE. By Various Authors. (Prepared under the direction of the Medical Research Council). Volume VIII. Octavo of 390 pages, illustrated. London, His Majesty's Stationery Office, 1931. Cloth, £8-8-0 a set; £1-1-0 each.

ABDOMINAL PAIN. By JOHN MORLEY, Ch.M., F.R.C.S. Octavo of 191 pages, illustrated. New York, William Wood & Company, 1931. Cloth, $3.50.

PRACTICAL METHODS IN THE DIAGNOSIS AND TREATMENT OF VENEREAL DISEASES, for Medical Practitioners and Students. By DAVID LEES, D.S.O., M.A. Second edition. 12mo of 634 pages, illustrated. New York, William Wood & Company, 1931. Cloth, $5.00.

AN INTRODUCTION TO GYNECOLOGY. By C. JEFF MILLER, M.D. Quarto of 327 pages, illustrated. St. Louis, The C. V. Mosby Company, 1931. Cloth, $5.00.

BOOK REVIEWS

THE MORBID PERSONALITY Psycho Analytical Studies in the Structure of Character and Personality By SANDOR LORAND, M D Octavo of 181 pages New York, Alfred A Knopf, 1931 Cloth $3 00

Following the basic work of Freud and his followers, Doctor Lorand demonstrates that the primitive sexual instincts play so clamorous a role in the evolution of personality that they cannot be ignored

As Doctor Brill suggests in his foreword, psychiatry *has never learned anything from the adjusted, normal person* Doctor Lorand has chosen to present his subject by the study of the character development in ten typical patients whose personalities have deviated from the normal to an extent that they sought the assistance of the psycho-analyst *Analysis in each case demonstrated* early arrest and fixation of natural sexual development

Doctor Lorand approaches his subject with profound sympathy for the individual entangled in the bonds of sex *We are accustomed as medical men,"* he writes to believe any complaints of somatic or physical nature which the patients bring to us Why not show more tolerance towards granting the possibility of mental torture? There is much truth in the complaint of the neurotic *that no one understands him, that everyone is* against him, and that he is accused of imagining things because he has no physical signs of illness"

Written primarily for the physician and the psychiatrist, Doctor Lorand's text will be of service, also to *educators* and social workers in helping them more sympathetically to understand the sex perversions and anti social demonstrations which come within their ken It presupposes a knowledge of scientific terminology and deals at length with eroticism

The book has sixty two bibliographical references both from the foreign and English psychiatry texts

FREDERIC DAMRAU

BIO-ASSAYS A HANDBOOK OF QUANTITATIVE PHARMACOLOGY By JAMES C MUNCH Octavo of 958 pages illustrated Baltimore The Williams & Wilkins Company, 1931 Cloth, $10 00

The author has succeeded admirably in presenting in logical fashion the important factors, technique and method of quantitative pharmacology More than five thousand references are divided into groups according to subject matter and placed at the end of the chapter on which they have bearing The mere fact that it was necessary to tabulate *so many articles indicates* the chaotic state of this subject and the unnecessary duplication of work by various investigators

The second and third chapters deal with experimental technique, supplemented by ink sketches of the sites of *of results The drugs with* ty of each are listed rather predominant action as those affecting the nervous system circulation respiration and the muscles, with one chapter each on glandular products and special types of drugs The chapter on the circulation is quite voluminous and complete, the part allotted to the chemical and physiological assay of heart stimulants, such as digitalis strophanthus, squill, etc is especially detailed The other drugs are dealt with in a similar manner, the author having compiled a mass of data and presented it in a form that is readily utilizable.

DAVID I ABRAMSON

METHODS AND PROBLEMS OF MEDICAL EDUCATION (Fifteenth Series) Quarto of 76 pages, illustrated New York, The Rockefeller Foundation, 1929

The fifteenth series of these Rockefeller brochures is devoted entirely to Albany Medical College The teaching methods of the various departments are described and floor plans including the Albany Hospital are included The photographs are excellent C A G

THE PRACTICAL MEDICINE SERIES Comprising Eight Volumes on the Year's Progress in Medicine and Surgery Series 1930 Chicago, The Year Book Publishers, 1930 General Medicine Edited by GEORGE H WEAVER, M D, and others 12mo of 848 pages illustrated Cloth, $3 00

This volume on 'General Medicine, Series 1930,' presents in the usual thorough and comprehensive manner, the advancement made upon the subject of general medicine *The departments of the volume* are separated into the infectious diseases, diseases of the chest, excepting the heart, diseases of the blood and blood making organs, diseases of the kidney, diseases of heart and blood vessels and diseases of the digestive system and metabolism *It is impossible to give in detail* the newer aspects of the diseases reviewed in this year book The editor of each department has thoughtfully presented the advances A study of this volume will well repay the time taken to keep abreast of the times It is indeed, surprising to learn how *much can be presented in so* small a space with the typographical work so agreeably done.

HENRY MONROE MOSES

THE THEORY OF OBSTETRICS A functional study of child bearing based on a new definition of normal labor and on a new theory of uterine inertia By M C DE GARIS M D Octavo of 272 pages New York, William Wood and Company, 1931 Cloth $5 00

The author gives us a functional study of child bearing, based on a new definition of normal labor, and on a new theory of uterine inertia The book is illustrated by a detailed statistical analysis of one hundred consecutive labors, and *some records of cases of painless* labor

The writer argues for a new standard for normal labor—one in which the mother will in a short time deliver herself spontaneously of a healthy baby with but little *pain or distress*

He contends that if all other types of labor are considered abnormal, more attention would be focused on some of the unsolved problems of childbirth Why do most labors cause pain? What causes uterine inertia? He makes a *plea for more studies* in regard to physiology of pregnancy and labor, and he is of the opinion that long and painful labors are more often due to abnormal maternal physiology than to faulty mechanism The high mortality and morbidity rate in obstetric patients is viewed with grave *concern* and the writer seeks to find a part of the cause in poor general health of the patient foci of infection faulty diet etc. Whether or not the reader agrees with the author, it must be admitted that he views pregnancy and labor from a new and unusual angle The book is *most interesting,* and is worth reading by teachers as well as by clinicians

W S S

OUR NEIGHBORS

SPECIALISTS' CERTIFICATION IN NEW JERSEY

The June issue of the Journal of the Medical Society of New Jersey contains a plan for certifying specialists presented to the meeting of the Second District Branch of New Jersey. The report is as follows:

"(I) Formation of a State Society Committee on Credentials for accrediting members for special practice, with subsidiary county committees to refer approved applicants to the state committee for action. These committees might be formed as follows: State—President, ex-officio, the Chairman of the Welfare Committee, Chairman of Publicity Committee, Chairman of Board of Trustees, and member of the State Examining Board.

"County—12 members, with the president ex-officio; the members to be chiefs of departments or ranking attendings in their respective hospitals, and members of the colleges or groups now nationally accrediting physicians for special practice, apportioned as follows: Surgery 2, Medicine 2, Obstetrics 1, Eye and Ear 1, Nose and Throat 1, Roentgenology 1, Genito-Urinary 1, General Practice 1, Gynecology 1, Pediatrics 1.

"(II) Requirements for Acceptance as Specialists:

"(1) Those accepted by the respective groups of specialists gathered under the following Societies and Colleges:

"(a) American College of Surgeons.

"(b) American College of Physicians.

"(c) American Society of Obstetricians and Gynecologists.

"(d) American Boards of Otolaryngology and Ophthalmology.

"(e) American College of Radiology and the Radiologic Society of North America.

"(f) American Society of Psychiatrists.

"(2) Accrediting by recognition of experience:

"(a) Men in practice longer than 10 years who have been notably identified with certain branches of medicine and surgery and who are accepted in their communities by their fellow practitioners as competent in the field to which they are giving special attention.

"(b) Men in general practice, holding a hospital service in a special branch of medicine, which service is sufficiently active to allow of attainment of a high degree of proficiency in that branch of medicine. The duration of appointment must be not less than five years.

"(c) Properly qualified and trained men, not classified in (a) and (b). Those of ample hospital and post-graduate training in practice five years or more, who furnish proof of qualifications which are acceptable to the State Committee on Credentials.

"(III) Distribution of Information Regarding Accrediting of Members for Special Practice and Those So Accredited:

"(1) Newspaper notices, prepared by County Committee on Credentials and certified by the State Committee on Credentials.

"(2) Radio talks; best through the State Committee.

"(3) Through agency of the medical profession; office placards and pamphlets on the subject of 'Choosing a Specialist.'

"(4) Display of Certificate issued by the State Society through the State Committee on Credentials for Special Practice.

"(5) Distribution of information through a Central information Office in each county medical district; (a) Physicians' and Surgeons' Telephone Exchange; (b) Secretary's Office of the County Society."

CHILD HEALTH CONFERENCE IN NEW JERSEY

The June number of the Journal of the Medical Society of New Jersey contains a description of a State conference on Child Health and Protection, held on April 17 and 18, in the New Jersey College for Women in New Brunswick. It had been called by Governor M. F. Larson in order to "Measure the State's facilities and program with the standards set by the White House Conference; and to make recommendations for State action."

"The conference was conducted by the New Jersey Conference of Social Work, of which William J. Ellis is President, in cooperation with the four major state departments that deal with the child; the Department of Education,

(*Continued on page 930—adv. xii*)

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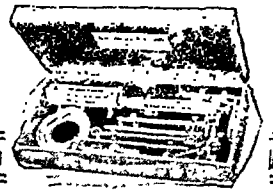
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(*Continued from page 931—adv. xiii*)

without a dissenting voice, as follows: Resolved that the Welfare Committee of the State Society be urged to secure, if possible, at the coming session of the legislature an amendment of the hospital lien law to include doctors and nurses.

"Dr. Waters, of Hudson, presented a careful résumé of the attitude of other states, Canada, and Europe, on the 'Problem of Licensing Specialists.' He then submitted a carefully thought out plan for proper accrediting and control of specialists and specialism by the State Medical Society. (Page 928.)

"Dr. Joseph R. Morrow, of Bergen, opened a discussion on the 'Supervision of Public Health Nursing,' and was followed by Drs. Knox, Marris and others.

"'The Need for Better Public Relations Through County Medical Society Publicity' was spoken of by Dr. Spencer T. Snedecor, of Bergen. This was discussed and the following motion passed: Resolved that the State Medical Society be asked to appoint a special committee for the promotion and supervision of county society publicity.

"Dr. Harry Perlberg, of Hudson, spoke on the problem of 'Medical Charity.'

"Dr. Wilbur, of Sussex, presented for consideration a 'Plan for Continuing Immunization Against Diphtheria.'

"Dr. Wayne Hall, of Passaic, discussed the subject of 'Pre-school Examinations,' and urged the need for a campaign to encourage this work.

"When the meeting adjourned it was felt that a great deal of fruitful discussion had been held on topics which are of vital interest to the general profession."

ANNUAL MEETING IN IOWA

The following editorial in the June issue of the Journal of the Iowa State Medical Society summarizes the editor's impressions of the eightieth annual meeting held on March 13-15, 1931, in Des Moines:

"The eightieth annual session of the Iowa State Medical Society, which recently convened in a three-day meeting in Des Moines, was generally conceded to have been the most outstanding in the history of the society." . . . "This year a new high mark in interest was demonstrated by a registration of 790. This fact alone demonstrates a healthy spirit of unity which has been developed during the past few years and could not prevail if dissensions existed without our membership.

(*Continued on page 933—adv. xv*)

(*Continued from page 932—adv. xiv*)

"Interest in the annual session of the Society was also strikingly demonstrated in the uniformly good attendance at every scientific session. In the past it has frequently been observed that following each presentation there was much restlessness and shifting of the audience. Members would take occasion to enjoy a friendly chat in the corridors while papers of lesser appeal were presented. This year the corridors were noticeably deserted during the time of the scientific programs and frequently between addresses the audience would not vary a score. Back of such interest was manifestly the exceptionally high type program which had been so thoughtfully prepared by the section chairmen. Every section of the state was duly represented and every phase of practice touched upon. By the aid of well placed and skillfully controlled loud speakers, the audience was uniformly enabled to hear and enjoy every presentation.

"The banquet and smoker bore testimony of the feeling of fraternity which permeated the entire group. Great credit was due the local arrangements committee for the splendid entertainment prepared for both the members and the visiting ladies. At all functions there was record attendance and accommodations were taxed to the limit.

"Most far-reaching perhaps in accomplishments was the resolution enabling the redistricting of the state for more uniform representation and in effecting an increase in dues sadly needed to carry on the enlarged activities of the organization. The program for redistricting the state as approved was chosen from a number suggested as being most equitable in representation and most workable from the standpoint of unity. It provides for eleven councilor districts formed as nearly as possible in rectangles in order to facilitate councilor activities. The dues for the ensuing year were advanced from $7.50 to $12.00."

PRESIDENT'S ADDRESS IN IOWA

The first article in the June issue of the Journal of the Iowa State Medical Society is the Presidential address given on May 13, by Dr. W. A. Rohlf, before the Eightieth Annual Meeting of the Iowa State Medical Society. Doctor Rohlf said in part:

"During the year I traveled 13,846 miles in the interest of the Iowa State Medical Society (and I hope it was for the best interest.) I addressed thirty county and other medical societies during this period. I made fifteen trips to Des Moines for meetings of various com-

(*Continued on page 934—adv. xvi*)



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(Continued from page 933—adv. xv)

mittees and other groups. This entailed fifty-five days of time. I am hoping that perhaps this effort on my part may have contributed in a small way to the accomplishments of the Iowa State Medical Society and allied medical and health agencies.

"The society can take just pride in the accomplishments of the Speakers Bureau; a detailed report will be available for your perusal. I predict that continued effort by this very efficient committee will bring results beyond the most sanguine hopes of those who originated its work in Iowa.

"It is gratifying to note that there is progress being made in the coordination of various organizations, lay and professional, in public health and hygiene. That the State Society is more active in this field than ever before is one of the results of the educational program of our Speakers Bureau. Closer relationship, better understanding, and greater efficiency for both the profession and the medical department of our State University is being brought about by the University Extension courses and by the work of the Medical Education and Hospitals Committee.

"I cannot refrain from expressing my appreciation of the splendid efforts put forth by the members of our legislative committee who were on the job all the time, day and night. Perhaps they were more keenly disappointed than the rest of us because we did not get everything asked for, but much progress for the good of the profession and humanity at large was accomplished. Considering that there were others whose programs failed to pass, we have every reason to be pleased, hopeful, and optimistic for the future.

"I want to add my personal word of appreciation for the splendid work done by Dr. Jeannette Dean-Throckmorton in administering the office of the Medical Department of the Iowa State Library. I am very sure that as this service is better understood, that more and more of our members will avail themselves of the great help this institution affords."

Doctor Rohlf also advocated the establishment of a students' loan fund to assist needy medical students.

OBITUARIES OF MAINE PHYSICIANS

The May issue of the *Maine Medical Journal* contains the following note by the Necrologist of the State Society:

(Continued on page 935—adv. xvii)

(*Continued from page 934—adv. xvi*)

"During the past year we have lost rather more members than usual, and largely from heart disease. They left us in a minute or in their sleep. Having already printed their careers in our columns, a reference list here follows, with the date of their deaths. Thus we salute them."

Then follows the names of twenty deceased members, with a brief characterization of each as follows:

"A young leader in Aroostook.
"Distinguished eye surgeon.
"The right-hand man of Portland's organist.
"Versatile country doctor.
"Man of mark in Penobscot medicine.
"Skillful physician.
"Beloved citizen and physician.
"Maine's first Medical Councilor.
"A universal favorite.
"State Medical Adviser in the Spanish War.
"Prominent surgeon in York County.
"Model county secretary.
"The man who ran the town.
"All-round practitioner.
"Skillful surgeon and staunch friend.
"Good physician and citizen.
"Pharmacist and physician.
"Good in emergencies.
"Famous neurologist, east and west.
"State Board of Health worker."

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As the infant grows older, therefore, it is only necessary to increase the total amount of S.M.A. diluted according to directions.

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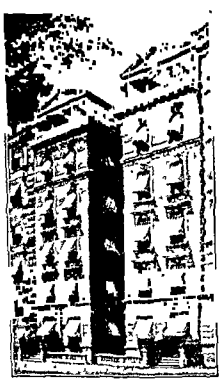
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POPULAR MEDICAL EDUCATION IN MICHIGAN

How popular medical education is carried on by the Medical Society of Kent County, Michigan, which includes the City of Grand Rapids, is told by Dr. E. B. Andersen, Chairman of the Public Health Committee, in the following item from the June issue of the Journal of the Michigan State Medical Society:

"We have inaugurated four projects. *One,* we have extended an invitation to both the Grand Rapids *Herald* and the Grand Rapids *Press* to send a reporter to all meetings of the Kent County Medical Society. In this connection we have also stated that when the meeting is a dinner meeting provision will be made for dinner for the reporter if he will let his presence be known. We have requested that the reporter covering our meetings interview the Chairman of the meeting before leaving in order to avoid misstatement and wrong interpretation of anything that is said in the meeting.

"*Two,* we have arranged with the American Medical Association to furnish both of the above-mentioned papers with the medical broadcast for the week in sufficient time to have them appear in the Sunday and Monday editions weekly.

"*Three,* through the courtesy of Mr. Frank Sparks, editor of the Grand Rapids *Herald,* we will publish in the magazine section of the Sunday edition, weekly, a public health article. These articles are to be written by members of our County Society and published under the authority of the Society by our committee. For the present these articles will be anonymous, but the newspapers are very anxious that the authors' names appear with the article. They explain this by the fact that the public is much more interested in reading anything if they know the writer. These articles are to be approximately one thousand words in length, written in popular language and dealing with some particular subject. The space required in the paper is the equivalent of one full column and is donated by the Grand Rapids *Herald* provided we agree to use as outlined.

"*Four,* several members of the Society have already agreed to cooperate in the matter of circularizing their own patients with pamphlets on public health. These pamphlets will be provided through the committee and will be of such size that they can be enclosed with statements on the first of the month. We expect to obtain these pamphlets from the biological and pharmaceutical houses without their names appearing on the same. All the cooperating doctors will be furnished with the same pamphlets at the same time."

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CHIROPRACTOR SUIT IN TEXAS

The Texas State Journal of Medicine of June contains the following news item on the successful prosecution of a chiropractor for practicing medicine without a license:

"*The Brownsville Herald,* of May 3, advises that a $250.00 fine and a thirty-day jail sentence were assessed against W. S. Hamel, Brownsville chiropractor, charged with practicing medicine without a license, by a jury in the Cameron county court at law, May 1. It further states that the courtroom was filled with chiropractors and their attorneys who were anxious to see how the test case would be handled. The prosecution was handled by Martin Hall, Cameron county attorney. The defense attempted to prove that chiropractors did not practice medicine, but Judge E. T. Yates' definition of medicine in his charge to the jury included chiropractors. County Attorney Hall quickly brought out that Hamel gave treatments and charged for them and that he did not have a State license to practice medicine. He vigorously opposed expert testimony concerning chiropractors. The plaintiff is on trial for not having a State medical license; not for being a chiropractor, Hall said."

NEW YORK STATE JOURNAL of MEDICINE

PUBLISHED BY THE MEDICAL SOCIETY OF THE STATE OF NEW YORK

VOL. 31, No. 15 NEW YORK, N. Y. AUGUST 1, 1931

THE TREATMENT OF CHRONIC OSTEOMYELITIS WITH LIVE MAGGOTS

By FRANK S. CHILD, M.D., PORT JEFFERSON, N. Y., AND EDWARD F. ROBERTS, M.D., Ph.D., PEARL RIVER, N. Y.

The work of which this article is a report was done in the St. Charles Hospital for Crippled Children, Port Jefferson, the Mather Memorial Hospital, Port Jefferson, and the Lederle Laboratories, Inc., Pearl River, N. Y.—Editor's Note.

ABOUT three years ago the late Dr. William S. Baer began treating chronic osteomyelitis with disinfected maggots (1). Because of the difficulty in propagating the maggots and rendering them sterile, the treatment did not become available to the medical profession until December of 1930. At that time the Lederle Laboratories began producing disinfected maggots.

The literature on the use of disinfected maggots in the treatment of chronic osteomyelitis is very scant. The most complete statement of Dr. Baer's work, which we have found, is in his testimony before the Committee on World War Veterans' Legislation, House of Representatives (2). At this hearing Dr. Baer and his associate, Dr. Livingston, stated that over one hundred and twenty cases of osteomyelitis had been treated, of whom 98% were cured.

On another occasion we were informed by Dr Baer that 95% of his cases in children were cured and 85% in adults.

Baer and Livingston (2) reviewing the ancient and medieval literature state that Andrew Paro, 1510-1590 noted maggots in war wounds. as did also Benvenuto Cellini.

Larrey (3) mentions the beneficial effects of the larvæ of the blue fly in war wounds in Syria during the Egyptian Expedition.

After the discovery of antiseptics by Lister maggots came to be considered contaminators of wounds. It remained for Baer to rediscover the value of maggots, or as he termed them—viable antiseptics.

The difficulty of growing disinfected maggots is mentioned by Weil (4).

Surgical Preparation of the Bone: As a preliminary to the maggot treatment the diseased bone is freely opened with an osteotome and all necrotic bone thoroughly removed. Cloaca or bone sinuses are chiseled out so that the entire diseased portion is freely accessible to the maggots.

Our technic at this operation is a soap and water cleansing of the part. This is done the night before operation and again on the operating table. It must be remembered that maggots will not work in the presence of antiseptics.

The operative field is draped as for any operation, using sterile sheets and towels. Instruments are sterilized and sterile rubber gloves are worn. After thoroughly removing all sequestra the wound is packed with sterile vaseline gauze, and a pattern of the wound is cut from bandage gauze.

Implanting the Maggots: A cage is necessary to confine the maggots and this is prepared by cutting a piece of 80 mesh brass screening cloth to the pattern made from the bandage gauze. The edges of this screen are inserted between single strips of sponge rubber split longitudinally. The opposing surfaces of the sponge rubber are first coated with rubber cement and then sewed together with the screen margin between. The screen is sterilized in an autoclave and is then ready for use.

Forty-eight hours after the operation the packing is removed, gas anaesthesia usually being necessary. Strips of adhesive plaster, one inch wide, are placed on the skin all about the wound and flush with the wound edges. This is to protect the skin and prevent dermatitis. "Duo" adhesive is then painted on the adhesive plaster. This "Duo" is waterproof and more securely holds the cage in place and prevents the escape of maggots. Next, adhesive plaster the length of the cage is folded, adhesive surface out, and attached to the sponge rubber of the cage on the side which is to be against the wound. Everything is now ready for the maggots which are applied in the following manner.

Sterile normal saline solution is placed in the

bottle containing the maggots, and the bottle emptied onto a small piece of sterilized screening cloth through which the water drains, leaving the maggots on the screen. With a sterilized wooden tongue blade the maggots are very gently scraped in the wound. Some prefer to use fine mesh gauze or a spoon made with screening cloth. Any method will do so long as the maggots are not injured. The cage is immediately applied, and secured in place by wide strips of adhesive extending from the sponge rubber to the skin, and then by narrow strips of adhesive placed at intervals across the cage. The adhesive must be spaced wide enough apart so as to provide light, which drives the maggots deep into the wound, and also to provide air which is essential for their vitality.

The cage should be inspected daily, for the profuse discharge may loosen the adhesive and permit the escape of maggots. It is best to allow this discharge to drain through the screen. We have tried cutting trap doors and aspirating the liquid but we found that these openings made an easy exit for the maggots.

The maggots are left in the wound five days. Then the cage is removed and the maggots washed out with sterile normal saline solution. Maggots buried deep in the granulation tissue are removed with sterile thumb forceps. A new implantation of maggots may be made at once, after cleaning the skin, but usually we apply a dry dressing of parresine mesh and gauze and wait twenty-four hours. With each application of maggots a new pattern of the wound is made. This is because it is preferable to discard the old cage, and also because the wound rapidly becomes smaller.

With the first application of maggots we administer a prophylactic dose of tetanus antitoxin. Our only reason for doing so is that Baer reported tetanus in one of his early cases (Maggots not disinfected[3].)

Preparation of Maggots: The main problem involved in preparing maggots suitable for clinical application is the use of a disinfecting procedure that is bactericidal without being insecticidal. In early work attempts were made to disinfect the maggot itself but this soon proved impractical and attention was turned toward disinfection of the fly egg. The technique developed by Baer and Knight (immersion for 30 minutes in solution composed of $HgCl_2$ 1:1000, alcohol 25 per cent and HCl 0.5 per cent) and subsequently modified by the Bureau of Entomology, U. S. Department of Agriculture (immersion for 15 minutes in solution composed of one part $HgCl_2$ in 4,000 parts saline, alcohol 25 per cent, HCl ⅛ per cent) has been used for egg disinfection by most investigators, but in our hands the method did not give consistent germicidal action and the hatching of the eggs after disinfection was often considerably impaired. Accordingly attention was turned toward the development of a procedure which would result in a minimum of bacterial contaminations and as nearly as possible a 100 per cent hatch of the disinfected eggs. After extensive experimentation, the following technique was devised:

Fly eggs laid by the species Phormia regina and Lucilia sericata on either hog spleen or raw beef are removed by gently brushing off the clumps with the flat end of a tooth pick into a beaker of sterile distilled H_2O. The water should be at a temperature of 4° C to prevent hatching of the eggs before disinfection takes place.

The apparatus for disinfection consists of a covered Gooch crucible attached to a filter tube by means of a thin-walled rubber tubing collar. The crucible and cover are sterilized separately, the crucible containing a small piece of fine mesh cheesecloth placed over the perforations. A short piece of ordinary rubber tubing is connected with the lower end of the filter tube which, with collar tubing attached, is immersed in 3 per cent phenol when not in use. When the crucible, cover, and filter tube have been assembled, a pinch clamp is attached to the small-sized rubber tubing and the apparatus is ready for disinfection.

Approximately 1100-1200 eggs are transferred to the cheesecloth layer in the crucible and are rinsed several times with sterile distilled H_2O (temperature 4° C) to mechanically remove bacteria. The pinch clamp is tightened and the egg clumps are thoroughly disintegrated by gently agitating them in 3-4 cc. of a sodium hypochlorite solution yielding 0.5 per cent available chlorine. Complete separation of the clumps is effected in ½-1 minute, and is important in that it makes the whole surface of each egg available to the action of the disinfecting agent. After loosening the clamp, the eggs are thoroughly rinsed with sterile distilled H_2O to remove all traces of chlorine, the clamp is re-tightened, and a neutral solution containing 4 per cent formaldehyde added to fill up the crucible. The eggs are exposed to this disinfectant for 3 minutes, then the clamp is loosened, and the eggs are rinsed a third time with sterile distilled H_2O. All agents in the above procedure are used at a temperature of 4° C.

As soon as most of the fluid has drained off, the piece of cheesecloth holding the disinfected eggs is transferred with sterile forceps to a 2 oz. bottle containing about 4 cc. of a sterile semi-solid medium. The medium consists of 1 per cent agar, desiccated liver, and dried yeast. Experience has shown that poor hatching results if the cloth with eggs is dropped on the medium and therefore the bottom surface of the moist cloth is smoothed out so that it will adhere to the bottle wall.

The bottle is then placed in a hatching incubator (regulated for temperature, humidity, and ventilation with exclusion of light). Twenty-four

hours later hatching is completed and the tiny maggots are tested for sterility by inoculating duplicate sets of fermentation broth tubes for detecting aerobes and deep meat tubes for detecting anaerobes.

After sterility testing the bottle of maggots is returned to the incubator for another day of growth and then the bottle is transferred to the chill room (temperature 4° C) to await the results of the sterility tests. Each bottle is held for a 4-day reading on the sterility tests before it is shipped. On the average, the technique as described above results in 90 per cent hatches free from bacterial contamination. It must be remembered that each bottle is subjected to a 4-tube test and if only one of these tubes shows a contamination within 4 days after testing, it is not released. Moreover, all tests are actually held in the incubator 7 days as a check on the dependability of the sterilizing process. The hatch after disinfection varies between 90 and 100 per cent of the hatch observed from non-disinfected eggs, the fertility of the eggs being comparable.

The method of shipment consists in packing the bottle of maggots next to a can of natural ice which is then surrounded by a 4-5 inch layer of pulverized cork as insulation between the chilled maggots and the walls of the carton. Since the ice in the package and the type of medium in the bottle both serve to retard the growth of the maggots while retaining their viability, they remain during transit at approximately the same 2-day stage of growth at which they are shipped, and therefore may be left in the wound 5 days unless unfavorably affected by the wound secretions or lack of food. Upon arrival, a bottle of maggots may be kept in an icebox at 4° C. for a few days before implantation if necessary, but this is obviously not desirable since the maggots are perishable and cannot be stocked indefinitely. Such a procedure is certainly not feasible when a bottle remains more than two days in transportation. All shipments are sent special delivery to facilitate transportation.

Of no less importance than the problem of developing an effective disinfecting procedure is the proper breeding of flies to insure a constant supply of fertilized eggs. This involves attention to environmental factors such as temperature, humidity, and ventilation and more particularly to selectivity of strains in all the stages of the fly's life cycle. Another contributing factor is the choice of foods which supply protein and carbohydrate in forms readily assimilated by the larvæ and adult flies. If cognizance is taken of these requirements, one may be fairly well assured of constant and abundant laying of fertilized eggs by young and vigorous flies.

Case Reports: The following are the reported cases of chronic osteomyelitis treated by us by the implantation of disinfected fly larvæ.

Case No. 1

J. L., age 15, female. Onset of acute osteomyelitis July, 1929. Admitted to St. Charles Hospital for Crippled Children August 22, 1930. Diagnosis, chronic osteomyelitis. Involvement right femur. Osteotomy and Orr treatment instituted September 10, 1930.

First implantation of maggots December 9, 1930. Last implantation May 15, 1931. One month later scar was covered with epithelium, which was smooth and without indentations. Total implantations eighteen.

Case No. 2

E. M., age 10, male. Referred by Dr. Stanley P. Jones, Mattituck, Long Island. Admitted to St. Charles Hospital for Crippled Children January 10, 1931. He was transferred from the Mather Memorial Hospital where an osteotomy of the femur had been performed December 31, 1930, and the first implantation of maggots made January 2, 1931. This patient gave a history of having had meningitis November 14, 1930, a gram positive organism being recovered from the spinal fluid. Acute osteomyelitis was discovered December 8, 1930 and the right femur opened and drained, also the left tibia. At time of admission there was a dislocation of the right hip.

The last implantation of maggots was made May 23, 1931, there being a total of thirty implantations in two bones. The wound healed with a sinus due to fact that at operation all necrotic bone could not be removed because of pathological fracture through trochanter. X-Ray showed two small sequestra remaining. The patient is in excellent condition and after another osteotomy the maggot treatment will be continued.

Case No. 3

F. L., age 5, male. History of a giant cell sarcoma removed from tibia about three years ago Because of non-union bone grafting was attempted three times, all unsuccessful, and the last time bone became infected. Admitted to St. Charles Hospital for Crippled Children February 4, 1930. Diagnosis, chronic osteomyelitis of tibia, old fracture of tibia and fibula, and discharging sinus in leg. Leg was immobilized in long plaster spica until September 24, 1930 when, because of continued non-union, internal fixation by means of Sherman plate was done. January 17, 1931, there was still non-union and maggots were implanted. April 2, 1931, last implantation of maggots, total of eighteen. Plaster spica continued throughout treatment. Result, *x*-ray shows increased production of bone and there seems to be union. Spica not removed. Scar covered with smooth epithelium without indentation.

CASE No. 4

R. B., age 7, male. Admitted to St. Charles Hospital for Crippled Children September 5, 1930. Diagnosis, tuberculosis of right hip of about five years' duration: discharging sinus. January 21, 1931, with a probe in the sinus to indicate its position, an incision was made, laying open the sinus and exposing the hip joint, anteriorly. Wound packed with vaseline gauze. Six days later packing removed, without anaesthesia, and maggots implanted. Last implantation May 4, 1931, total of twenty-four. Result, wound covered with smooth epithelium, except for one small area: no sinus.

CASE No. 5

F. K., age 14, male. Onset of acute osteomyelitis July, 1928. Admitted to St. Charles Hospital for Crippled Children July 26, 1929, with history of having had several operations following compound fracture of tibia which was the cause of the osteomyelitis. Diagnosis, chronic osteomyelitis in tibia at site of old fracture, sinus with intermittent discharge. Usual preparatory osteotomy performed February 21, 1931. First implantation of maggots February 27, 1931. Last implantation April 28, 1931, total of fourteen. Result, wound completely covered with smooth epithelium and not indented.

CASE No. 6

M. H., age 10, male. Onset of acute osteomyelitis September, 1929. Admitted to St. Charles Hospital October 5, 1929, with history of having been treated for six weeks for typhoid fever.

Diagnosis, chronic osteomyelitis involving right femur, left tibia, right humerus, both iliac bones of the pelvis and spontaneous dislocation of the right hip. On admission all lesions were opened and drained, and after formation of sequestra the Orr treatment was instituted. Because of sinuses in right femur and left tibia these bones were opened March 9, 1931 and maggots implanted. Last implantation May 8, 1931, total of thirteen in two bones. Result, wound covered with epithelium which is smooth and not indented. *X*-ray showed sequestrum in distal end of right femur. This will be opened and maggots implanted.

CASE No. 7

Age 20, male. Admitted to Mather Memorial Hospital June 11, 1930, with history of having had a compound fracture of left tibia ten years ago.

During past ten years has had occasional discharge from sinus in the leg. On admission had temperature of 104° F. and severe pain in left leg. Onset six hours before admission.

Tibia was immediately opened thoroughly and packed with vaseline gauze. Patient discharged August 5, 1930. The wound was closed except for a small granulating area. The wound was dressed regularly at the office of one of us (F.S.C.) but failed to heal. January 6, 1931, the patient was readmitted to the Mather Memorial Hospital. Maggots were implanted on the ulcer but did not do satisfactory work and on January 17, 1931, the ulcer was curetted exposing necrotic bone beneath. This latter was removed, wound packed with vaseline gauze and six days later the packing removed under gas anaesthesia. Maggots were again implanted. The last implantation was May 25, 1931, total of twenty-six.

Result, June 20, 1931, wound now nearly covered with epithelium, the granulation tissue having a much healthier appearance than previously.

CASE No. 8

J. L., age 50, male. Referred by Dr. Grover A. Silliman of Sayville, Long Island.

Admitted to Mather Memorial Hospital December 8, 1930. Complaint, pain in right leg for past eighteen months and discharging sinus. Gives a history of having had acute osteomyelitis in right leg forty-one years ago. Treated in New York and Brooklyn hospitals.

December 9, 1930, osteotomy of tibia and packing with vaseline gauze. Six days later packing removed under gas anaesthesia and maggots implanted. After third implantation bone looked as clean as though it had been burnished. This patient frequently complained of numbness in the leg and foot while maggots were working. Last implantation March 2, 1931, total of fifteen.

May 15, 1931, patient reports that he works all day without discomfort and that he has walked as much as fifteen miles in a day. Wound entirely covered with smooth epithelium—very different from the original scar.

CASE No. 9

J. R., age 30, male. Admitted to Mather Memorial Hospital January 19, 1931. Gave a history of having had acute osteomyelitis twenty years ago in Germany where he had several operations. Did not give him any further trouble until eighteen months ago when he came to one of us (F.S.C.) because of pain in the left leg. At this time an osteotomy was done and Orr method instituted. He was discharged from the hospital apparently cured but returned one year later when another abscess was found in the tibia. This was treated as before and apparently cured.

The reason for the present admission was pain in the left leg. On January 20, 1931, the left tibia was opened the entire length and necrotic bone found near both epiphysis. Cavity packed with vaseline gauze and six days later gauze was removed under gas anaesthesia. Because of considerable oozing of blood, maggots could not be implanted until the next day.

During the maggot treatment the patient developed acute pharyngitis which was followed by cellulitis about the wound and inguinal adenitis on the same side. All the maggots died. Hot saline dressings were applied to the wound and after subsidence of the inflammation maggots were continued and worked satisfactorily. The



Figure 1

Case No. 10. After four implantations. Wound washed out and ready for adhesive

last implantation was April 10, 1931, total of fifteen.

June 15, wound is closed with smooth epithelium and patient working all day as gardener. He has no pain

CASE NO. 10

W. W., age 17, male. Admitted to Mather Memorial Hospital May 7, 1931, because of discharging sinus in right leg.

History: Received compound fracture of right tibia May 10, 1930, when knocked from motorcycle by collision. Bone plated by one of us (F.S.C.), good union resulting. After operation had several small sequestra discharge from wound and sinus persisted.

May 8, 1931, at operation small area of necrotic bone found near site of fracture. This was thoroughly curetted and packed with vaseline gauze, all unhealthy skin being removed at same time. Seven days later packing removed without anaesthesia and maggots implanted. June 15, 1931, last implantation of maggots, total of eight. Wound filled with granulation tissue, compact and healthy. New epithelium is fast closing over.

Discussion of the Cases: At the beginning of the treatment the patients are annoyed by the crawling sensation and by what some of them describe as the itching from the maggots. Occasionally we are obliged to give a mild sedative at night. As the treatment progresses and the patients note their rapid improvement they become accustomed to this irritation and rarely complain. An interval of twenty-four hours between implantations gives the patient a respite from this.

Frequently on the third or fourth day we have noted a rise in temperature to 102 or 103 degrees. The temperature returns to normal as soon as the



Figure 2

Case No. 10. Adhesive strips about wound. "Duo" adhesive is painted on outer surface of strips.

maggots are washed out. This fever has been noticed particularly when the discharge has been profuse and is due, we think, to insufficient drainage.

The effect on the wound is very remarkable. After the second or third implantation the bone has the appearance of having been bored out in the manner of a cylinder of an automobile engine.

Granulation tissue soon appears and is nearly always compact, rarely becoming exuberant. Later small pieces of sequestrum, loosened by the action of the maggots, appear and are easily removed without discomfort to the patient.

There is no purulent odor, and free pus is never apparent. On removing the cage preparatory to washing out the maggots there may be detected a faint briny odor which seems to be characteristic of the maggots.



Figure 3

Case No. 10. Cage ready for attachment. Note adhesive folded, face out, attached to sponge rubber strips.

Baer has stated that six to eight implantations were usually sufficient to effect a cure. We have found that in the majority of our cases this was not sufficient. The greatest number of implantations used was thirty. This was case No. 2 which was reopened and is now under treatment a second time. The tibia was cured but the healing in the femur seemed to be faster than the maggots were able to work.

The smallest number of implantations was eight. The average number has been about fifteen to eighteen. Time required to effect a cure has been eight weeks to six months.

One of our most interesting cases has been that of No. 3, a little boy with non-union of the tibia following complications after removal of a giant cell sarcoma. Following the maggot treatment there has been a definite growth of new bone and apparent union.

The maggot treatment is apparently beneficial in the treatment of tuberculous sinuses as demonstrated in Case 4.

Occasionally on removing the cage we have found all the maggots dead, although the wound was not filled with granulation tissue. In the succeeding implantations the maggots were alive and working. This is mentioned to show that dead maggots do not always indicate a cure.

Following the first implantation of maggots all patients receive a prophylactic dose of tetanus antitoxin. Although Baer had no cases of tetanus after using disinfected maggots we consider it a wise precaution.



Figure 4

Case No. 10. Maggots implanted. Cage securely fastened.

Summary

Nine cases of chronic osteomyelitis and one case of tuberculous sinus, a total of ten cases, have received the Baer treatment of maggots. Six of the patients were children and four adults.

Of the nine cases of osteomyelitis, eight have healed satisfactorily (an additional lesion in one will require treatment), and one will require an-

other operation and treatment. The tuberculous sinus has closed. That is, all lesions treated in the nine cases have healed with the exception of one. This one exception was due to failure to remove all necrotic bone because of pathological fracture.

Rise in temperature to 102 or 103 degrees on the fourth day of each implantation has been a frequent observation

Itching caused by the maggots has annoyed many of the patients at first but was easily controlled by sedatives at night

The odor of purulent discharge has been absent in every case.

The preparation of the bone by osteotomy is a surgical procedure and should not be undertaken by anyone not familiar with bone surgery.

It is the opinion of the authors that this is the most satisfactory treatment yet devised for the treatment of chronic osteomyelitis.

The authors wish to acknowledge their appreciation for the cooperation and many helpful suggestions of the following, Dr. Coburn A L Campbell, Resident Physician St Charles Hospital for Crippled Children Miss Margaret Bullowa, Miss Frances Clapp and Mr Stanley D Beard of Lederle Laboratories.

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LIPIODOL INJECTION OF A DOUBLE UTERUS

By FRANCIS J. CERAVOLO, M.D., AND ISAAC LEVINE, M.D., BROOKLYN, N. Y.

Mrs. C. D., age 26, white, presented herself for examination because of an occasional dispaurenia. The family and past history was irrelevant. Menses began at the age of 14. The flow lasted for three to five days and was associated with a considerable amount of pain. Patient was married eighteen months ago. Coitus at times was associated with some dispaurenia. Contraceptive measures were employed until five months ago. At that time patient became pregnant The pregnancy was terminated by a miscarriage at the end of the third month.

Vaginal examination showed a bipartate vagina with the septum extending all the way back to the posterior vaginal wall. In each vaginal compartment a distinct and separate cervix was observed The cervix on the right side appeared to be more patulent than the cervix on the left. Because of the dispaurenia the patient was advised to have the septum removed. This was done by Dr W. B Anderson. Lipiodol injection of the uterus was done to determine whether or not we were dealing with a true didelphys A cannula was inserted in each cervix. The patient was highly neurotic and at the first session permitted us only to insert a cannula in the right cervix. Six cubic centimeters of lipiodol, Lafay, was injected into the right uterus The right uterus and tube were visualized At the second examination a cannula was inserted in the right and left cervix Six cubic centimeters of lipiodol, Lafay was injected into each uterus In spite of all precautions the injection of the right uterus on this occasion was incomplete because of the lack of co-operation on the part of the patient. The left uterus was completely filled and was visualized together with its tube.



This anomaly is the result of the failure of fusion of the two Mullerian ducts.

N. Y. State J. M.
August 1, 1931

DEEP INTERFASCIAL INFECTION OF THE NECK*

By HERMAN J. BURMAN, NEW YORK, N. Y.

From the Laryngological Department of the New York Post Graduate Medical School and Hospital. Service of Dr. Charles J. Imperatori.

ABSCESS formation in the deeper structures of the neck, is one of the dread conditions requiring immediate and heroic measures.

When one considers the abundant vascularity of the neck, its limited confines containing very many important structures, and the very loose areolar tissue leading directly to the mediastium, it is obvious that here is an ideal culture medium for infection, once established. When, as a result of infection abscess formation occurs, the life of the patient is greatly endangered, unless it is recognized early and appropriate treatment immediately instituted.

Practically everyone who has written on this subject, has thought it necessary to go into a detailed description of the Deep Cervical Fascia, in order, so they say, to give the reader a better appreciation of the ease with which an abscess may spread to the mediastinum. I shall omit this, for it is evident, that one versed in the anatomy of the neck has nothing to gain from such a description, and the reader who is not so fortunate, can do no better than to refer to any of the standard text books of anatomy.

The vital structure of the neck from the standpoint of infection is of course the internal jugular vein. In the American literature the first cases are those reported by Goodman (1) and Mosher (2). There has also been reported by Hastings (3) a case of thrombosis of the superior thyroid vein, due to an abscess between the larynx and pharynx. Of immediate concern is the glottis. Pressure in the deep tissues of the neck inevitably results in edema of the glottis, narrowing the chink, which even normally is none too wide.

It is by way of the lymph vessels and glands draining the upper respiratory tract, and the loose connective tissue spaces intimately connected with them, that abscesses may descend into the neck and mediastium. The pus frequently extends along the side of the vascular sheath into the deeper structures and into the mediastinum, thus involving such vital organs as the heart and lungs.

Glogau (4) says that such infections are more frequent in childhood, because there is more lymph gland structure in the connective tissue spaces of the throat and neck.

In an excellent and comprehensive article, Shapiro (5) classifies deep cervical infections as phlegmonous and vascular. In the phlegmonous, which is the more common type of infection, the signs of local inflammation predominate. This is primarily a cellulitis, and in the majority of cases abscess formation occurs, resulting in swelling of the neck and fever. The swelling is usually noticeable before the end of the first week and is seen earliest in the submaxillary region. Extension downwards often takes place in a few days. The fever is noted soon after infection has occurred and is first apparent in the afternoon, frequently it is preceded by a chill. If the abscess has extended into the parapharyngeal space, irritation of the internal pterygoid muscle occurs with a resulting trismus; the slightest movement of the jaws being painful. Constantly the patient complains of pain in the throat and neck, not infrequently referred to the ears. Adenitis of the submaxillary and anterior cervical lymphnodes is of course always present but is generally not noticed, because of the diffuse swelling of the region.

The vascular form represents a true septicemia. Phlegmon may be absent, have preceded or accompany it. In connection with this type of infection, Shapiro quotes Shotmüller and Behzold as saying that bacteria cannot multiply in the living blood stream. There must be a collection of pus somewhere which continually or periodically discharges pathogenic bacteria into the circulation.

The most common causes of deep cervical infection in order of their frequency is given by Glogau (6) as Angina of the faucial tonsils following tonsillectomies, following phlegmon and erysipelas of the pharynx, following laryngeal phlegmon, following foreign bodies, as a secondary descending abscess.

The literature on the bacteriological study of this condition is rather meagre, but most writers are in accord, that the usual bacteria of the mouth are to be found either in pure culture or mixed with other organisms; that is to say pneumococcus, staphylococcus aureus, streptococcus hemolyticus and non hemolyticus, and the fusiform bacilli. McIntosh and Nichol (7) report a series of five cases in children. In two of the cases no specimen of the pus was cultured but in the other three cases in which it was done, pure cultures of non hemolytic streptococci were obtained.

Case History

A woman sixty years old, while eating her dinner, felt a piece of meat lodge in her throat. Violent efforts to expel this foreign body proving ineffectual, she called her family

* Read before the Lincoln Hospital Alumni Association, December 15, 1930.

physician He was unable to respond to the call, and the patient decided to go to one of the city hospitals

At the hospital emergency room the throat was examined and palpated for the foreign body without avail She decided to try again, and went to another hospital, where she was once again examined and the piece of meat not located At this second institution the intern who examined the patient had previously been applying a cast, for she stated, that he was wearing a pair of rubber gloves spotted with plaster and that he did not remove these gloves when palpating her throat

Discouraged, she returned home to await developments Although she had been told at both hospitals that there was no piece of meat lodged anywhere in her throat, and that the sensation of a foreign body was probably due to the irritation caused by swallowing an unusually large bolus, she insisted that it was still there

Three days later she was seen at home by her family physician At this time she complained of headache, backache, chills and fever, sore throat and dysphagia Any effort to swallow food was usually followed by its being regurgitated through the nose She also complained of a hypersecretion of mucus and drooling from the mouth

Physical Examination

The physical examination revealed her to be wan, pale, slightly cyanotic, and in evident distress The pupils were equal and reacted to light and distance The cornea were dry and there were no petechial spots seen There was a drooling of viscid saliva, and excoriation at the right angle of the mouth The heart sounds were normal but rapid, the pulse rate being 122 per minute The blood pressure 146/100 There was no edema of the extremities The lungs were clear but the respirations were labored and with an expiratory grunt The abdomen was soft and scaphoid The liver and spleen not palpable The tendon reflexes were exaggerated The skin was hot and moist The temperature 101 5 degrees

The mouth was opened with difficulty because of the pain it occasioned The mucosa of the pharynx was bright red and looked glazed The tonsils were large and reddened but showed no exudate

Indirect examination of the larynx disclosed the cords to be white and to approximate completely The ary-epiglottic folds were red and swollen, the edema on the right side being more marked The epiglottis was also edematous and there was definite bulging in the right pyriform fossa

Externally the neck appeared reddened, markedly indurated, and pitted on pressure The induration extended from the floor of the mouth down to the level of the sternal notch The region of the right side of the larynx was very tender to palpation

A diagnosis of descending deep interfascial infection of the neck was made

It was advised that the patient be hospitalized, and the family was apprised of the grave prognosis

She was examined at the New York Post Graduate Hospital by Dr Charles J Imperatori who confirmed the above facts and decided on immediate operation

Operation

Examination by direct laryngoscopy disclosed edema of the whole post cricoidal region of the larynx, and a bulging in the pyriform sinus low down near the cricoid

Oesophagoscopy showed the lower pharynx to be occluded by edema and a bulging of the mucous membrane above and below the crico pharyngeus There was no loss in the continuity of the mucosa

One end of a feeding tube was inserted into the stomach and the other end allowed to protrude through the nose

An incision was made along the anterior border of the sterno cleido mastoid on the right side, at about its middle third The incision was then lengthened through the superficial layer of the deep fascia and by blunt dissection the sheath of the great vessels was exposed The sternocleadomastoid was retracted laterally, the larynx mesially, and a large abscess at the side of the larynx was entered With a blunt haemostat the abscess cavity was widened and a large quantity of foul smelling pus was permitted to escape slowly A specimen of the pus was taken and cultured on blood agar plates and was subsequently reported to be a pure culture of streptococci, producing green colonies The wound bled only moderately The sheath of the vessels was not opened and, as there did not appear to be an extension downwards the mediastinum was not entered Two rubber drain tubes were inserted and the wound packed tightly with iodoform gauze

No foreign body was located although a diligent search was made

Throughout the operation the patient's color was good and the pulse maintained at 110 per minute

The first two days, pus was withdrawn through the rubber tube drains by gentle suction On the third day, and every day thereafter the wound was irrigated with Dakin's solution She was given a gargle of ten

minims of Dakin's solution to the glass of water because of the frequent expectoration of tenacious yellowish muco-pus. Liquid food was well taken through the feeding tube and retained. Despite the precaution of using vaseline to protect the skin, she complained of a burning sensation around the edges of the wound.

The temperature continued to range between 100 and 101 degrees, and the pulse was maintained at 100 per minute. There was a constant moderate diaphoreses. The drainage from the wound was considerable.

The fifth day post operative a slight persistent cough developed and the temperature rose to 102 degrees. The lungs were examined and found to be clear. A second oesophagoscopy was performed and a bulging as on the first examination was seen, but because of the free external drainage no further operative procedure was undertaken.

Following this there was an immediate increase in the amount of discharge, which in the next few days gradually diminished. Her general condition improved, the pain in the throat ceased. The feeding tube was removed and soft diet ordered. Twenty two days after admission she was discharged from the hospital, and except for a considerable loss of weight, in fair physical condition.

Comment

In the management of such a case the question always arises as to how radical the treatment should be. Practically every surgeon who has been confronted with this condition is agreed that emergency measures are imperative. The external operation is in the vast majority of instances the method of choice, and should be done always when the abscess points externally. It is also indicated when the symptoms of septicemia are increasing even though there is no bulging in the pyriform fossa; also if no drainage or remission of symptoms has taken place within forty eight hours after incision through the fossa; or if the external swelling and symptoms of absorption are progressing even though the abscess is draining through the pyriform fossa.

The line of incision as indicated, is along the anterior border of the sternoclaedomastoid muscle, but Keifer (8) in discussing this subject says that this landmark is infrequently available because of the edema of the region. He makes the incision well forward in the neck from the tip of the mastoid to the sternum. He warns against using gauze drains because of the frequency of hemorrhage, and therefore prefers employing rubber tubing for this purpose.

Apropos bleeding from the site of operation, it is well to remember that the pus should be evacuated very slowly; there have been cases reported where sudden death occurred as the result of its too rapid withdrawal. The theory is that these deaths are due to vagus inhibition.

Glogau who was America's most enthusiastic writer on the subject of deep cervical abscess advocated and practiced the so called Marschik's prophylactic mediastonotomy. This consists of opening the anterior and the posterior mediastinum and sealing them off with gauze, so as to form adhesions. Others do not however resort to this procedure unless there is a definite mediastinitis and any attempt to improve on that by breaking down barriers is something that most surgeons are avoiding. Sautter (11) objects to the procedure also on the ground that extension into the mediastinum is rare, and that if it does occur, it can readily be diagnosed by the Roentgen ray.

In the case above reported the etiology is not definitely established but is seems reasonable to conclude that it was due to an infection secondary to instrumentation, in an attempt to remove a foreign body. Furstenberg (12) relates an interesting experience which demonstrates the usual route of infection in such cases. He was attempting to inject lipiodol by means of a curved trocar into the larynx of a child aged six. Failing to penetrate the cricothyroid membrane the point of the instrument tipped over the cricoid cartilage, and came to lie somewhere to one side of the trachea. About 5cc of the opaque oil were injected before the accident was discovered. The course of the injected oil through the visceral space into the posterior mediastinum was clearly demonstrated by a stereoscopic plate.

To illustrate the results of improper instrumentation he quotes a case from the experience of Dr. Charles J. Imperatori—A woman fifty year old whose complaint was dysphagia was brought to the hospital. On oesophagoscopy Dr. Imperatori confirmed a roentgen diagnosis of diverticulum of the lower part of the oesophagus, but in addition he saw a distinct band-like stricture just anterior to the cardia. The patient died two days later and the autopsy revealed an empyema due to an oesophageal perforation high up in the small pouch of the dilated oesophagus. The physician who had referred the case to the hospital, later admitted to having unsuccessfully attempted to pass a bougie, probably causing the perforation.

Anaesthesia in operation for deep cervical abscess is rarely written about, and yet, it is

of extreme importance because there is always embarrassment of the respiration due to the edema of the glottis

Local infiltration would seem to be the safest procedure but where children or highly nervous adults are concerned, it may not be the most efficient kind of anaesthesia In discussing this matter with Dr T Drysdale Buchanan he gave it as his opinion that local infiltration in neck operations, often sets up dangerous reflexes by direct irritation For that reason he prefers giving a general anaesthetic

When a general anaesthetic is to be employed it is obvious that the choice should be in favor of those least depressing to the respiration or irritating the respiratory mucosa, which practically narrows the field down to gas oxygen Many surgeons employ the intratracheal method but the objection to this, is the irritation and trauma produced

It would seem that here is a condition ideally suited to the use of the so called basal anaesthetics The greatest objection to them is that they are not reversible, for once absorbed, elimination is slow and no measure will effectively retard their depressing action Avertin is now employed in head surgery by a number of surgeons who are quite enthusiastic about it There have however been reported a number of deaths These deaths have been generally attributed to its toxic effect on the liver

Proponents for the use of Avertin stress the fact that even when administered in full dose the pharyngeal reflex is not abolished, thus serving as a guard over the larynx to prevent the entrance of extraneous material If the pharynx and larynx have been cocainized, sufficient time should elapse prior to the operation to permit the return of this reflex

Conclusions

1 Instrumentation for a foreign body in the larynx, except by direct laryngoscopy is a dangerous procedure

2 If search is made for a foreign body the utmost precaution as to cleanliness should be observed

3 Operation is indicated if there is edema or bulging in the larynx, or if there are general symptoms of septicemia

4 The external route is preferable because it offers the most rapid and more certain way of insuring drainage

5 Prophylactic mediastinotomy should not be done routinely, because mediastinitis is infrequent and can be diagnosed by Roentgen ray if it does occur

6 A well managed general anaesthetic is safest

7 Basal anaesthesia should not be administered soon after cocainization of the larynx

8 Deep interfascial infection of the neck is a grave surgical condition, and any experience with it warrants being reported

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A FLUOROSCOPIC MIRROR

By JACOB SARNOFF, M D, BROOKLYN, N Y

IN a recent article Dr Crile stated that the future of medicine will be more in the form of prevention than in the form of the cure of disease The average individual will be so educated and well informed that he will, to a certain extent, diagnose and take the necessary steps toward the cure of his ailment To what extent this will become true, only the future can tell Nevertheless even to day, the tendency for the lay public is to acquire additional knowledge and understanding of human ailments They are becoming more inquisitive and demand of the physician facts and findings in diagnosis which help them to arrive at a conclusion Questions such as these are frequently encountered "What

is my blood pressure, Doctor? What does my blood examination show? What are the urinary findings? Have I diabetes or kidney trouble?" Likewise not only do they ask for the X-Ray findings, but they are also anxious to see the films; whether it be a fracture, a dislocation, a foreign body or gallstones. The conventional secrecy and mystery surrounding human ailments are being more and more discarded,—Seeing is believing!

The purpose of this article is to present in a simple manner the feasibility of reflecting the image from the fluoroscopic screen on to a mirror, which can be seen to advantage by the patient as well as the radiologist and an audience of any size. (Fig. 1) What prompted the writer, whose field is far removed from X-Ray, to suggest the idea was a personal fluoroscopic examination. On this occasion, his colleague dictated the negative findings to his secretary. His curiosity arose as to why he himself could not observe the findings, and then the idea occurred to the writer to use a

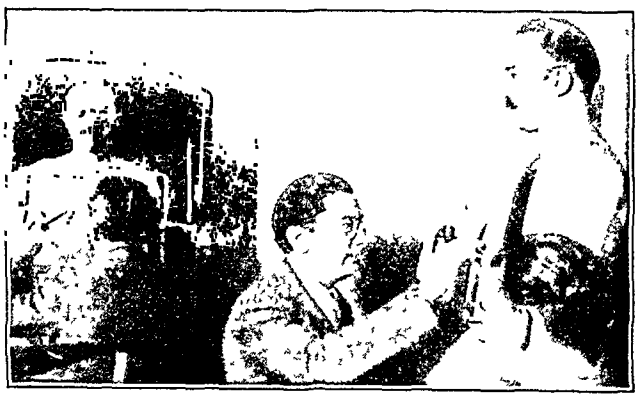


FIGURE 1

Radiologist observes findings at screen, while patient and observer view same through mirror.

mirror to reflect the image from the fluoroscopic screen. This was demonstrated by the writer in the X-Ray laboratory of the United Israel-Zion Hospital on March 8, 1931 to the satisfaction of quite an audience composed of internes, members of the Medical Staff, and the attending radiologist.

The mechanical arrangment is very simple. The mirror may be attached on to a swivel in the fluoroscopic room so that the image can be reflected in any direction without effort. This arrangment of the mirror, however, can well be left to the discretion of those furnishing the X-ray equipment.

What are its possibilities and advantages? 1, Quite often during a fluoroscopy the patient is curious and even doubtful as to what is really accomplished by such an examination. He has to be content with the Doctor's explanation and findings. However he would be much more impressed and his fears allayed if in addition to what the Doctor tells him, he himself could visualize these findings. Imagine a patient following the course of the bismuth through the oesophagus, stomach, and intestines, and at the same time be assured by the physician that no abnormalities such as malignancy, are present. How convincing it would be to the patient. It would certainly be more conducive to a proper appreciation of such an examination by the patient and would also justly popularize this useful laboratory diagnostic aid.

When this paper was first presented at the Williamsburgh Medical Society on March 9, 1931, one of the participants in the discussion remarked that it would not be feasible for the patient to view such fluoroscopies, for fear that he might encounter a condition of which he should not be informed, such as cancer. For that matter it is not feasible even to tell the patient of such findings. The physician is endowed with enough discretionary judgment to show the patient only those facts which would be helpful. The above comment thus refuted, the idea created such a favorable impression that a number of my colleagues have since fitted their Fluoroscopes with such a mirror, to their great satisfaction.

2. It would facilitate the demonstration as well as the teaching of fluoroscopy. A large group of students and observers can be comfortably seated and yet view the findings without the unpleasant and awkward crowding around the patient, radiologist and screen. With the aid of lenses, the image may be magnified if so desired. Also part of the view which has no bearing and which may be confusing in the examination may be eliminated by the mere adjustment of the mirror.

3. The reflectoscope may be so constructed and arranged that the radiologist, as well as the audience, in many instances, may view the findings in another room quite a distance away from the fluoroscopic machine, thus preventing undue exposure to the rays.

The writer, whose endeavors are in the field of Surgery, hopes that he will be pardoned by radiologists for trespassing on their territory. It was mere personal curiosity on his part that prompted the idea, and he will now leave it to them for their practical application and improvement.

COMMON ERRORS IN DIAGNOSIS OF HEART DISEASE*

By LOUIS H. SIGLER, M.D., BROOKLYN, N. Y.

MOST errors in cardiac diagnosis result from one of the following conditions: 1. Improper understanding of the normal variations in the structure and function of the heart. 2. Lack of appreciation of the relationship between other bodily structural and functional abnormalities and this organ. 3. Improper conception of the underlying pathology in any form of heart disease, and the use of terms purporting to convey an idea of pathologic changes, the existence of which cannot be proven clinically, and are only too often disproved on the post mortem table.

ERRORS ARISING FROM A MISUNDERSTANDING OF THE NORMAL

Size and Shape: We very often consider a heart to be diseased when its size and shape do not conform to a preconceived idea of normality.

We fail to realize that we have no definite standard of normality, and that the "size and shape of the normal heart," to put it in Köhler's words, "are as different in different individuals as the size and form of the nose." One must always associate size and shape with other clinical manifestations of heart disease, if any, to arrive at a conclusion if a given heart is pathological. We often find hearts which are perfectly normal in appearance that are the seat of grave myocardial disease. On the other hand, an apparent enlargement, displacement or disfigurement of the heart may occur without any structural or functional pathology.

Rate and Rhythm: What is said of size and shape may also be said of rate and rhythm. Although the established normal rate at rest is 72 to 90 beats per minute, we very often find cases where the rate is 40 to 60, or in exceptional cases even less, with no pathology underlying it. In rates of less than 60, however, we must always rule out heart block. This can be done clinically by making the patient exercise, when the rate will go up in cases of simple bradycardia. The electrocardiogram is the surest way of checking up.

Disturbances in rhythm are more frequent sources of error in diagnosis. Simple sinus arrhythmia, and premature contractions, which in the great majority of children and the earlier adult life have no pathologic significance if unassociated with other manifestations of heart disease, are very often considered to indicate such disease. This is especially true if an occasional murmur is heard in addition.

The Murmur: This is by far, the greatest source of error in cardiac diagnosis. Many a false conception is formed because of its presence. In a great many cases the murmur has no pathologic significance. The physical requisites for murmur production, namely, the passing of fluid from or through a narrowed passage suddenly into a wider cavity is present in any normal heart with its narrowing at the valvular regions and comparatively widened vessels in which the blood enters. That no murmurs occur in the average normal heart is, according to Dr. Thayer, due to a wonderful adoptation of the aorta and ventricle, representing a single tube, and to the fact that the viscocity of the blood prevents it. I feel that we may make it a rule that any murmur not associated with any cardiac enlargement or definite change in configuration of the heart, is to be considered to be of no pathologic significance, and should be disregarded. Exception to this rule are murmurs heard in some forms of congenital abnormalities of the heart where there may not be any enlargement. The harshness of such murmurs, however, and their large area of transmission together with the fact that they were heard from early infancy, will easily differentiate these from functional murmurs.

IMPROPER CORRELATION OF DISEASE ELSEWHERE AND HEART REACTION

Constitutional and local organic disturbances elsewhere in the body will always produce more or less reaction upon the heart. In some cases the heart reaction is the outstanding feature, and leads to an erroneous diagnosis of heart disease. In all these cases the heart may be perfectly normal structurally, but merely reacts abnormally to abnormal stimuli. If it becomes affected secondarily, it is the primary factor which has to be treated to relieve the heart, not the heart itself.

The usual conditions leading to abnormal cardiac action and thus to an erroneous idea of heart disease are the various reflex, toxic and infectious states of the body.

Reflex Factors: Disease or abnormalities of the pelvic organs, gall-bladder, gastrointestinal tract and the nervous system may set up reflex disturbances of the heart which are mistaken for primary heart disease. The commonest manifestations are tachycardia, bradycardia, vagal arrhythmia, and premature contractions. An interesting example of this type is the case of a boy nine years old who sustained a fracture of his skull and developed a secondary brain abscess. The surgeon in charge questioned the advisability of operation fearing that the heart could not stand it. The patient presented marked bradycardia, rate about 38, marked sinus arrhythmia and frequent premature contractions, interpolated, so that there were periods of over three seconds when the heart would stop. From the behavior

*Read before the Harbor Hospital Staff Conference, May 6, 1931.

of the heart one might have thought that it was the seat of organic disease. It pointed more, however, to a reflex vagal disturbance due to intracerebral pressure. When the skull was trephined and considerable pus vacated, the heart became quite regular and the rate went up to 100.

Examples of milder grades of reflex cardiac disturbances are met with in daily practice, and one must be a trained judge not to condemn the heart for disturbances existing elsewhere. In many cases the seat of disturbance may not be discoverable, and disease of the heart itself must then be very carefully ruled out, by clinical and electrocardiographic study.

Toxic Factors: Various toxic states of the body will result in some form of abnormality of cardiac action, and, if persistent, may eventually lead to structural cardiac pathology. It is important, therefore, from a therapeutic viewpoint, to recognize early the cause of the heart disturbance, to make sure that this organ is not the seat of disease.

The most notable example of abnormal cardiac action in response to toxicity is the thyrotoxic state, where we may get marked tachycardia, simple or even paroxysmal, extrasystoles, fibrillation and flutter. Only careful investigation will avoid error in diagnosis in many of these cases, for this toxic state may exist at times with no classic findings such as exophthalmos, enlarged thyroid and tremors of the fingers. A basal metabolic rate determination will often clear up an otherwise obscure abnormal cardiac action.

Acute Infections: Any acute infectious disease may be associated by cardiac manifestations which at times alarm the physician, and make him direct his treatment to the heart. In the great majority of cases the heart is not the seat of disease but merely reacts to an abnormal constitutional state. In spite of this generally known fact, and because of the peculiar association in the minds of the physician of heart and digitalis, we are still utilizing quantities of the drug in our therapy of infectious diseases. The everlasting fight is still going on in the ranks over the value of digitalis in pneumonia, with authoritative pros and cons. Probably in the majority of infectious diseases the heart action will not be modified in any manner except in a deleterious way to the use of any drug directed towards its treatment. If the infectious disease is of a severe character, overwhelming the resistance of the individual, the patient will die in spite of and partly because of treatment of the heart. If on the other hand the individual's resistance has the upper hand, he will recover unless that organ has been overtreated. Paroxysmal tachycardia, auricular flutter and fibrillation, associating acute infections, do demand active treatment, however.

ERRORS ARISING FROM IMPROPER CONCEPTION OF CARDIAC PATHOLOGY

Nomenclature: The universal use in the profession of the terms "Chronic Myocarditis," "Chronic Endocarditis" and "Angina Pectoris" to describe something abnormal heard over the heart, or something complained of by the patient, is evidence of the general misunderstanding and misconception of heart disease. In looking over vital statistics records, one is amazed at the number of deaths attributed to chronic myocarditis, endocarditis and angina pectoris. If all these cases would come to autopsy, probably 80 per cent would not show any evidence of myocarditis active endocarditis and certainly no uniform pathology for the symptomatology characterized as angina pectoris.

If we consider myocarditis to designate an active inflammatory state of the heart muscle, as the term expresses it, we must have clinical evidence of its presence. The evidence should include fever, leucocytosis, progressive heart failure, various arrhythmias, and definite electrocardiographic findings of progressive myocardial involvement. Above all, some etiologic factor must be present at the time the myocarditis is suspected. The most common etiologic factor is the rheumatic virus. Less common are the various forms of sepsis.

The term "Chronic Myocarditis" would imply merely the continuance of an *active* myocarditis over a long period of time. The etiologic factor must be present and continuous, however, and clinical manifestations of an active inflammation must exist. As the term is generally used, it covers a multitude of sins. All forms of myocardial degeneration, the fibrotic heart, and the anatomically normal heart showing disturbances in rate and rhythm for reasons described above, are thrown into one sack, decorated with a fancy label, and considered a diagnostic feat accomplished.

What is said of chronic myocarditis is equally true of "Chronic Endocarditis." Chronic cardiovalvular disease of long standing with absolutely no evidence of fresh activity is labeled "Chronic Endocarditis." Are we to consider a scar resulting from an old infection or burn, an active inflammatory condition?

A few words about angina pectoris. Volumes have been written on this time-worn term, all of which are repetitions and fancies. The profession generally does not seem to have a clear idea of its meaning. It is considered to be a disease by some and a syndrome by others. That it is not a disease is evidenced by the fact that it has no uniform etiology, pathology, and symptomatology. To explain the various manifestations, terms such as "Pseudo-Angina," "Angina Sans Dolores," "Angina Decubitus" and "Angina of Effort" have been introduced, which further add to the misconception of the condition. The term

"Angina Pectoris" should be entirely discarded from medical literature, as meaning nothing. If we are to express a painful state of the heart associated with a choking sensation and strangulation, such descriptions should be used as symptoms, whenever such symptoms exist. To enter angina pectoris as the sole diagnosis is to admit ignorance of an existing underlying pathologic condition. At best it should be only a part of the cardiac diagnosis, the etiologic, anatomic, other physiologic and functional diagnosis are to embrace the main diagnostic features of the case, to give us a comprehensive idea of what is going on in the heart.

To summarize, this paper points out certain errors in cardiac diagnosis, as follows:

1. Errors arising from a misunderstanding of the normal size, shape, rate and rhythm of the heart, and non-pathologic murmurs;

2. Errors arising from an improper correlation of disease elsewhere and heart reaction. Of these we have the reflex, toxic and infectious states reacting upon the heart;

3. Errors arising from an improper conception of cardiac pathology, and the too frequently used and misapplied terms chronic myocarditis, chronic endocarditis and angina pectoris.

THE SINUSOIDAL CURRENT IN CHRONIC GONORRHEA OF THE MALE

By HAROLD NEIFELD, M.D., BROOKLYN, N. Y.

FOR the past several years gonorrhea in the male, both acute and chronic, has been treated with the electrical modalities. Of these, diathermy is the most effective; and yet under this treatment many cases of urethritis persist with a chronic discharge or shreds. It is in these cases that the sinusoidal current can be used successfully. A twenty minute application of ten to eighteen milliamperes three times weekly has proved valuable. In an occasional obstinate gonorrhea, the surging current, by its more vigorous reaction is found to be more beneficial than the sinusoidal current alone.

The value of the sinusoidal current depends upon its accurate application to the focus of infection with the proper electrodes. For this purpose the two-glass test is a simple, accurate enough method. If the first glass alone is cloudy or alone contains shreds we know that the chronic infection is limited to the anterior urethra. In such a case the penis is wrapped in moistened cotton, and electrodes are applied over this so as to include the urethra. The current is gradually turned on till the patient experiences a drawing feeling, or a feeling of waves. Should the case show a clouding of both glasses, one electrode is placed in the rectum so as to include the prostate.

The rational of the treatment is clear. According to Granger,* "The sinusoidal current is an excellent stimulant for unstriated muscle. Hence, it is useful in treating intestines, oesophagus or uterus, causing physiological contractions. Under the fluoroscope, after a barium meal, the intestines show (with this current) an increased peristalsis. Some indications for its use are atonic constipation, enlarged prostate where the sine waves will take the place of prostatic massage."

The male genital tract is admirably suited histologically for the treatment with the sinusoidal current. Between the visceral portion of the tunica vaginalis and the transversalis fascia of the testis lies the internal cremasteric muscle, a layer of unstriated muscle fibers. The vas efferentia near the epididymis contains endothelial cells resembling non-striated muscle cells; while the epididymis and the seminal vesicles have outer longitudinal and inner circular smooth muscle layers. The vas deferens has an involuntary muscle structure consisting of a middle circular and an outer and in inner longitudinal layer. The ejaculatory ducts contain a poorly developed inner circular layer, but a well-developed longitudinal layer of non-striated muscle, which is continuous with that of the prostate's capsule. The external envelope of the corpus spongiosum of the penis is formed partly of unstriped muscle tissue, and a layer of the same tissue immediately surrounds the canal of the urethra.

The sinusoidal current through its ability to contract smooth muscle stimulates the involuntary musculature of the genital tract, producing an emptying of the prostate, seminal vesicles, glands of "Littre" of the urethra, etc., with an improvement or cure of subjective and objective symptoms.

* Physical Therapeutic Technique—By F B. Granger, p. 64.

N. Y. State J. M
August 1, 1931

THE GRIEVANCE COMMITTEE

By HAROLD RYPINS, M.D., EXECUTIVE SECRETARY, STATE DEPARTMENT OF EDUCATION, ALBANY, N. Y.

THE Committee on Grievances of the New York State Department of Education, established under sections 1264-5 of the Practice of Medicine Act, has now been functioning for four years. As originally designed by its sponsors, its primary object was to provide a legally constituted body to protect the public by disciplining members of the medical profession who were guilty of improper practice. While the results accomplished by the Grievance Committee during this four-year period show that the original object for which it was designed is being accomplished, the Committee's experience indicates that it is accomplishing two other functions as well, first, the protection of the medical profession itself against unfounded charges, and second, the raising of the standards of professional practice.

To date the Committee has received 163 complaints against licensed physicians. Of these, 65 have been dismissed by the Executive Secretary on the grounds that the complaints alleged did not come within the legal purview of the Committee, and it is significant that so far as can be determined, not one of these sixty-five complaints has ever been brought before any other tribunal. In other words, the fact that without expense a citizen can place a complaint against a physician before a legally constituted professional tribunal, even though he is advised that he has no proper grounds for such complaint, is sufficient satisfaction to forestall a large number of malpractice suits.

In these cases the Grievance Committee acts as a safety valve for disgruntled patients, and has undoubtedly saved many members of the profession from unpleasant newspaper notoriety and the expense of defending unwarranted malpractice actions.

Perhaps the best work of the Grievance Committee is accomplished in informal hearings before a sub-committee of three members, at which both the complainant and the physician complained against are permitted to tell their side of the story without the necessity of a formal trial. Although the law does not require a physician to appear before the Committee unless he has been served formally in writing, the standing of the Committee is evidenced by the fact that not a single physician requested to appear at these informal hearings, nor any lawyer, has ever intimated any unwillingness to attend.

Of the 58 cases disposed of informally, approximately half have been cases in which, after hearing both sides, the sub-committee concluded that the conduct of the accused physician had been proper, and that there was no just cause for a formal trial. The other half have been cases in which there was a certain amount of evidence that the physician had either acted improperly, or had practiced too close to the borderlines of unethical conduct. It has been the policy of the Committee in these cases to give the defendant physician a serious warning and an admonition to improve his professional conduct. It is gratifying to note that, with a very small number of exceptions, it has not been necessary to recall any of these admonished physicians on later charges. There is no doubt that this method of handling physicians guilty of questionable practice has had an excellent effect upon not only the physicians directly involved but the profession as a whole; and this has been accomplished without publicity, or depriving the physician of any of his rights, in all cases in which such procedure is justified.

Only 17 cases have been referred to the Board of Regents; and with the excepton of one case, where the Grievance Committee recommended six months' suspension and the Board of Regents dismissed the charges, the recommendations of the Grievance Committee have been sustained by the Board of Regents.

In all, eight physicians' licenses have been revoked—two for attempted abortion; two for aiding and abetting illegal practitioners; two for fraud and deceit in practice; one for violation of the narcotic law; and one because of insanity. One phpsician's license was suspended for one year because of his offering to commit an abortion; and another for six months for association with an unlicensed practitioner. Four physicians have been formally censured and reprimanded by the Committee—one for improper advertising; four for association with illegal practitioners; and one for fraud and deceit in practice.

In additon, the Grievance Committee is authorized to arbitrate disputes between physicians, and between physicians and patients, and has successfully completed several such arbitrations.

The work of the Grievance Committee entails a sacrifice of much time and energy by its members, for which they receive no compensation whatsoever. They are accomplishing benefits both to the public and to the medical profession, and their work is now well

COMPLAINTS AGAINST LICENSED PHYSICIANS CONSIDERED FROM SEPTEMBER, 1928 TO JUNE, 1931

Complaints	Violation	Disposed of by			Regents Action				Pending
		Secretary	Informal Hearing	Formal Hearing	Revocation	Suspension	Censure	Dismissed	
31	Improper Advertising	16	14				1	...	..
20	Attempted Abortion	8	8	1	2	1	.		.
30	Aiding Illegal Practitioners	10	6	1	2	1	4		6
16	Ambulance Chasing		12	2					2
17	Fraud and Deceit	3	6		2	..	1	1	4
13	Malpractice	8	5		.	.	...	..	
9	Unethical Conduct	3	3				..	...	3
1	Narcotic Violation				1		.	..	..
1	Insanity ..	..	.	.	1		...	..	..
1	Arbitration		1	..	..		..	..	
24	*Miscellaneous*	17	3		.	..	.	...	4
		65	58	4	8	2	6	1	
163	TOTAL	127			17				19

established upon a firm basis. As a result of their work, similar disciplinary bodies will shortly be started in several neighboring states.

CONTRIBUTIONS OF MEDICAL AND OTHER SCIENCES

By JOSEPH H. GETTINGER, M.D., BRONX, N. Y.

The Presidential Address at the Annual Meeting of the Bronx County Medical Society, June 17, 1931

THE political, social and economic history of mankind presents a vast panorama which unfurls before our eyes the records of noble endeavor, magnificent achievements, supreme sacrifices, as well as heinous atrocities, cold-blooded cruelties and merciless outrages. We are fascinated by its romance, thrilled by its climaxes and stand aghast at its tragedies. At one time we see man smothered by his unbridled desires and ambitions and dragged down by the gravity of the lowest instincts. At another we find him majestically soaring to heavenly altitudes impelled by the noblest impulses of self-sacrifice.

The scientific history of man presents no such diversity in its development and no such spectacularity in its growth. Its progress was slow and even monotonous, moving with a deliberate and rhythmic stride. But this stride carried with it the grandeur of enlightenment, the magnificence of truth. The rhythmic regularity like that of the tide brought the drift of noble thought to the banks of knowledge; its ebb carrying the wreckage of superstition and darkness into the abyss of the past.

The history of science presents an illustrious array of noble characters, identified with a wondrous ideality for creation and construction, continually making transitions from one set of fundamental entities and principles to another, ever thinking to introduce a rational order into the universe, each having added a stone to the great mosaic of learning. They not only made us heirs to the accumulated wisdom and experiences of past centuries, but through their ingenuity have added many essentials to our necessities, comforts and even to our luxuries. Their acts and words terminated epochs and inaugurated eras. The automobile, airplane, the cinema, wireless telegraphy and telephony, radio and television —all these landmarks of progress and civilization would have been still the hidden secrets of mute nature were it not for their scientific efforts.

The political economic history of the world presents no such personnel. The ambition and aim of the actors ever were the concentration of power, political advantages, military exploitations, and last, but not least, the accumulation of wealth. And lacking the ideality of true benefaction, their achievements were transitory and could not withstand the changing storms of time. Look upon Assyria, Babylon and Persia rising to their zenith, pouring forth their vast hordes, and then sinking again into oblivion. Greece with her chiseled temples crowning a thousand hills, her genius

endowing the world. What became of her? Rome rose to supreme grandeur, her army invincible, her law unchallenged until, under the fever of pomp and extravagance, she sank into decay. Nero, who ran the gamut of all that is atrocious and made the Romans minister to his atrocities; Alexander the Great who destroyed empires, vanquished nations, and, in one of his debauches, lamented the fact that there were no more worlds to conquer; Napoleon with his checkered career of rise and fall, suffocating nations by the dust of his marching armies; they all belong to the political history which drenched humanity in tears and blood.

In contrast with the warriors, Aristotle, Copernicus, Galileo, Newton, Darwin, Haeckel, Einstein, Milliken, Michelson, belong to the history of constructive science. The experiments and research of these savants were not devoted only to the fact-finding in the immeasurable vastitudes of space or in the imponderable littleness of the atom, concerned only with their scientific deductions, but their vision encompassed other fields and gave color to many sides of human life. This was true of the great innovations of thought in the past. The demonstrations of Galileo shook the religious world of his time, fundamentally changed Man's ideas of his relations to nature and to society, and made such a scheme of thought as we find in Dante seem suddenly antique and quaint. Newton's mechanics affected the structure of religion, society, and perhaps above all of politics. As for Darwin, we are still in the midst of the sweeping currents of change which the evolutionary doctrine set in motion. It is impossible as yet to predict the forms in which the ideas of relativity, which only the expert few can now understand, will affect thought and society; but the effects will occur and they will ultimately be far-reaching. And even our late venerable Michelson, though his concern and devotion were aimed at the objective of pure science, and whether it was the velocity of light which he strove to confirm by experiment, or whether it was in the infinitely small sphere of a molecular orbit that he sought new knowledge, his searchings and his findings alike led the average man to a deeper appreciation of the profound mysteries of living, exalted by a vision of the immensities.

The story of the triumphs of modern science is one of which man may be proud indeed. Every problem solved opened the door leading toward a mansion of more intricate problems. The problem of the ion touches the problem of the atom; the problem of the atom is associated with the problem of a planet; and the problem of a planet opens the way into the problem of the universe. The idea of evolution has formed the background of all sciences. The solar system, the earth, the mountain ranges and the great deeps, the rocks and crystals, the plants and animals, man himself and his social institutions—all must be seen as the outcome of a long process of transitional changes. Evolution has fashioned our mode of historical analysis and has taught us that, from the nebula to the social system, the present is the child of the past and the parent of the future.

Medicine, while its origin must have been contemporaneous with the origin of civilization, for us the history of medicine begins with the written history of events. Its earliest period is enveloped in profound obscurity, and so mingled with myth and fable as to be very uncertain. It embraces an indefinite time, during which medicine was not a science but an undigested collection of experimental notions, vaguely described, disfigured by tradition, and often made inutile by superstition and ignorance. Among the earliest records of probable authenticity are perhaps the Scriptures, from which may be gathered here and there a fair notion of Egyptian knowledge and practice. Centuries have since passed, and from the empty dawn of this maze has arisen a mighty institution whose arsenals are now filled with the ammunition of physics, chemistry, biology, physiology, pathology and allied sciences, to fight disease, to ameliorate pain and suffering, to prolong life. Medicine today is more concerned with prophylaxis, that is, with the prevention of disease, than it is with its cure, thus realizing the truism of "An ounce of prevention is worth a pound of cure."

Modern medicine does not only seek to lessen mortality by properly piloting man through the dangerous periods of growth and development, but it also anticipates the morbidity and infirmities so commonly incidental to old age. Medicine has made more progress within the last three decades than it did in centuries before. In fact, so torrential became the flood of its knowledge that it is almost impossible for a physician today to keep a thorough familiarity or even to be adequately conversant with all the tributaries of medical learning. This profuse light of knowledge has of necessity brought about grouping and specialization in the various branches of medicine, each physician seeking to collect the rays of new thought and to concentrate them in the field of this particular activity.

The public health is more efficiently guarded today than it ever was before, for not only has the span of life been increased according to statistics by at least ten years through hygienic vigilance, but life itself has been placed on a higher plane of sound health by the precise means of early diagnosis and treatment. Hospitals and clinics were perfected by the establishment of clinical and pathological laboratories, by the construction of x-Ray machines and electrocardiographs, by instituting aseptic surgery, by delving into the benefits of blood transfusion and intravenous medication, by the standardization of pharmaceuticals, and the enhancing preventive

medicine through the study of infection and immunity. The recent studies of *x*-Ray, Radium, Actino, Physio and Electro-therapeutics, hold out much hope in the beneficence of curative medicine. Of course, medicine has still much to learn and more to conquer, but surely the public cannot look forward towards a solution of any of the biologic, morphologic, physiologic or pathologic problems to any of the existing and much-thriving sects with their preposterous cults. The solution must emanate from the physician living within the confines of the cloistered laboratory, from the clinician observing the patient at the bedside, and from the pathologist who surveys the cellular transitions in the cosmos of the microscope. It is amazingly surprising to find that in the present light of universal progressiveness, some people are still willing to take the counsel of charlatans and fakers, that they are still consulting upon matters of health with chiropractors, Christian Scientists, neuropaths and naprapaths, a herd deplorably steeped in ignorance and utterly devoid of any knowledge appertaining to the disorders of the human economy. And even our legislators, the guardians of public welfare, either through misinformation or to gain political advantages, very often incline towards their favor. It seems that Barnum's statement referring to the prolificity of fools is destined to become a classic.

But in spite of many discouragements, the caldron of medical experimentations is constantly being filled with new problems and thoughts which keep on crystallizing for practical application. It seems to be the glorious ambition of every medical man to make some contribution to the treasury of medical knowledge, because the physician has always realized that of all the human possessions, health is the greatest asset. And since by virtue of his training this most valuable possession is placed into his hands, he has ever guarded this trust with the ardor of fealty and fidelity. Most physicians are prompted by a sincere desire to render the best service to humanity, and look upon disease as a public calamity in whose eradication the entire profession must participate. And to quote from my inaugural address: "The medical man lives for the medical cause, sacrificing not only the comfort that comes with material wealth—which the average physician can never hope to attain as he does not patent his discoveries—but he is often compelled to struggle for the bare necessities of a simple existence. And the public reaping the benefits of these sacrifices owes a great deal to the medical profession, more than it is likely ever to become aware of." (N. Y. STATE JOUR., Wed. Dec. 15, 1930, Page 1467).

But in order for the physician to continue in his devotion to service and make possible the rise of men like Brown Sequard, Pasteur, Lister, Jenner, Virchow, Claude Bernard, Koch, Ehrlich, Ewing and Banting, his freedom of thought, his initiative, his integrity and his self-determination must be fully and wholly retained. He cannot continue to exist and render valuable service unless he is assured of those conditions which will make it possible for him not merely to eke out an existence, but to meet with assurance and a degree of comfort, the economic and social demands of his responsible position.

Recently much talk has been given to the socialization of medicine. But society can ill afford to risk social experiments with the guardians of so valuable an asset as health. For under the most perfected conditions such a régime would not only hinder the physician in the performance of his duties according to his own dictates and best judgment, but would positively destroy the spirit of devoted interest so essential in the study and investigation of medical science. And no matter what system would be instituted for the control of medical care, whether State or corporative, the physician of necessity would become either a "political football" subject to political favor, or he would become the hireling of an insurance company with the glorious prospect of a "clock-puncher."

In order that medicine maintain its scientific integrity for growth and development, it must bask in the sunshine of freedom, it must live in the atmosphere of inspiration. Any other scheme would shackle the spirit of ideality, would stunt potentialities and force a noble profession to "stoop to conquer."

N. Y. State J. M.
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VARIOUS ANESTHETICS AND CERTAIN METHODS OF THEIR ADMINISTRATION: INDICATIONS AND CONTRAINDICATIONS FOR THEIR USE*

By JOHN S. LUNDY, M.D., ROCHESTER, MINN.

From the Section on Anesthesia, The Mayo Clinic, Rochester, Minnesota.

IT will be the object of this paper to present facts which in general should aid in selecting the anesthetic for a given case. The considerations involved in this process may be said to be preliminary and final. The final considerations are concerned essentially with the pharmacologic effect of the drugs as modified by the methods of administration. The preliminary considerations are concerned with the remainder of the factors relevant to choosing an anesthetic. In the choice of an anesthetic one begins, as a rule, with the preliminary considerations and then continues with those that are final. An example of the effect of the preliminary considerations on the choice of an anesthetic or a method might be that if the anesthetist, as well as other members of the surgical team, is unfamiliar with spinal anesthesia, it would be well to avoid this method. If the mental condition of the patient is such that he refuses a certain type of anesthesia then it may be well to avoid that agent and method. An example of the effect of the final considerations on the choice of the anesthetic might be that if it is necessary that the patient recover consciousness quickly, or that he speak during the operation, it would be well to avoid the administration of agents which would prevent such a result.

The introduction of various new drugs as anesthetic agents has increased the number of such agents and has, to some extent, complicated the problem of eliminating all but the anesthetic of choice for the individual case. I feel that the choice of an anesthetic is best made by following a definite plan or scheme. The preliminary characteristics to guide one are: (1) the mental and physical condition of the patient, (2) the proposed operation, (3) the technic of the surgeon and (4) the experience of the anesthetist. Each of these factors, if given proper consideration, tends to exclude certain agents and methods and so to limit one's choice. The final considerations in making the decision are: (1) is the need for anesthesia or for analgesia? (2) is relaxation necessary? (3) is quiet breathing necessary? (4) is quick recovery of the reflexes desirable or necessary? and (5) is this agent or method likely to produce immediate or delayed untoward results? Each agent produces certain effects which limit its use, and these effects must be borne in mind in the application of the agent. I shall speak briefly of several agents that are more or less widely used.

*Read before the Buffalo Academy of Medicine, Buffalo, New York, November 5, 1930.

Derivatives of Barbituric Acid

Beginning with the hypnotics, I shall speak of the barbiturates as they occupy considerable attention at the present time.

The consensus of opinion is that the barbiturates are definitely useful as hypnotics, sedatives and antispasmodics only. These agents have been employed for the purpose of producing anesthesia, but the results indicate that a dose larger than that which will produce hypnosis carries with it an increased danger which is directly proportionate to the dose. It is well to bear in mind that the effect of a barbiturate is not essentially related to the method of its administration but rather to the dose. It is of especial interest that the small hypnotic dose of sodium *iso*-amylethyl barbiturate (sodium anytal) is being used to advantage instead of morphine to hasten labor in primiparae by administration of the drug when the cervix is dilated 3 to 4 cm. Barbiturates in small doses produce some analgesia but little anesthesia. Relaxation is facilitated by their use but it is not produced directly by small doses. Breathing is more quiet if the barbiturates have been used than if they have not. Very small doses do not delay the recovery of reflexes particularly, but large doses do retard the return of reflexes. Small doses seldom produce immediate or delayed untoward results, whereas large doses not infrequently produce remote untoward results. I prefer to control the preoperative anxiety and fear of a patient by administering a small dose of a barbiturate at bedtime the night before the operation, repeating the dose an hour before operation, and following this with a hypodermic injection of a small dose of morphine and atropine. More uniformly good results may be obtained following the use of any anesthetic agent if the patient is brought to the operating room in a degree of sedation which relieves the patient to a large extent of apprehension. An excited, apprehensive patient requires more anesthetic than a confident, quiet patient, and those who prepare the patient for operation should bear in mind that the preoperative treatment of the patient should work toward the reduction of the risk from the anesthetic as well as toward the reduction of the risk from the operation by improving the patient's mental as well as physical condition. In the postoperative period, the use of oxygen and carbon dioxide

for hyperventilation is a good precautionary measure against postoperative pulmonary complications and should always be available for use.

Tribromethyl Alcohol (Avertin)

The alcohols represent the next class of agents. I shall speak of the one which is probably the most widely used at present, tribromethyl alcohol, tribromethanol, or avertin. This agent should be used generally as a basic anesthetic only. Its use should be avoided in the presence of advanced hepatic and renal disease, in pulmonary tuberculosis with cavitation, in marked bronchiectasis, and in colitis. If it is used in old people only small doses should be employed.

I find it advantageous to give more preliminary medication when using this agent as a surgical anesthetic, than when using almost any other. It has been my custom to administer chlorbutanol (chloretone) grains 10, by mouth or by rectum, a small dose of a barbiturate, and morphine grain 1-6, with atropine grain 1-150 by hypodermic injection prior to the rectal administration of 1.5 c.c. of 3 per cent solution of tribromethyl alcohol in 6 per cent solution of gum acacia for each pound of body weight, and in addition, local, regional, or gas anesthesia.

In obstetrics this agent may be used, but I believe that at the present time other agents are probably equally as efficient and more convenient to use.

The optimal dose of tribromethyl alcohol produces analgesia and sometimes anesthesia. Relaxation is facilitated and breathing is usually quiet, but recovery of the reflexes is delayed. The frequency with which untoward results appear is as yet uncertain, although it is rather definitely established that small doses usually are without untoward result if use of the drug is not contra-indicated by the patient's physical condition.

Anesthetics Given by Inhalation

It is wise to avoid the use of chloroform in almost all cases if possible because of its untoward effect on the heart and its delayed untoward effect on the liver in occasional cases. Deaths have been ascribed to its use. However this drug has been extensively used with gratifying results. Apparently the important factor in its use is slow administration of a well-diluted vapor. The dilution apparently depends on the amount of oxygen in the mixture. It has been said that chloroform is safer when administered with oxygen than with air. Anesthesia, relaxation and quiet breathing are usually associated with this drug, and the time for recovery of the reflexes is not particularly long. However, as has been said, immediate and remote untoward results have been reported.

Ethyl chloride is useful for inducing anesthesia that is to be carried on under ether, or for short periods of anesthesia required for minor sugical procedures. It should be given by the drop method, not sprayed on the mask. This agent is being given by the closed method by a few anesthetists and with considerable satisfaction when the dose administered is small and the vapor is not concentrated. Recently I have used this agent but little because of the sudden deaths reported incident to its use Anesthesia is quickly produced by ethyl chloride, relaxation is not usually obtained, breathing is not particularly quiet, the period of recovery is short, and immediate untoward results have been reported.

Ether, the most extensively used of all anesthetic agents in the past, is one of the most reliable available agents. The physiologic effect of this agent depends to some extent on its method of administration. The one most commonly used is the open-drop method. Usually results with this method are uniformly satisfactory if the vapor administered is not too concentrated and if preliminary medication is not sufficient to depress the respiratory center. The closed method of administering ether is facilitated by the admixture of anesthetic gases and of oxygen and carbon dioxide. It is best to establish anesthesia with low concentrations of ether, by means of deep breathing through the period of induction, and by using the gases not only as vehicles for ether but as synergists in obtaining anesthesia. It is essential in this method that the percentage of oxygen be sufficient adequately to maintain metabolism. Good results have been obtained from hyperventilation of the lungs with a mixture of carbon dioxide 5 per cent and of oxygen 95 per cent following anesthesia by inhalation of ether.

The intratracheal modification of the closed method is one of the most outstanding advances in methods of administration. This has been brought to a high point of perfection by Magill of London, who uses a fairly large soft rubber catheter. It usually may be passed through the nose and into the trachea after treatment of the larynx with a cocaine spray and following light general anesthesia. The patency of the airway is maintained, with the result that breathing is quiet, relaxation is facilitated, and administration of the agent or agents is made easy.

The colonic or rectal method of administering ether in oil has been used satisfactorily by many, but for safety one must carefully reg-

ulate the concentration of the ether in the olive oil. I feel that ether 65 per cent and olive oil 35 per cent is about the optimal mixture for surgical purposes. This method requires that the patient be given preliminary medication sufficient to insure that he will not quickly exhale the ether, thereby rapidly diluting its concentration in the blood stream and thus shortening the duration of anesthesia and lessening its depth. It would be well to use ether by this method as a basic anesthetic rather than in an attempt to produce complete anesthesia. Intravenous administration of ether and saline solution is worthy of mention, but as yet the method has not been widely applied and it will not be considered here in any further detail. Ether produces anesthesia, and relaxation may be produced with fairly large doses. Breathing is quiet with the intratracheal and rectal methods but is not particularly quiet when ether is given by inhalation. Recovery of reflexes is definitely delayed, and varies with the amount of ether administered. Although immediate untoward results are seldom seen, remote untoward results are said to occur not infrequently.

Nitrous oxide is widely used and is a valuable agent, particularly because it is not inflammable, is not particularly unpleasant to inhale, and is not irritating to the lungs. It is especially useful for short minor operations and for operations in which relaxation is not necessary. In administration of this agent more than in administration of most other agents, it is essential that preliminary medication be adequate. This agent is frequently resorted to when other general anesthetic agents seem to be contraindicated. Anesthesia and analgesia may be produced by nitrous oxide. Relaxation is usually not obtained and breathing is not quiet. The reflexes are quickly recovered. Immediate and remote untoward results should not occur.

Ethylene, when its inflammability does not contraindicate its use, is fully as valuable if not more valuable, than nitrous oxide. Twice as much oxygen may be administered with ethylene as with nitrous oxide and equivalent anesthesia and also considerable relaxation can be obtained. Breathing is not particularly quiet and reflexes are recovered easily. Immediate and remote untoward results should not occur except through the inflammability of the agent. With both nitrous oxide and ethylene it is often advantageous to administer small amounts of ether. With either nitrous oxide or ethylene, preliminary medication is important. In many surgical and obstetric cases nitrous oxide or ethylene may be preferred to other agents.

Local Anesthesia

Advances in local anesthesia run concurrently with the introduction of new agents. At the present time I feel that procaine when used in solutions not exceeding 1 or 2 per cent is the safest local anesthetic agent available, and so, of the many local anesthetic agents, I shall discuss only procaine.

Analgesia is produced by procaine. The amount of relaxation produced depends on the method used. Breathing is usually quiet except in excited patients or in patients who are suffering pain either from the operation or in other parts of the body than those being operated on. Reflexes return early. Immediate and remote untoward results should not occur.

When used by the infiltration method in a 0.25 or 0.5 per cent solution procaine is used with great safety if intravenous injection is avoided. The administration of small doses of a barbiturate because of its antispasmodic property may add to the safety of local anesthesia. Certain untoward results are incident to its use when it is combined with large amounts of epinephrine. I prefer to use epinephrine in very small amounts; about 6 minims of 1 to 1000 solution in 200 c.c. of 0.5 per cent solution of procaine. In the average case I prefer to use not more than 100 c.c. of 1 per cent, or 200 to 250 c.c. of 0.5 per cent solution of procaine. The method of infiltrating the line of incision is valuable and may be applied by the surgeon, his assistants or the anesthetist. Because of its relative safety, this method should be used when the safety of other methods is questioned. In some instances it seems advisable to avoid direct injection into the field of operation and then the most frequently used of the so-called regional methods of anesthesia may be employed, namely, field block, wherein the field of operation is surrounded with a wall of anesthetic solution, so that the site of operation is anesthetized without being infiltrated. Abdominal block anesthesia is an illustration of a type of field block. Two useful methods of regional anesthesia may also be mentioned, brachial plexus block, and sacral block. By these methods the anesthetic solution is injected at a point distant from the field of operation and yet blocks conduction through the nerves supplying the region of the operation. These methods of employing procaine are very valuable and are applied by many with the greatest satisfaction and with relative safety.

The decision whether or not to use spinal anesthesia, by means of injection of procaine, depends essentially on the degree of relaxation considered necessary for the operation. This procedure, according to my experience,

is best carried out by bearing in mind that (1) the rate of injection should be constant, 0.5 c.c. each second, (2) the point of injection should correspond to some extent to the site of operation, (3) routinely, the number of cubic centimeters of spinal fluid in which the dose of procaine is dissolved should be increased in proportion to the extent cephalad to which it is desired to produce anesthesia, and (4) the dose administered must be a safe one. In the average person the safe dose is about 1 to 1.25 mg. for each pound of body weight. It is essential that readings of blood pressure be taken before, during and after administration of a spinal anesthetic. I have obtained rather uniformly successful results by the administration of ephedrine immediately before the anesthetic is administered subdurally. However, in cases of hypertension it is best to administer the ephedrine after the procaine has been deposited. Gratifying results may be obtained by administration of oxgen or of oxygen and carbon dioxide during the operation if periods of nausea occur. When these agents are insufficient to control the nausea, then one may find that the administration of nitrous oxide or ethylene with the oxygen is effective.

Spinal anesthesia may be used with considerable satisfaction for operations on the viscera below the diaphragm if small doses of anesthetic solution are administered and if it is used only in patients in whom it is not contraindicated by recent debility, hypotension, marked cardiovascular disease, or diseases of the central nervous system.

Indications and Contraindications in Different Operations

A patient for operation on the brain is usually in fair physical condition in respect to respiratory and cardiovascular systems unless the lesion is very far advanced or is due to recent trauma. In operations on the cerebrum, ether by the open-drop method is usually satisfactory. It has been used with considerable, although probably less, success by rectal instillation with olive oil and with considerable safety by the intratracheal method. For operations on the cerebellum, or when the respiratory center is likely to be affected, the intratracheal method has definite advantages, as it facilitates ventilation of the lungs. The use of the barbiturates is not as a rule indicated in operations on the brain. Tribromethyl alcohol is being used with considerable satisfaction, especially when combined with local anesthesia. However, local anesthesia is usually resorted to when it is considered that other methods would add to the risk of the operation. The gases have probably been used with less satisfaction than most other agents for these operations. For operations on the face, the intratracheal method of administration of ether or of the gases, or of a combination of these agents, has been particularly satisfactory. These operations may be done, also, under rectal anesthesia with tribromethyl alcohol or olive oil and ether, but my preference is for the intratracheal method, especially if the operation is to be a plastic one, and if the space ordinarily occupied by the anesthetist encroaches on the operative field. Mastoidectomy can be carried out successfully under inhalation of nitrous oxide or ethylene. Simple operations on the eye are probably best done under local anesthesia. This may also be true of most operations on the nose and for tonsillectomy in adults. Tonsillectomy in children is probably best done under ether. Extraction of teeth is particularly satisfactory under block or conduction anesthesia, but if the patient is very nervous it may often be advantageous to use nitrous oxide by nasal inhalation.

Operations on the thyroid gland are usually carried out satisfactorily under infiltration anesthesia, using procaine solution without epinephrine, and after medication with morphine and a barbiturate. These operations also are done with considerable satisfaction by using gas anesthesia, especially at the time that the gland is being delivered. Operations on the submental and submaxillary glands of the neck, or for sinus of the thyroglossal duct, may be done with good results under cervical block anesthesia if sufficient preliminary medication has been administered. Recently, with tribromethyl alcohol and local anesthesia, excellent results have been obtained, and probably the patient has had less pain than under local anesthesia only. In laryngectomy I believe that the best results are obtained by the use of cervical block anesthesia. In operations on the cervical portion of the spinal cord, cervical block anesthesia with or without tribromethyl alcohol, or with or without light anesthesia with ether given by the open-drop method has been very satisfactory.

For operations on the upper extremities, rather wide choice exists. Operation may be done under any method of administration of ether or a gas, or under local or regional anesthesia. Many times the results obtained from brachial plexus block anesthesia are excellent. In such operations, the method of anesthesia chosen for use may be that in which the anesthetist is most skilled.

Minor operations on the thorax may be carried out under local anesthesia or under anesthesia by a gas with almost complete satisfaction. Radical amputation of the breast is

facilitated by quiet respiration. The intratracheal method of administering a gas or ether is particularly satisfactory for this operation. However, most patients do well under ether administered by the open-drop method. For operation within the thorax, such as thoracoplasty, ethylene and nitrous oxide anesthesia, with a moderate amount of preliminary medication, has been satisfactory in my experience, although many advocate the routine use of local anesthesia and that may be the method of choice except if the operation is done in several stages. For operations on the lung or within the thorax, in which the pleura is opened, the intratracheal method of administering a gas, with or without ether, and following some preliminary medication, is usually essential. Operations for diaphragmatic hernia also are carried out advantageously under the intratracheal method of anesthesia, using gas and ether.

For operations in the upper part of the abdomen, in which relaxation is necessary, spinal anesthesia is particularly valuable, especially if it is probable that postoperative pulmonary complications may ensue. It is frequently advantageous to combine spinal anesthesia with a gas. However, if relaxation is not necessary, the operation may be done under infiltration or field block of the abdominal wall with or without anesthesia by a gas. The safest method of anesthesia in cases of serious risk is probably infiltration, or field block; the next safest method is probably inhalation of ethylene. In some cases of hypotension, in which the relaxation must be secured, ether given by the open-drop or intratracheal method probably is the method of choice.

Operations in the lower part of the abdomen may be done under spinal anesthesia, unless it is contraindicated. About the same methods are indicated in operations in this region as in operations in the upper part of the abdomen, if conditions of operative risk are similar. However, in operations on or through the urinary bladder the procedure may be carried out under sacral and abdominal block with considerable safety and satisfaction; in such circumstances, the safety of other methods may be open to question. Herniotomy may be performed under many types of anesthesia but local anesthesia usually is preferable.

Operations on the perineum may be done under anesthesia with a gas, and the female patient usually prefers to be unconscious during such operations. However, sacral block or spinal anesthesia may also be used with considerable satisfaction. This is particularly true in operations on the anus and rectum and especially true for such operations as hemorrhoidectomy. For this operation, sacral block anesthesia may be used to advantage almost routinely. For hemorrhoidectomy, I feel that spinal anesthesia provides more extensive anesthesia than is necessary and that infiltration anesthesia distorts the tissues too much and does not produce sufficient relaxation. Sacral block anesthetizes practically only the field of operation and provides ample relaxation without distortion of the tissues. Circumcision and other operations on the penis in the adult patient are probably best carried out by field block in which injections are made at the base of the organ. Manipulations and operations through the cystoscope may be done with considerable satisfaction under gas anesthesia or with sacral block anesthesia. In some instances, as in tuberculous bladder and cord bladder, spinal anesthesia is indicated.

Operations on the lower extremities may be carried out under almost any form of anesthesia. Certain operations such as those for bunion should be done under field block anesthesia. Amputation of the leg is very satisfactorily performed under spinal anesthesia.

For obstetric procedures anesthesia with a gas has been very satisfactory. A recent advance in this field has been the oral administration of small doses of sodium *iso*-amylethyl barbiturate as soon as the cervix has dilated to the width of 3 or 4 cm. This is followed by inhalation of a gas in the third stage of labor. Chloroform has been used extensively in obstetrics but reports of delayed central necrosis of the liver have discouraged its employment. Ether administered by the open-drop method has been the most widely applied agent and has given excellent results. The barbiturates in large doses, and tribromethyl alcohol have been used, but certain disadvantages are said to follow their use. Ethyl chloride has no place in obstetric anesthesia. Spinal anesthesia is probably not indicated in normal labor but it may be used at times to advantage in operative obstetrics. Sacral block anesthesia has been used to advantage in operative cases but not in normal labor. In cesarian section anesthesia with a gas, or with ether administered by the open-drop method, spinal anesthesia induced by low injection or even infiltration anesthesia has been uniformly successful in the hands of many.

The Physical Condition of the Patient

In the presence of diabetes, ether is probably contraindicated. In pulmonary disease anesthetics given by inhalation other than the gases probably are contraindicated. In extensive cardiovascular disease, spinal anesthesia probably is contraindicated. Epinephrine

raindicated in extreme hypertension and presence of hyperthyroidism.

considering the technic employed by ns, those factors which facilitate a par- surgeon's obtaining his optimal re- must be considered. For example, re- n may be extremely important to one n and of less importance to another. rgeon may wish to have his patient un- ous, and another may be equally anxious that the patient be awake. Some surgeons work very rapidly, whereas others do not. For example, an operation for the cure of gastro-jejunal ulcer is done by some surgeons in the short period of anesthesia produced by procaine given intraspinally, whereas that operation by another surgeon may overrun that period of time. The surgeon who works more slowly may prefer general anesthesia alone or in combination with spinal anesthesia.

USE OF ATROPIN OR ITS DERIVATIVES FOR TREATMENT OF DISEASE

By THEODORE S. EVANS, M.D., NEW HAVEN, CONN.

Read before the Grace Hospital Staff, New Haven, Conn.

HE literature for the past seven years, in- luding 1930, is full of references to the use f atropin or its derivatives for treatment of e. In none of the literature examined, includes practically every reference that be obtained, was there a report of a toxic f such small size as the one herein reported. is work on the diagnostic value of atropin s of early typhoid fever, N. Fairley Marris[1] ed 256 cases of typhoid fever and 353 which not typhoid fever, a total of over 600 cases ich he used 1/33rd of a grain of atropin per without inducing any toxic effect. This is thirty times the dose which caused the toxic in this case herein reported.

k J. White,[2] of St. Louis, reported reactions included fever and increased pulse rate, but pillary changes and no erythematous blush 1/000th grain in three-day old children. He es this was due to direct stimulation of centers similar to the fever seen in certain of cerebral hemorrhage. His viewpoint in regard is supported by Solis-Cohen and ns[8] and Cushny.[6]

well[7] and Sollman,[9] however, both feel that ever is due to the suppression of the function e sweat glands.

nzing[4] makes the observation that infants tol- atropin proportionately better than adults, e does not give the reason for his conclusion.

orge Heller[10] reports a case in a five-day-old of 9/100th of a grain, used by mistake, h caused a mild reaction, dilatation of the s, fever, and erythematous blush.

orge Munns[11] reported a case in which six- doses of 1/1000th of a grain in a two-day resulted in skin rash, and abdominal disten- He also reported a case in a five-day-old where three doses of 1/1000th of a grain d fever, and abdominal distension without ation of the pupils. He reported a third case hich 1/500th of a grain for four doses in a nine-day-old child caused abdominal distension and fever. He also reported a fourth case of 1/60th of a grain in a seven-day-old baby which caused fever, and distension of the abdomen. In his fifth case, 1/500th of a grain in a three-weeks-old baby was used and caused distension of the abdomen, temperature, without eye signs or erythematous blush.

S. V. Haas[12] uses as routine 1/50th to 1/16th of a grain of atropin in every 24 hours for babies over 1 month of age.

In none of the accounts examined is there reported, even in children, a case of atropin poisoning from such a small dose as the one reported here.

Case Report

W. H. Seen Nov. 16, 1930, 28 years old, Male. Teacher of Salesmanship.

For the past two weeks, the patient has been suffering off and on with dyspnoea. This began two weeks ago, November 2nd. There was no reason which the patient could ascribe for the dyspnoea. His mode of life had not changed recently nor had any of his other habits. He consulted a physician, November 3rd, who told him that his intestinal tract was full of gas and that this was causing shortness of breath and palpitations of the heart. He also told him at this time that he had high blood pressure and a large heart. He left the physician's office and seemed to be all right the next day. Two days later, November 5th, he developed the same symptoms again.

His appetite has been good, no vomiting, nor nausea. There has been some belching of gas. The bowels are normal. There has been no edema nor cough. His voice has not been hoarse. The urinary tract is negative. Weight has remained normal. There has been no fatigue. He has been taking plenty of exercise. He smokes moderately and has not been drinking at all. He has no

dizziness, nor headache. Ears are normal. Throat has been "dry." During the past two weeks, the eyes have occasionally shown a slight blur when reading.

Past History: Scarlet fever, frequent sore throats, Vincent's infection, Surgical: Removal of appendix, tonsils and adenoids.

Family History: Wife is well. One child, 4 years old, in good health.

Medical Treatment: On November 2nd, at bedtime, the patient took "Alophen" tablets. This is the first time he had used a cathartic. On the 3rd, he consulted a physician for shortness of breath, dry throat, palpitations of heart and was told that he had gas in the intestinal tract, hypertension, and a large heart. The following day, November 4th, he was free from symptoms. On November 5th, he again took one "Alophen" tablet. The distress was marked. He went to a hospital where he remained for four days. While he was there, he was fluoroscoped, he had a gastro-intestinal series, he had an electrocardiogram made, and examinations were made of the blood content, urine, feces, and stomach contents: all of which were normal. He left the hospital, November 12th, and was free from the symptoms until November 16th at which time he gave the above history of shortness of breath, etc. From the time of his discharge from the hospital until 12 noon on November 16th, he had taken no medication of any kind, but noticing that he had a slight "nose cold," he took one "Rhinitis" tablet at 12 noon, on the 16th. He is certain that he took only one and that he had used no medication of any kind for the antecedent four days.

Physical Examination: He presents a well nourished and developed man. Temperature 100, pulse 120, blood pressure 120-80, on three different readings. Eyes: the pupils are dilated. The eye grounds are easily examined because of the dilatation of the pupils. They are normal. The teeth are normal. The throat is bright red. It is very dry. The tonsils are buried, and not visibly infected. The neck nodes are slightly enlarged. The heart is normal in size and rhythm; it is fast; no murmurs are heard. Lungs are clear throughout. The abdomen shows scar of appendectomy. He has a hydrocele on the left side. The extremities are normal. The reflexes are normal. Rectal examination is normal. The skin shows a slight erythematous blush.

After getting the history and making the physical examination he was told that he had atropin poisoning from the "Rhinitis" tablet. He then volunteered the following information:

That one drop of atropin had been put in his eyes when he was having them examined one time previously, and that it was a matter of ten days after that before the vision became entirely distinct.

November 17th, although the pupils are still dilated, the heart rate is only 80. The skin is clear, the throat is no longer dry nor red. November 18th, the pupils react to light and accommodation.

As there is absolutely no reason to doubt the patient's history, I should say that this is a case of atropin poisoning. The toxic dose in this case is extremely small. The "Rhinitis" tablet used was one of the "half strength" variety. The total dose of Belladonna was 1/8 grain, or atropin 1/800th grain. The "Alophen" tablet contained Belladonna 1/3 grain, or atropin 1/300th grain.

Summary

This case is reported for two reasons:

(1). Atrophin is a drug in very common use in such preparations as Rhinitis for colds, and various cathartics.

(2) There is a very wide individual idiosyncrasy of the drug as is proven by this case of poisoning resulting from 1/800th grain dosage.

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Advertising Manager—JOSEPH B TUFTS... ....New York

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FLY LARVAE AND OSTEOMYELITIS

The first article in this Journal is an important contribution to the literature on the treatment of chronic osteomyelitis That disease is often notoriously hard to cure, even when dead bone and tissue and all other apparent causes of non-healing have been removed The St Charles Hospital in Port Jefferson is a hospital home to which a great number of crippled children from Brooklyn are sent, among them being old cases of osteomyelitis which have resisted treatment for months. The series of such cases reported by Doctor Child will be of great interest to all physicians of New York State.

THE GRIEVANCE COMMITTEE

The Grievance Committee that was appointed according to the provision of the Medical Practice Act passed in the Spring of 1926 (Public Health Law, sections 1264-5, held its organization meeting on September 2nd of that year, as stated in this Journal of September 15, 1926, page 802. Major articles describing the work of this Committee have appeared in this Journal from time to time as follows:

"The first year of the Medical Practice Act," Rypins, Journal of December 15, 1927, page 1359.

Editorial, July 1, 1928, page 787.

"The Grievance Committee in the Medical Practice Act," Wightman, Journal April 1, 1929, page 391.

"The Work of the Grievance Committee," Rypins, Journal September 1, 1929, page 1073.

"The Standards of the Grievance Committee in the Acceptance of Rebates," Journal May 1, 1930, page 547.

The Grievance Committee, being an entirely new body, had to adapt its methods to conditions as they arose; but in the course of two or three years, its experience enabled it to develop methods which have proved eminently satisfactory and successful. Physicians throughout the State are not yet fully aware of the scope of the activities of the Grievance Committee and of the methods of its action, for the Committee conducts its work quietly and with due regard to the feelings and reputation of the physicians who are investigated. Physicians will therefore be interested in the report of its work which appears on page 952 of this Journal.

The primary object of the law establishing the Grievance Committee was to provide a committee of medical men who should hear charges of unprofessional conduct brought against physicians, and should report their findings to the Department of Education, under whose jurisdiction and authority the Committee acts. The licensing of practitioners of medicine, the revocation of their licenses, and the investigation of complaints that may involve revocations are functions of the State Department of Education; but the investigation and prosecution of practitioners for illegal professional acts is a function of the Attorney General also. Specifically the Grievance Committee is a part of the machinery of the State Department of Education. It is a sub-committee of the Regents of the University of the State of New York, and reports its findings to the Regents.

There are therefore three official bodies that are charged with disciplining physicians for conduct that is either unprofessional or criminal:

1. The State Department of Education—the Regents, who issue licenses to practitioners.

2. The Attorney General who is concerned with the criminal acts done in the professional practice of physicians.

3. The Grievance Committee who is concerned with professional standards applying to physicians under charges.

The description of the regular course of events following charges against a licensed practitioner of medicine will help a doctor to understand the procedure of the Grievance Committee.

Charges may be brought by any person against a physician. They are to be made in writing and signed by the complainant and sent to the Secretary of the Grievance Committee, Dr. Harold Rypins, Educational Building, Albany, N. Y. Doctor Rypins is also Secretary of the Board of Medical Examiners, and is therefore familiar with the methods of granting licenses as well as their revocation.

The Secretary gives due consideration to the complaint and makes a preliminary investigation sufficient to disclose the importance of the complaint; and if he finds it to have a legal basis, he refers it to the Attorney General for an opinion. If the Attorney General decides that the charges warrant further consideration, they may be referred to the Grievance Committee. There has never been friction between these two official bodies, for the Attorney General is concerned with the criminal phases of the complaint and with the securing of legal evidence; while the Grievance Committee is concerned with the interpretation of the medical practice act. Each body therefore supplements the other, but the Grievance Committee fills a need that has never before been supplied.

The Grievance Committee is a legal tribunal which may compel the attendance of witnesses; but it may also hold informal hearings which often lead to amicable settlements when formal hearings in public would only irritate the parties. Informal hearings also enable the Committee to decide when an action of a formal nature should be brought, for the attitude of the accused is a vital factor in every case. The Committee therefore represents not only the medical profession but also the people of the State.

The law also makes provision that in cases of dispute between individual doctors, the Committee may act as a court of arbitration when requested by both parties; and in this case the decision is final, and no appeal from it may be taken.

Physicians should understand that merely calling the attention of the Grievance Committee to an alleged irregularity is not sufficient to set its machinery in motion. The Grievance Committee acts only on complaints referred to it by the Regents; and the Regents usually obtain an

opinion from the Attorney General's office as well as from the Grievance Committee.

Many complaints sent to the Grievance Committee properly belong to the County Medical Society. Physicians sometimes charge their medical brethren with unwise acts in which no law is violated, and which therefore do not come within the jurisdiction of the Grievance Committee, or the Attorney General, or the Department of Education. Examples of such complaints are:

Inserting advertising cards or announcements in the newspapers.

Accepting salaried positions with corporations.

Continuing to treat patients referred for consultation only.

Such actions as these come within the jurisdiction of the county medical society. The physicians practicing in the county are familiar with local customs and the temperaments of all persons concerned with the complaint, and can make decisions more wisely than those connected with any outside organization. It is much better that a county society should exercise its own liberal prerogatives and opportunities in disciplinary matters, rather than pass them on to a higher tribunal, which is governed by the strict provisions of the statute law.

The Grievance Committee has been a success in giving medical points of view to the representatives of the Department of Education and the Attorney General in the application of the legal principles of disciplinary actions against physicians.

PLANNING HEALTH LEGISLATION

Past experience in public health legislation has demonstrated the essential value of giving publicity to the studies and debates of the promoters of the new laws. The public health bills which were introduced in the Legislature late last year had been proposed by a special group of persons appointed by the Governor; but certain features were opposed by a large group of local health officers composing the Sanitary Officers Association, and other features were questioned by the members of the Medical Society of the State of New York. Both of these organizations are taking steps to study all phases of the report of the Governor's Commission, and to inform the medical profession regarding public health conditions as they are and as they should be. (See page 973.)

LOOKING BACKWARD

THIS JOURNAL TWENTY-FIVE YEARS AGO.

Medical Legislation:—This Journal for August, 1906, contains the following remarks by Dr. A. G. Root, of Albany, Chairman of the Committee on Legislation, concerning three bills, all of which were passed by the Legislature within a few years.

"The year had been one of the most trying in the eleven years that he had served upon the Legislative Committee; the crop of special bills legislating into the profession men entirely unfitted for its duties, special bills for the licensing of men in special subjects which were purely medical, and bills to endeavor to destroy the present enactments, had been large. Two of these bills narrowly failed of passage. It was thought that last year's fight against the osteopaths was a serious one, when the bill failed of passage in the Senate by only one vote. This year the bill actually passed the Senate and in the Assembly was referred to the Committee on Public Health, where, fortunately and with much labor, it was kept until the end of the term. The Optometry Bill was only at one time in danger of passing and this danger was caused by the inactivity of the profession throughout the State. In fact, the greatest danger is the passiveness of the profession in matters which directly interest it. If from all parts of the State physicians manifest their opposition to any measure, that opposition will be completely effective.

"One bill was reported from the Committee on Public Health which would solve the entire difficulty. This bill gives the most explicit, concise and exclusive definition of the practice of medicine, and, at the same time, provides for one State Board of Examiners to be appointed by the Regents, which shall be composed of nine members; and before this State Board shall come all applicants for medical licensure, whether regular, homeopathic or eclectic. This bill also failed of passage because of the inactivity of professional support and at the same time because of opposition on the part of homeopaths and eclectics."

MEDICAL PROGRESS

Inhalation Treatment of Angina Pectoris and Intermittent Claudication.—In a long series of experiments, from fifteen to twenty-five years ago, Yandell Henderson and his collaborators demonstrated on dogs, under artificial respiration or breathing naturally under a slight pressure of air after opening the thorax, a condition verging on tetanus of the heart, which was effectively counteracted by a restoration to normal of the carbon dioxide content of the blood. Following these observations, it was shown that carbon dioxide may exert an equally strong influence upon the peripheral circulation, and particularly upon the volume of the venous return to the right heart. Clinically, the results are similar to the effects induced by amyl nitrite, but like those of a hot bath are more physiological than pharmacological. It is possible that the greater part of the benefit sometimes derived from the Nauheim treatment is due to the inhalation of carbon dioxide volatilizing from the surface of the bath. With these considerations in mind, carbon dioxide inhalation has been tried in three cases of angina pectoris in its earlier stages. The inhalations are not given during an attack of pain, but every day, usually before the midday and evening meals and at bedtime. The patient holds his own face mask which has a sufficiently large opening to the outside air to offer no resistance to breathing. He is told to breathe deeply rather than rapidly. A stream of carbon dioxide gas is fed through a small rubber tube from a cylinder of the pure liquefied substance. The flow of gas is at first kept small, but is gradually increased until a maximal or nearly maximal depth of breathing is developed. This condition is maintained for fifteen or twenty minutes. The essentials are an open mask, and a device for the control of the flow of gas to the mask, so that by no possibility can the patient receive an excess. Henderson describes in detail the apparatus which he employs. The results of the inhalation are a distinct improvement in the color and temperature of the lips and skin, a markedly fuller circulation is evident, the sensation of oppression in the chest and the pain or "pins and needles" sensation in the shoulder and arm is considerably decreased. After some weeks of daily inhalations the capacity to take exercise is markedly increased. In two patients with intermittent claudication of the lower extremities the inhalations continued for some weeks resulted in a distinct cumulative beneficial effect. Though the number of cases is small, the author nevertheless feels justified in recording them because of the striking results obtained and the convincing theoretical considerations upon which the treatment is based.—*American Heart Journal*, April, 1931, vi, 4.

Mediterranean Exanthematous Fever.—L. Cannavo describes in the *Riforma medica* of April 6, 1931, a case of a little-known affection which has appeared sporadically in Mediterranean countries during the last 20 years, instances of which, although reported under different names by different observers, must be ascribed to a single disease entity in view of their numerous common characteristics. This disease, best known as Mediterranean exanthematous fever, has a typical course and symptomatology. It begins abruptly, in the midst of florid health, with a violent chill followed by fever often reaching 40° C. (104° F.), which assumes a continuous course with, however, moderate remissions in the morning. Pain in the joints and muscles promptly appears, sometimes accompanied by tonsillitis, diarrhea, and vomiting. On the third to fifth day an exanthem appears, beginning on the thighs and lower part of the abdomen; after which in several successive crops it invades almost the entire surface of the body, including the palms of the hands and the soles of the feet. The eruption consists of spots intermediate between macules and papules, slightly elevated above the surface of the skin, becoming white on pressure, not confluent, without hemorrhagic phenomena, and each surrounded by zones of perfectly normal skin, thus being clearly differentiated from typhus exanthematicus. The appearance of these spots is so characteristic that the French in Tunis have suggested the name of "button fever." There is sometimes observed in addition, especially on the face, a small brownish spot the size of a pinhead to a small pea which it is believed represents the portal of entry of the specific virus. The patient's condition remains practically constant for 10-15 days, after which the fever drops by rapid lysis; the pains gradually diminish, the eruption fades and disappears without desquamation. Convalescence is brief, and full health is soon restored. Oftentimes, the nervous system is affected and the patient suffers with headaches, restlessness and not infrequently febrile delirium. Other organs of the body are little affected; occasionally there is moderate tumefaction of the spleen. Prognosis is favorable and there has been complete recovery in every case thus far reported. The possibility of this affection should be borne in mind in the differential diagnosis from other acute febrile adult diseases with an exanthem.

Head Murmurs.—Louis P. Hamburger states that his chief object in writing this paper is to revive interest in cephalic auscultation—a well nigh lost art. These murmurs may originate from intracranial, extracranial, or infracranial sources. In the intracranial group are the sys-

tolic "brain murmurs" of children. In the routine auscultation of the heads of seven babies under one year of age, Hamburger demonstrated a distinct systolic murmur in three, all of whom were anemic and one rachitic. Anemia is probably a contributing factor, though it is not a necessary accompaniment of these murmurs. If cephalic auscultation were more frequently practiced in the case of highly anemic patients these head murmurs analogous to accidental cardiac and venous bruits would often be discovered. A second group of head murmurs comprises those accompanying communications between cephalic arteries and veins, which may be intracranial or extracranial. They are acquired in a large proportion of cases by trauma, although they may be congenital or are classified as spontaneous. The simplest form of the acquired intracranial variety is that of a communication between the internal carotid and the cavernous sinus. It may or may not be attended by pulsating exophthalmos. In one of Hamburger's cases such a murmur persisted for nineteen years without the development of pulsating ophthalmos. Another variety of intracranial head murmur is that accompanying aneurysmal angioma. It is described as continuous with systolic intensification. Head murmurs may also accompany meningiomas and gliomas. A case is described in which a murmur resulted from angulation of the vertebral arteries, caused by foraminal herniation of the cerebellum due to the presence of a cerebral cyst. The rare murmur of an actual aneurysm of a cerebral artery was illustrated by one case. Another group of cephalic murmurs includes subjective and objective sounds which are transmitted headward in the direction of the blood current from their origin in atheromatous and possibly dilated carotid arteries. With this type other evidences of marked arteriosclerosis are present. The murmur of a cardiac valvular lesion or from the struma of Basedow's disease may also be conducted to the head. Head murmurs may arise in presumably healthy individuals without apparently adequate causes and may disappear without untoward results, as exemplified by two cases, which are described in detail.—*American Journal of the Medical Sciences,* June, 1931, clxxxi, 6.

A Case of Pulmonary Gangrene Cured by Collapsotherapy.—Writing in the *Schweizerische medizinische Wochenschrift* of April 11, 1931, Henri Curchod gives an account of a case he observed in a man of 47 who had for years exhibited symptoms of cavitary bronchitis, localized in the right lung and constantly aggravated by his occupation as a renovator of mattresses. His condition becoming worse to such a degree that he lost 12 kg. in weight in a month, he entered a hospital. On admission the roentgenogram revealed an infiltration of the entire right upper lobe, with a cavity the size of a walnut in its middle portion. The pulmonary flora consisted of streptococci, spirochetes, and fusiform bacilli, with no tubercle bacilli present. The fetid nature of the expectoration, the type of flora, and the patient's grave general condition led to a diagnosis of pulmonary gangrene. In view of the evidence of cavitation, phrenicectomy was performed under local anesthesia, followed over a period of two months by administration of tincture of garlic in large doses and intravenous injections of salvarsan. But as the fetid secretion continued undiminished and the cavity was still present, it was decided to have recourse to artificial pneumothorax, one month after the phrenicectomy. Small weekly insufflations of 250 c.c. each were given, which were gradually increased to 400 and even 600 c.c. Intratracheal injection of lipiodol 25 c.c. by the intercricothyroid route revealed the continuing presence of geodes in the median portion of the right apex. There was a febrile reaction of 39° C. (102.2° F.) without any grave sequels, after which the expectoration appeared to be improved. The pneumothorax was still pushed, in combination with strong doses of lugol designed for absorption (15-20 c.c. of a 1 per cent solution). By the end of 3 months the patient had made an excellent recovery and was practically free from symptoms. He returns to hospital every 2 weeks for renewal of his pneumothorax, which has strongly collapsed the right lung, especially the upper lobe. While it is not contended that collapsotherapy is indicated in every case of pulmonary gangrene, it is evident that in the case described no treatment could have been more efficacious.

Linitis Plastica.—In reviewing the literature Fred C. Coe finds that linitis plastica has been considered under many and various names and has been assigned to as many and as varied etiological factors. Some writers have thought it was due to syphilis and others that it was a form of fibrocarcinoma. Ewing, with whom the author is in accord, concludes that it is a peculiar form of gastric carcinoma, probably occurring in resistant subjects and originating from cells of limited growth capacity, which pursues a chronic course and tends to spontaneous regression of the tumor process. Fibrous and mucous degeneration overtakes most of the cell colonies and in many areas the carcinomatous elements are replaced by fibrosis. In its symptoms linitis plastica does not differ from gastric carcinoma. The course of the disease is variable, the shortest time recorded being five weeks and the longest fifteen years. The disease is more common in men than in women. The age is from 30 to 60 years, the usual age periods for other forms of gastric carcinoma. The outstanding *x*-ray finding is the exceedingly rapid emptying of the barium meal. The outline of the stomach is that of a narrow inverted cone. The cardiac portion is usually not involved. The cardiac portion of the esophagus can be seen as a finger-like projection. Peristalsis in the involved area is wholly lacking and the walls are

inelastic. Linitis gastrica may easily be confused with gastric syphilis. The differentiation can only be made serologically or on section. In syphilis the stomach is not shortened as in cancer, and the motlity is normal. Coe reports three cases of linitis plastica which were definitely carcinomatous, and in two of which there were metastases to other viscera. The third patient refused to be examined by an opaque meal. When a lesion suspicious of linitis plastica is seen in the stomach, the small intestine and colon, as well as the omentum and mesentery, should be carefully scrutinized for metastases. This point has not been sufficiently emphasized in the literature.—*Southern Medical Journal,* June, 1931, xxiv, 6.

A New Treatment for Carbuncles.—The aim of a rational treatment of carbuncles, says W. Gerlach in the *Münchener medizinische Wochenschrift* of May 8, 1931, must be to increase the natural defenses of the organism, for which reason operative intervention is unphysiological. With a view, therefore, to producing hyperemia, he has for four years been using injections of a sterile solution of substances obtained from *Arnica montana.* The action of this medicament constitutes a form of irritation therapy directed specifically to the vascular system. It has nothing to do with an "internal disinfection" or with any general stimulation of the organism. The injection is made subcutaneously in the vicinity of the carbuncle, at a point at least a handbreadth away from the focus, not into it nor distributed around it. Very small amounts are sufficient to produce a reaction. The injection is not repeated until the reaction has occurred, which is usually in 24 hours, but may not be for 48 hours. When the carbuncle is already near to softening. 1 or 2 injections are enough. Where there is still a strong tendency to spread, 6 or 8 injections may be necessary, but even in such cases the toxic action is arrested after 1 or 2 injections. Immediately after the injection a brief smarting pain is experienced, which can be relieved by pressure of the finger. The sense of tension and pain in the carbuncle is promptly diminished. In a few hours the pain returns, the temperature rises, and in 24 hours the bluish color of the carbuncle is changed to bright red, extending 1 or 2 fingerbreadths into the surrounding tissue. What has happened is that the already infiltrated zone has become hyperemic and the inflammation has reached a more acute stage. Signs of segregation of the inflamed zone from the healthy tissue soon appear, usually after 2 or 3 injections. A characteristic feature is the appearance of small pustular points in the carbuncle. Injections are stopped when the abscess has come completely to the surface. If there is a tendency to bleed, simple compression will usually control it. Gerlach has used this treatment successfully in over 50 cases. Local applications of wet arnica compresses are often comforting as an adjuvant. The cosmetic results are of the very best, and the treatment has the further advantage that it can be carried out by the general practitioner at the patient's home.

Disastrous Secondary Effect After Therapeutic Use of Benzoyl Peroxide.—David J. Macht states that he has had occasion to observe an interesting case of accidental injury after use of benzoyl peroxide, which has recently been recommended by P. D. Lamson for its remarkable results in cases of poisoning from *Rhus toxicodendron.* When employed in powder form directly upon the skin lesions, it produces slight local pain and destroys the toxicodendrol by its oxidizing properties. The case here noted came under Macht's notice by virtue of his being director of a pharmacological research laboratory of a concern which manufactures benzoyl peroxide. A man who was a victim of ivy poisoning in both arms and hands had received from his physician a prescription for benzoyl peroxide, with instruction to sprinkle it on the left arm and hand and upon two fingers of the right hand, and then apply bandages. After the patient had carried out these instructions, he lit a cigarette while he was in the course of a meal, and held it between the fingers of the right hand. The bandage took fire, the benzoyl peroxide exploded and destroyed the skin and a part of the muscles of the right hand. The injuries healed in the course of a short time, but the case is of interest in view of the fact that the danger of explosion in connection with the use of benzoyl peroxide is unknown to the laity and also to a good many physicians.—*Deutsche medizinische Wochenschrift,* April 17, 1931.

Vegetables as a Source of Vitamins. — A. Scheunert draws attention to the widespread misunderstanding that prevails with regard to the effect of cooking, sterilization, and preserving upon the vitamin content of vegetables. On the basis of experiments in young rats, he asserts that vitamins A and B suffer no loss through exposure to the heating process. Fat-soluble A especially is so abundant in those vegetables that contain it and is so little affected by cooking under all conditions that it is quite unnecessary to plead for its increased use in the raw state. Water-soluble vitamin B, while insensitive to heat, may be lost to an appreciable degree by prolonged washing of the vegetables after they have been cut up, or by failure to utilize the water in which they have been boiled. Vitamin C, on the other hand, is extremely sensitive to heat and loses a considerable part of its value under ordinary conditions of household cooking, in which the vegetables are freely exposed to oxygen. But when the vitamin is subjected to long cooking by steam under air-tight conditions, such as are provided in the mass production of canning factories, it loses little of its value. Hence the question of raw or cooked food regimens has not the importance that has been claimed for it in some direc-

tions. It is of interest, however, to note that even in raw vegetables variations of vitamin content occur, according to the age of the product, the soil in which it grows, and the time of its harvesting. Thus the oxidation of vitamin C takes place in the raw state also, if the vegetables are eaten otherwise than when freshly gathered. Especially do potatoes tend to lose their rich content in vitamin C when they are kept in storage or allowed to sprout. The effect of the fertilizer employed is also of a certain importance. The only vegetable known to contain vitamin D in considerable quantity is the field mushroom, grown in the open. This vitamin was found to be still present and unaffected when the mushrooms had been canned. In general it can be said that the content in vegetables of vitamins of all kinds is by no means constant, but varies with the type of soil, the time when they are picked or dug, and the conditions under which they are kept afterwards. —*Deutsche medizinische Wochenschrift,* May 15, 1931.

Treatment of Modern Scurvy. — On the basis of his own personal observations in arctic and antarctic regions, J. B. Charcot gives an account of a type of scorbutic disease which differs somewhat from classic scurvy and to which he inclines to give the name canned meat disease, or modern scurvy. All the cases he has observed have this important common factor in the etiology, viz., that irrespective of whether the patients had or had not consumed other food containing the necessary vitamins, they had all consumed over a considerable period of time preserved meat taken from cans. The first indication of the disease consists in a slight pretibial edema; the swelling progresses, invades the legs, then the thighs, scrotum and finally the abdomen, at the same time that small red dots appear upon various parts of the body, resembling flea-bites. Sometimes extensive ecchymoses make their appearance, especially at the larger joints, and there may be deep ulcerations on the joints of the fingers. Ulceration of the gums, on the other hand, is very rare. The patient does not suffer any severe pain, but experiences extreme fatigue and exhibits symptoms of myocarditis, the pulse being subject to variations from a rate of 30 to 160 beats per minute in the same 24-hour period. Administration of antiscorbutic food does not do the least good so long as the patient continues to eat canned meat. Herein lies the difference of the disease from ordinary scurvy. Charcot first observed this modern type of scurvy in a fellow-explorer on his first antarctic trip in 1903, and cured the man by withdrawing all canned meat and putting him on a diet of humanized milk. On his second antarctic expedition in 1908-1910 he himself and another comrade both fell victims to the disease, which assumed an exaggerated form. In his own case, abstinence from canned food for 4 days was followed by disappearance of all symptoms; in 5 days his comrade was likewise cured, not even a cicatrix remaining after the extensive ulcerations healed. It appears that certain persons have an idiosyncrasy for canned meat. It remains to be learned under what conditions predisposed individuals contract the disease. Charcot has since had occasion to check up other instances of the affection in exploring parties in Greenland and in the small colony of Saint Paul. It is obviously of great importance that the knowledge of this modern scurvy or canned meat disease be disseminated among persons who plan to take long trips into desolate arctic places.—*Bulletin de l'Académie de Médecine,* May 5, 1931.

Constitutional Angiohypotony. — Andrea Ferrannini recalls that in 1903 he described a morbid picture to which he gave the name "chronic arterio-hypotension," though later he preferred "constitutional angiohypotony." During the past fifteen years this condition has been discussed under many different names, the most important being hyposphyxy, arterial hypotony, permanent arterial hypotension, hypotension, habitual hypotony, low arterial tension, and hypotony. Because of the multiplication of nomenclature the identity of this phenomenon has escaped recognition. The outstanding features of the condition are: (1) Signs of lack of tone in the arteries and veins without any corresponding lack in the heart, which in some patients and at some stages is over-excited; (2) severe disturbance in the blood supply and nutrition of the organs, especially the nervous system, kidneys, and liver (3) sclerosis in the walls of the vessels indicating the disturbance in their metabolism caused by the hypotony; (4) general weakness, vertigo, accentuated first sound in the mitral area and accentuated second sound in the aortic area, due to over-excitability of the myocardium, a tendency to displacement of the heart, acrocyanosis without general stasis, oliguria, hematuria, albuminuria, and casts; (5) general alteration in appearance and indication of the influence of general angiohypotony on the development and general metabolism of the body. The morbid picture originates in abnormal constitutional conditions, depending on intoxications and infections *in utero* or during the first years of life, which have affected the development of the body and vascular tissue particularly, especially of the adrenals, pituitary, and thyroid. The treatment should be dietetic, balneological, climatic, and endocrine, in order to tone up and detoxicate the walls of the vessels and the whole organism. The difficulty in the recognition of this constitutional picture is due to the fact that the clinician is accustomed to regard arterial hypotension as a result of myocardial insufficiency and that he automatically looks to the heart whenever he meets a case. As a matter of fact the heart may be in excellent condition and yet the tension of the vessels may be very low.—*The Lancet,* May 23, ccxx, 5621.

LEGAL

CORPORATIONS—LEGAL RESPONSIBILITY OF DIRECTORS

By LORENZ J. BROSNAN, ESQ.
Counsel, Medical Society of the State of New York

As a man of prestige and standing in the community, the doctor is frequently sought out and sometimes prevailed upon to accept the position of director of a corporation. The community has confidence in the integrity of the physician, and the addition of the doctor to the personnel of the board of directors of a corporation strengthens the standing of the board from both a financial and personal point of view.

The average man, not versed in the legal consequences of the acceptance of a directorship, may feel and very often does feel that such a position is merely one of honor and may be considered lightly so far as individual responsibility is concerned. Such a view of the consequences of accepting the position of director is highly erroneous. Not only civil liability, but criminal responsibility as well, may result to a director who stands idly by and without protest permits action to be taken which contravenes the civil or the criminal law. The Courts have made it very clear that the duty of a director is to direct, and that he will not be heard to say that he thought the position was merely an honorary one. To be sure, when things go well with the corporation and its affairs are in a prosperous condition the inactive director may lose nothing; but when controversies arise or when the organization becomes involved in straightened circumstances, the result of the failure on the part of any director to be actively concerned and interested in the affairs of the company may and often is the basis of a civil or criminal action against him.

We shall attempt in this editorial and in a subsequent one to discuss some of the legal phases of the position of director.

When a man is elected to a directorship of a corporation, he is not thereby automatically thrust into the responsibilities of the position. He is under no obligation to accept the position if it is not desired by him, and even after accepting the position, if he feels that he has not sufficient time to devote to the position he may resign at any time; nor by becoming a stockholder of a corporation does he bind himself to accept a directorship if offered to him.

Very often men are persuaded against their better judgment to accept the position of director either because of friendship for those in charge of the corporation or because of representations that the individual to whom the position is offered will be a mere "dummy" director and need not worry himself about the affairs of the corporation. It should be remembered that in legal contemplation there is no such thing as a "dummy" director. A man is either a full-fledged director with all the responsibilities that attach to that office or he is not a director at all. In attempting to justify his inaction a board member urged in one of the Courts of this State that he had been acting merely through friendship for one of the stockholders. The Court in rejecting his excuse said:

"As a director, he was chargeable with such knowledge as he gained in that capacity, or might have learned by the exercise of reasonable care. He could not blindly shut his eyes to what was transpiring about him, and shelter himself behind the claim that he was merely acting in the interest of a friend, and knew nothing of what he was doing."

Having taken the office, the Courts have laid down the general rule that a director must act in good faith, without negligence and with reasonable diligence. The rule that a director must act with reasonable diligence is, of course, a question of fact to be determined in the light of all the surrounding circumstances in any given situation. This rule of law is a reasonable rule. A director is not responsible for mere mistakes or errors of judgment if he acts in good faith within the limits of the powers conferred upon him and in the exercise of proper prudence and diligence.

Even though a director does not receive compensation for his services, he is not excused from inattention to his duties. He is not expected, upon assuming office, to possess extraordinary or exceptional ability, but the law places upon him the duty to cooperate in managing the corporation and to devote to its affairs such time as is reasonable in any given case. A director is under the duty of attending meetings of the board, and his continued absence from such meetings without good reason has been held to be evidence of lack of proper diligence. It is well settled that inaction on the part of a director may be held to constitute such gross inattention and unconcern for the corporate affairs as to charge the director with legal responsibility for losses to the corporation caused by such neglect.

Not only from the standpoint of civil liability should a director be alert and active, but it may

be seen from a study of our penal statutes that even criminal responsibility may result from inaction on his part. The law makes a number of wilful improper acts of omission or commission punishable as crimes, and then adds a section which provides in effect that a corporate director is deemed to have knowledge of the affairs of the corporation. Then follows a provision which places responsibility upon directors who fail to attend meetings. This section reads as follows:

"If absent from such meeting, he must be deemed to have concurred in any such violation, if the facts constituting such violation appear on the record or minutes of the proceedings of the board of directors, and he remains a director of the corporation for six months thereafter without causing or in writing requiring his dissent from such violation to be entered on such record of minutes."

In the case of a banking corporation the duty that falls upon a director is much greater. The State very properly takes a direct interest in the welfare of the depositors and clients of our banking institutions. Our penal law says that when an insolvency occurs in an institution of this kind an affirmative duty rests upon the directors, if they are to escape criminal responsibility, of proving that the insolvency was not due to any act or omission on their part. Recently the Court of Appeals was called upon to pass upon the validity of a section of the penal law under which certain indictments had been found for the crime of participating as directors in the fraudulent insolvency of a moneyed corporation. The Court summarized the effect of the statute under which the prosecution was proceeding as follows:

"The insolvency of a moneyed corporation is fraudulent unless its affairs have been administered by its directors fairly, legally and with the same care and diligence that agents receiving a compensation for their services would be bound to observe, and the burden of proof shall be on a director, when insolvency is proved, to show that it was not fraudulent or that he did not participate in the fraud."

In holding that the statute was valid, the Court said:

"The statute appeals to common-law standards of diligence and duty standards to which business men and fiduciaries have accommodated themselves for centuries. It gives warning to directors that they must manage the affairs of a moneyed corporation fairly and legally, and with the same care and diligence that is owing from paid agents, and that if they fail to do this, and by reason of such omission insolvency supervenes, they will be guilty of a misdemeanor. 'Fairly' we interpret as meaning 'in good faith.' * * *

"The test established by the statute, the diligence that is expected of agents in receipt of compensation for their services, is a legislative recognition of a standard of diligence long known to the common law. The diligent director is the one who exhibits in the performance of his trust 'the same degree of care and prudence that men prompted by self-interest generally exercise in their own affairs.' * * *

"The Legislature has said that insolvency shall be classified as fraudulent unless there shall be good faith and obedience to the law and reasonable diligence. The prosecution is not required to prove the absence of all these elements. If that were the requirement, a different conclusion would be necessary. The prosecution prevails (according to the letter of the statute) if it proves the absence of any one of them. This being the definition, the only consequence of eliminating the element of good faith or even the element of compliance with the law is not to increase the defendant's burden but rather to reduce it. By the statute as enacted a threefold standard is prescribed. By the statute as divided the Legislature is deemed to say that if one or more of the standards be rejected as indefinite, the proof shall be confined to the one that satisfies the test of certainty. We are to figure the situation as it will exist at the conclusion of the trial. Let us assume that the People shall succeed in proving that the insolvency is the consequence of a failure on the part of the defendants to direct the affairs of the bank with reasonable diligence. Is it conceivable that the Legislature would have wished such a prosecution to fail because the jury must be told that if due diligence has been exercised, guilt may not be found for transgression of a vague command to run the business 'fairly'? The question carries its own answer."

It cannot be too strongly emphasized that before a physician accepts the position of a director in any corporation, he should be fully aware of the responsibilities that attach to that office. He should carefully consider whether the press of his professional duties will preclude him from accepting such post, but once having accepted it becomes his duty to participate actively as a director. Do not accept the post on the glib representation that you will be a mere "dummy" director or that you need not worry about the affairs of the corporation. Do not permit yourself to be lulled into a sense of false security by the fact that those running the corporation may be your friends. Keep before you always the admonition of our Court of Appeals: "The duty of a director is to direct."

ALLEGED NEGLIGENT TONSILLECTOMY

In this case a young woman consulted the doctor, a specialist in ear, nose and throat cases, complaining of ear trouble. The doctor examined her ear and found that she had otitis media and a catarrhal condition of the left ear. The right ear was purulent, having a central perforation. Also her tonsils were badly diseased and atrophied.

The doctor suggested the removal of the tonsils before anything be done to the ears. To this the patient consented and arrangements were made by which she entered a hospital, and there, under a local anaesthetic, the doctor removed both tonsils. The operation was uneventful and after a confinement of two days in the hospital the patient went home.

She then returned to the doctor's office about once a week for the next ten weeks and each time he irrigated her ears and inserted medications into the ears by applicator. After the said ten visits the doctor heard nothing of the patient for several months, until one day she came to his office and told him she had consulted another doctor who had informed her that a portion of her tonsils had not been removed. The doctor examined her throat and found that the tonsils were completely out and that nothing had grown into the space, but that muscle had worked up a little at the tonsil cavity and that there was a nodule about the size of a pea in the tonsil cavity. This was not diseased and was causing no trouble, but the doctor nevertheless suggested that she allow him to cauterize it. The patient would not consent to be treated that day, but said she would return later. At the time of this visit the doctor noted that her ears had improved but were not entirely healed.

The next the doctor heard of the case was when suit was instituted against him alleging that the defendant did not use proper care and skill in operating upon the plaintiff and removed only a small portion of the tonsils; and succeeded only in scraping and injuring the uppermost portion of the plaintiff's tonsils. The complaint further alleged that as a result the tissues covering and surrounding the plaintiff's tonsils subsequently hardened, making it imperative for the plaintiff to undergo a new operation for the removal of her tonsils, and that as a result of such hardening of the tissues the subsequent operation was especially difficult and painful.

The case was duly brought on for trial before a judge and jury and at the close of the entire case the jury rendered a verdict in favor of the defendant and against the plaintiff.

ALLEGED NEGLIGENT DIATHERMIC TREATMENT

The defendant in this case, a doctor specializing in ear, nose and throat diseases, was consulted by a young woman complaining of headaches. He examined her and found she was suffering from spheno-palatine ganglion irritations. The doctor applied on a swab a 10 per cent solution of cocaine in the ganglion through the nostrils, leaving the cotton in place for twenty minutes before removing it. The patient returned two days later, and appeared to be markedly better but still complained of pain over the frontal sinuses. The doctor then decided to give her diathermic treatment which was administered at his direction by a nurse. The patient was seated in a chair, and a sponge soaked in soap suds was laid on her forehead and held there by an elastic bandage. This was attached to a wire from the diathermic machine. The patient was caused to take hold of a metal rod with her bare hands, which was also attached to the machine, and then the current was turned on. The patient was instructed that if she felt it was getting too warm or if she felt any annoyance to say so and let go of the bar. The patient made no complaint but took a twenty minute 400 M.A. treatment in the usual way, and then went home.

Three days later she came back and the doctor found she had two blebs on her forehead, although at the end of the treatment no redness or indication of burn had been observed. The doctor pricked the blebs, dressed them with a Burrow's solution, and put on a bandage. The doctor called on her daily thereafter for about two weeks and each time applied the wet dressings. There was a sloughing, and when the doctor last saw the patient about a month after the diathermic treatment, the wounds were entirely healed, but there were two small scars on the forehead.

Some time later a suit was started against the doctor charging malpractice in causing the burns, claiming that permanent scars had resulted and that her nervous system had been seriously affected. The action was brought on and was tried twice. The first trial resulted in a dismissal of the complaint at the close of the plaintiff's case. From the judgment entered on that ruling the plaintiff took an appeal, and the Appellate Division ordered a new trial on the grounds that the plaintiff's evidence uncontroverted by the defendant was sufficient to justify a finding of negligence. The suit was retried, and the whole case sent to the jury, who returned with a verdict for the defendant, thereby exonerating him of the charges of malpractice.

NEWS NOTES

COMMITTEE ON PUBLIC RELATIONS

A stated meeting of the Public Relations Committee was held in the Albany office on Tuesday, June 30th, 1931. There were present Doctors Sadlier, Chairman; Fisher, Mitchell, Hambrook, Ross, Johnson, Farmer, and Lawrence.

Lectures to Medical Students: Dr. Sadlier reported that four medical schools had replied to the letter which he had written suggesting that they provide some facilities for acquainting the students before they graduate with the provisions of the new public welfare law. Three of these had requested that Dr. Sadlier provide a lecturer upon the subject. The committee did not think it wise to make a selection, and voted that the chairman should accept the invitation and appoint a lecturer at his pleasure.

Druggists Practising Medicine: Dr. Lawrence reported that the anonymous letter which had been read at the last meeting, containing information concerning the practice of medicine by druggists in New York City and referred to the Five County Coordinating Committee for attention, was referred by them to Dr. Rypins for action. In a response from him he asked for additional information, especially such data as he learned had been collected by investigators of the American Social Hygiene Association. The committee will see that the report of those investigators is put at his disposal.

Illegal Practitioners: Dr. Johnson stated that frequently physicians have asked him what use is being made of the two-dollar registration fee collected annually. These physicians think that the Department of Education could do more with its investigators in the way of discovering and convicting illegal practitioners than is being done at present. Other members of the committee agreed with the observations made by Dr. Johnson, and felt that probably an undue share of attention is being given to New York City, while certain up-state sections are being neglected.

Governor's Health Commission: The committee authorized its Chairman, Dr. J. E. Sadlier, to confer with Dr. Thomas P. Farmer, Chairman of the Committee on Public Health and Medical Education, in regard to carrying out the recommendation made by the House of Delegates, on June first, as follows (see this Journal, July 1, page 828):

"That the House of Delegates instruct the Committee on Public Health and the Committee on Public Relations to study the report of the Governor's Commission, and to make recommendations on all or any of the subjects presented; and that the said Committee report its recommendations to the House of Delegates not later than January, 1932; and that the Council in its wisdom refer this to the House of Delegates either by a special meeting or by referendum of the House. Prior to any action by the House of Delegates a copy of the report shall be submitted to each component county society."

It was informally decided that Chairman Sadlier should give each member of the committee certain portions of the Commission's report to study. It was also decided to invite suggestions from the county societies, and, if necessary, to hold hearings in parts of the State where the county societies desired. (Page 974.)

Public Health Nurse: The influence of the public health nurse as a creator of public opinion was discussed, and it was generally agreed that she has unusual opportunity, and probably greater effort should be made to assist her to bring medical matters properly before the public. Physicians who are entrusted with the care of directing the activities of the public health nurses should keep themselves well informed as to the programs of publicity the nurses are charged with, so that the private physician may not be overlooked as a health agency. It was reported that in many instances the nurses are directing people to seek medical services at public clinics rather than from the family physician. It was also reported from certain counties that public health nurses occasionally undertake to treat patients. These reports dealt particularly with the administration of anti-toxin and toxin- anti-toxin. One report stated that a nurse, at the direction of a health officer, administered anti-toxin to a patient never seen by the health officer. His knowledge of the presence of diphtheria had been received from a report submitted by the laboratory of positive findings. According to law, the laboratory informs the health officer in each district of the positive findings made upon specimens submitted by physicians from patients in his district. In this instance the family physician called as soon as he received the report from the laboratory, but found that the nurse had preceded him and treated the patient. It was the sentiment of the committee that the health officer and nurse had violated the Medical Practice Act in this instance.

Cattaraugus County: A report was received from Cattaraugus County to the effect that a doctor had recently been employed by the County Department of Health as director of maternity, infancy and child hygiene. The physicians

learned first about the matter when the director arrived in the county and began his work. The committee regretted to hear that the county society had been overlooked in a matter of such importance, because it felt that there had been a general agreement between the promoters of the health demonstration and the Committee on Public Relations that no innovation affecting the practice of medicine should be undertaken in any county without the matter would first be presented to the physicians of the county through their Society. The chairman was asked to make an immediate investigation of this matter, and to ascertain why the county society had not been consulted.

Monroe County Society Program: The Committee's attention was called to the elaborate program being developed by the Monroe County Medical Society, looking to effective cooperation of all public health agencies operating in the county, and to the development of an extensive periodic health examination campaign.

J. S. LAWRENCE,
Executive Officer.

STUDY OF HEALTH COMMISSION

The following letter is being sent to the officers of every County Medical Society in New York State:

Dear Doctor:

At the annual meeting of the Medical Society of the State of New York on June 1st in Syracuse, the House of Delegates instructed the Committee on Public Health and the Committee on Public Relations to study the report of the Governor's Special Health Commission, to make recommendations on all or any subjects presented, and to report their recommendations to the House of Delegates not later than January 1, 1932.

Both committees have begun the study, and wish your County Society to know that they are ready to receive for consideration any matter relating to the report which you think should properly come before them. Because of the magnitude of the task imposed upon the committees and because of the lack of clerical assistance, it would facilitate matters greatly if such comments as your County Society wishes to submit be placed in writing, preferably in the form of an abstract.

It is the intention of the joint committee to hold hearings at different places in the state in order that representatives of County Societies who may prefer to appear personally before the committee and discuss particular features of the report in which they have a definite interest, may have such opportunity. Dates and places of these hearings will be announced later.

In the meantime, all communications relating to the work of this joint committee should be addressed to Dr. Joseph S. Lawrence, Executive Officer of the State Society, 100 State Street, Albany, N. Y.

Yours very truly,

THOMAS P. FARMER, *Chairman, Committee on Public Health.*

JAMES E. SADLIER, *Chairman, Committee on Public Relations.*

HEALTH OFFICERS AND COUNTY HEALTH UNITS

The New York State Sanitary Officers Association held a lengthy discussion of the subject of County Health Departments at its annual meeting held in Saratoga Springs on June 30 and July 1 (see this Journal of July 1, pages 909 and 922), and asserted its policy by adopting the following resolution introduced by Dr. Leo F. Schiff, of Plattsburg:

"The New York State Sanitary Officers Association recognizes the benefits to be derived both from an administrative standpoint and for the betterment of public health in rural areas, by the establishment of County Health Units throughout the State.

"We are cognizant of the difficulties of health administration through some one thousand local units, many of them very small; and of the advantages of concentrating administration into a smaller number of larger units.

"We realize that the establishment of County Units will in most cases provide units large enough to carry on an efficient health program in the rural areas. We feel that it would be wiser to attempt to secure county health administration with as little disturbance as possible of the local administration, rather than to attempt to remodel the entire structure of local health administration at one time, for the following reasons:

"1. Local conditions vary considerably in the various counties of this State. No one plan that can be devised will suit all equally.

"2. Many of the present units, though small, are functioning efficiently at the present time.

"We further feel that the concern of the State

Department of Health, both as to concentration of administration and extension of the public health program to rural areas, can be satisfied by the establishment of county health districts without reference to the internal structure of these districts.

"In view of the foregoing, we favor such changes in the Public Health Law as will accomplish the following objects:

"1. The appointment in all counties of a Board of Health, a majority of whose members shall be physicians; excepting that some special provision may be made for the smaller and less wealthy counties, and for the larger cities, towns, villages, and districts which are already well organized.

"2. The appointment of a full-time County Health Officer in each such district by the County Board of Health.

"3. Make permissible but not mandatory the rearrangement of the present structure of health administration within county boundaries.

"4. Providing that all health districts within the territorial jurisdiction of the County Board of Health be responsible to the County Health Officer.

"5. Providing that the County Health Officers and such City Health Officers as are excluded from the county system, shall have complete jurisdiction in their respective territory subject to the advice and supervision of the State Health Department.

"BE IT RESOLVED, that the President of this Association appoint a committee which shall be, and is hereby empowered to take such steps as they may deem advisable to secure the legislative action necessary to carry out the foregoing principles at the next session of the legislature."

All the officers of the Association were re-elected as follows:

President: Dr. Walter Leonard, Cambridge, N. Y.

Vice-President: Dr. M. M. Metz, Williamsville, N. Y.

Second Vice-President: Dr. W. H. Runcie, Freeport, N. Y.

Third Vice-President: Dr. Alexander L. Johnson, Gloversville, N. Y.

Treasurer: Dr. J. W. Crews, Pittsford, N. Y.

Secretary: Dr. Guy H. Turrell, Smithtown Branch, N. Y.

These officers constitute the Executive Committee of the Association.

The members of the Legislative Committee were re-elected as follows:

G. Massilon Lewis, M.D., Vernon, N. Y.; James W. Wiltse, M.D., Albany, N. Y.; Frances E. Fronczac, M.D., Buffalo, N. Y.; William H. Conger, M.D., Poughkeepsie, N. Y.; Arthur D. Jaques, M.D., Lynbrook, L. I.; Hugh H. Shaw, M.D., Utica, N. Y.; Chalmer J. Longstreet, M.D., Binghamton, N. Y.; George E. Ellis, M.D., Dunkirk, N. Y.; William Van Doren, M.D., Mechanicville, N. Y.; James H. Flynn, M.D., Troy, N. Y.; Ralph W. Thompson, M.D., Cornwall-on-Hudson, N. Y.; Leo F. Schiff, M.D., Plattsburg, N. Y.

THE SECOND DISTRICT BRANCH MEETING

An Announcement by the President

The Second District Branch of the Medical Society of the State of New York is composed of the four county societies on Long Island—Kings, Queens, Nassau and Suffolk. It represents a membership of nearly 3,500 physicians, or almost one-fourth of the entire membership of The Medical Society of the State of New York. Geographically it forms a complete unit with common interests, and with boundaries sharply defined by water. Practically it should be the strongest District Branch in New York State.

The officers of the Second District Branch are working hard and putting forth every effort to make this a successful year, and they expect every physician on Long Island to do his part. Therefore start now and reserve the afternoon and evening of November 19, 1931, as the date for the next meeting of the Second District Branch, which will be held in Brooklyn. An excellent program is being arranged—a scientific session in the afternoon, followed by a dinner with speakers of reputation and interest. Doctor William D. Johnson, President of the State Society, as well as other State Society Officers and Chairmen of Committees will be present. Reserve the date now, and do not allow anything to prevent you from attending the largest and best medical meeting which will be held on Long Island this year.

The District Branch is the middle ground between the County Societies and the State Society, and its meetings afford opportunities for the discussion of the broader phases of the practice of medicine, and for a consideration of the future outlook of medicine. We cannot continue the practice of medicine in the same manner as it was practiced a generation ago. The world and civilization have changed, and are constantly changing. New inventions and new medical dis-

coveries make living and social conditions different. Therefore we as a profession must change to meet the new conditions, and above all we must maintain a leadership in all medical activities. This can only be accomplished by an ever-increasing interest in our County Medical Societies, our District Branch Societies, and our State Society.

LOUIS A. VAN KLEECK,
President Second District Branch.

MEDICAL ECONOMICS

The vigorous work of the Committee on Medical Economics last year under the leadership of Dr. George F. Chandler of Kingston has inspired the new committee to plan new accomplishments. While attempting to "carry on" and to further the cooperation with Insurance Carriers in the care of Compensation Law cases, we are hoping to add to the Committee's field of activity in such a manner as will bring to the Medical Society of the State of New York a record for constructive idealism in economic affairs as related to our profession.

The primary essential feature of the Practice of Medicine is the relation of Physician and Patient. This relation has suffered many modifications and complications as a result of various influences operative in recent years. Complexity of social and business conditions; the increasing employment of physicians in public service, in industrial life, in insurance, in public health work, and in hospital administration; the ramifications and abuses of medical charities; the kindly and conscientious interest of foundations in working out scientific problems and providing practical means of enlarging work to promote public health; new laws providing for increased activity of States in public health and sometimes in branches of clinical practice; the increasing tendency of States and even of the Federal Government toward paternalism; the heated magazine propaganda and the publication of books attacking the medical profession for the shortcomings or greediness of the few; the urging of state medicine as the best medical policy; the appointments of lay politicians to newly-made (and old) positions in the public service which can only be competently filled by doctors of medicine; the increase of negligence claim cases; the practice of the medical arts by corporations; the increased number of physicians limiting their work to specialties of varying breadth; the variegated types of hospitals and clinics; so-called "Group practice"; "Medical clubs"; the encroachment upon some types of practice by unlicensed persons—as nurses (anesthesia and industrial clinic work), and physiological chemists (in diagnostic laboratories); the practice of "Fee-splitting" by a certain percentage of the profession; the elaborate costs of equipment and transportation; the advances of therapeutic propaganda by manufacturers of remedies; the gratuitous study of the cost of medical care by a self-constituted commission with generous financial backing; all of these and other influences have modified and complicated the relation of physician and patient.

Your committee starts its work by assuming that all sane "Medical economics" should be built upon two basic principles—service of high quality, and a reasonable compensation for the worker. We assume also that there have been reasons for the development of all of the above mentioned factors (and many more) which have modified and complicated modern practice, often with injustice to the physician, quite as often with injustice to the patient or the public.

A survey of all of the fields of activity occupied by physicians and of all of the economic relations of the profession seems to be needed. Such a survey cannot be accomplished by a committee of the few. Some of the constituent County Societies have local Committees on Medical Economics. We shall need their assistance and urge their cordial and prompt cooperation in our survey. In those county societies where no such standing or special committees exist we request the early appointment of such committees, to be ready to cooperate with us.

We must first know *the facts.* In the Empire State what one, five, or ten men can find all of the facts? Our State is large. Communities vary in size and in the character and the conduct of lives and in medical practice as related to those lives. Hence the need of widespread assistance in any comprehensive survey.

When the facts are in hand, classified, and tabulated—a careful study can be made. Such a study, thoughtfully conducted, should lead to recommendations and perhaps laws, which would benefit all of the people and lead to increased and deserved confidence in our profession.

CHARLES H. GOODRICH, *Chairman.*

ANSWERING MEDICAL LICENSING EXAMINATION QUESTIONS

Dr. Paul B. Brooks, a member of the New York State Board of Medical Examiners, after rating several hundred hygiene papers following a recent licensing examination, has asked the Journal to print the following practical suggestions and requests that physicians pass them on to future candidates in whom they are interested:

"Be sure you understand the questions. Devote more time to thinking, and less to writing.

"Answer questions fully, but also briefly and concisely. If you know the answers, few words will be required, as a rule.

"Don't throw in information not called for. It makes extra work for the examiner and may be incorrect.

"Don't attempt to conceal ignorance in a mass of useless verbiage. It can't be done.

"Use simple language. Don't try to make an impression by using big words or referring to personal experiences, as "On my service at the Blank Hospital, we, etc." If you make an impression, it may not be the sort you are hoping for.

"Remember that an examiner with a large number of papers to rate does not want to waste time "digging around" in an effort to find out whether or not the candidate really knows the answers.

"The purpose of licensing examinations is not to determine whether or not the candidate knows the answers to certain questions, but rather to ascertain whether or not he is capable of practicing medicine intelligently."

ALBANY COUNTY

The May meeting of the Medical Society of the County of Albany was held at the Laboratory of the New York State Department of Health on Manday evening, May 18, 1931.

The Society went on record as not accepting responsibility for pre-school clinics in Albany County, but would be glad to see such work continued as in the past inasmuch as it does not interfere with private practice. The Secretary was instructed to inform the State Department of Health of our attitude in this matter.

Dr. Arthur M. Dickinson read resolutions on the death of our late member, Dr. Wesley A. VanDeusen. These resolutions were accepted and spread upon our minutes and a copy sent to the family of the deceased.

The Scientific Program was furnished by the Laboratory Staff of the New York State Department of Health and consisted of the following interesting papers:

The Laboratory Service of the State, by Augustus Wadsworth.

"Undulant Fever," by Ruth Gilbert.

"Recent Studies Relating to Diphtheria," by Mary B. Kirkbride.

"Problems in Serum Therapy," by Augustus Wadsworth.

Following presentations of formal papers demonstations were held in various departments of the Laboratory.

Visitors were present from Troy, Schenectady, Amsterdam, and other surrounding counties.

Through the courtesy of Dr. Wadsworth a light luncheon was served following the meeting.

The total attendance at this meeting was about 130.

HOLMER L. NELMS,
Secretary.

GREENE COUNTY

The regular July meeting of the Greene County Medical Society was held at the Mountain House at Haines Falls on Tuesday evening, July 14th, with the President, Dr. M. H. Atkinson, in the chair. A dinner preceded the meeting, many of the members having brought their wives and other members of their families to this famous mountain resort.

Dr. Thomas Earl McQuade of Coxsackie was elected to membership.

Dr. Stuart B. Blakely of Binghamton, N. Y., delivered a most interesting address on Personal Experiences in Soviet Russia with particular reference to obstetrics. This address was something out of the usual and was most instructive, Dr. Blakely having visited Russia at two different times.

Dr. James E. Sadlier, of Poughkeepsie, Chairman of the Public Relations Committee of the State Medical Society, made clear the work of the State Committee, and urged the active support of the County Society Committee.

The following nominations were presented by the nominating committee for election at the annual meeting in October:

For President—I. E. Van Hoesen of Coxsackie.

For Vice-President—Kenneth Bott of Greenville.

For Secretary—William M. Rapp of Catskill.

For Treasurer—M. H. Atkinson of Catskill.

For Ch. Legislative Comm.—P. G. Waller of New Baltimore.

For Ch. Pub. Health and Pub. Relations—A. B. Daley of Athens.

For Delegate to State Soc.—F. W. Goodrich of Catskill.

For Alternate—R. E. Persons of Cairo.

For Delegate to 3rd Dist. Br.—W. M. Rapp of Catskill.

For Alternate—L. B. Honeyford of Catskill.

Dr. A. B. Daley, of Athens, Chairman of the Committee on Public Relations, reported the results of a recent conference of his committee with the Public Health Nursing Committee of the Board of Supervisors, and stated that this Nursing Committee had proposed that the Medical Society of Greene County formulate a working plan for the cooperation of the two committees. Dr. Daley was instructed to have the Public Relations Committee formulate a plan and submit it to the County Society for approval, and then to submit it to the Public Health Nursing Committee.

WILLIAM M. RAPP, *Secretary.*

ERIE COUNTY RADIO TALKS

The Erie County Medical Society will continue the program of radiograms which were described in this Journal of February 15, 1930, page 236, and the issue of November 1, 1930, page 1308. The Society has a Committee on Radio Health Talks consisting of twenty-three members, of which Dr. H. G. Johnson is chairman. The Committee has issued the following circular letter to the members of the County Society:

"The Medical Society of the County of Erie has instituted a new method of Radio Broadcasting, beginning July 1, 1931. The program will be given over Station WGR, Buffalo, from 5:45 to 5:55 every Monday, Wednesday and Thursday afternoon.

"The subject matter will be presented in a popular manner, and it is hoped you may be able to interest your patients in becoming constant listeners to these talks on preventive medicine.

"Pursuant to a vote of the Society at the May meeting, two physicians with suitable radio voice have been engaged for this feature of medical education of the public. There will be no announcement of the name of the doctor who is speaking. This is a radical departure from the previous system, and it is the sincere hope of the Committee that you will cooperate with the Society by interesting yourself and your patients in these broadcasts as a means of improving community health.

"A copy of the program for the next two months is enclosed. May we ask that you hang it in a conspicuous place in your waiting room.

"Your suggestions and criticisms will be appreciated."

The program is printed on a card, perforated for hanging in the doctor's office, and reads as follows:

JULY 1—"How Are You."

JULY 2—"Casualties of the 4th of July."

JULY 6—"What You Don't Know."

JULY 8—"The Unseen World."

JULY 9—"Concerning Germs."

JULY 13—"The Romance of Vaccination."

JULY 15—"The Romance of Vaccination."

JULY 16—"The Romance of Vaccination."

JULY 20—"This Matter of Reducing."

JULY 22—"This Matter of Reducing."

JULY 23—"This Matter of Reducing."

JULY 27—"Dame Nature's School."

JULY 29—"Sanitation of Automobile Tourists' Camps."

JULY 30—"Some General Dietary Hints."

AUG. 3—"Hot Weather Suggestions."

AUG. 5—"The Way of the Vegetarian."

AUG. 6—"What's the Matter With My Nose and Throat."

AUG. 10—"The Prevention of Hay Fever and Asthma."

AUG. 12—"Little Glands with Big Jobs."

AUG. 13—"Little Glands with Big Jobs."

AUG. 17—"The Genealogy of a Germ."

AUG. 19—"The Unseen Enemies of Children's Health."

AUG. 20—"The Unseen Enemies of Children's Health."

AUG. 24—"The Truth Shall Make You Free."

AUG. 26—"Smith in Search of Health."

AUG. 27—"Smith in Search of Health."

AUG. 31—"Why a Child Is Always Hungry."

THE DAILY PRESS

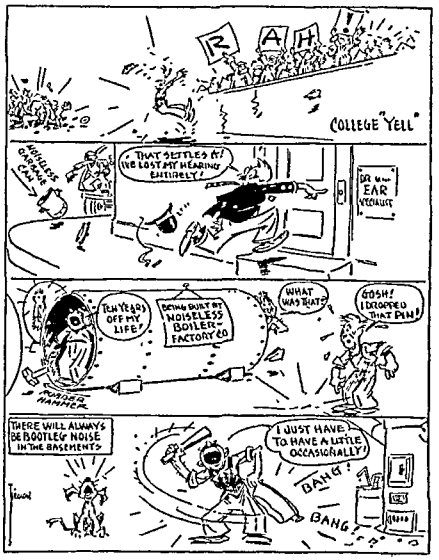
ASH CAN NOISE

The New York City newspapers of July first carried many accounts of the official tests of a new silencer for ashcans. The *Herald Tribune* said editorially:

"We feel a shy relief that the ultra-modern, rubber-tired ashcans tried out by the city's noise experts failed of their purpose. One rubber-tired ashcan bounced so merrily that it fell over on its unrubbered side, making more noise than the common or back-yard variety. Another, apparently excited by the unwonted competition, shed its rubber clothes completely and reverted to its natural noisy normalcy. The net result of the experiment was the super-scientific deduction that a noiseless ashcan is precisely five pin-drops more silent than a creaking can of the old-fashioned species.

"So, for the present at least, ashcans are still ashcans. Just as the subway is still the subway, and steam riveting is still steam riveting. New York is still New York. We are content; if all the din disappeared, if ashcans were gentle and even the air were sifted, what excuse would be left for fleeing to the country each week-end?"

The items on noise abatement carried by the New York dailies have been unusually well written. They compel attention by their intrinsic interest, and their content is scientific and truthful. Even the cartoons are editorials.



From the N. Y. Herald Tribune, July 9, 1931

THE NEGRO METROPOLIS

The *New York Herald Tribune* of July 7 has an editorial on the negro metropolis of the world which it locates on the northern end of Manhattan Island with its 225,000 negro population. The editorial says:

"Harlem is a mushroom growth, but the New York negro looks back with pride on a long participation in the history of Manhattan Island. Eleven negroes landed in New Amsterdam in the first year of its colonization, 1626; and by the end of that century 2,170 negroes lived in New York—5 per cent of its population. It was a free negro, Samuel Fraunces, who gave his name to Fraunces' Tavern, where General Washington dined and where New Yorkers are proud to eat today. New York City had free schools for negroes before it had free schools for whites. And in recent years New York has been the home of many of those superb negro artists who have written new chapters in the history of art in America—men like Charles Gilpin, who won his fame here in "The Emperor Jones"; Richard Harrison, whose Lord God Jehovah has startled onlookers at "The Green Pastures"; Countee Cullen and Langston Hughes and James Weldon Johnson and other poets and novelists; singers like Roland Hayes and Paul Robeson, scores of others known wherever the international language of art and music reach.

"To such men Harlem is, or has been, home; and New York is to negroes all over the world today something of what Rome was to the old Roman world and Athens in its heyday to Greater Greece. To some New Yorkers "Harlem" still means only a region of dark-skinned night clubs and a lodging-house for elevator boys and household servants; others are proudly aware that Harlem is the capital of a race and the seat of a culture."

The writer might also have commented favorably on the negro physicians of whom over two hundred are practicing scientific medicine in Greater New York.

AGES OF THE NEW YORK CITY DWELLERS

The ages of the people must be considered in comparing one city or country with another. The tendency is for parents with small children to live in the rural suburbs and to commute to their work in the city; and for people beyond the working age also to live in rural districts on account of the increased comfort and decreased cost of living. Thus it happens that New York has become a city with persons in the vigor of their manhood, while the babies and old people live elsewhere. The New York *Times* of July 15, commenting on these ages, says:

"A decrease in the number of small children in New York City is one of several striking facts revealed in data concerning the ages of residents of the city, made public today by the Census Bureau. The number of children in the city under the age of 5 years was 560,869 in 1920 and 535,600 in 1930, a decline of 25,269.

The number of children under one year of age was 108,908 in 1920 while the total in 1930 was only 100,398.

"All other age groups showed increases during the decade.

"Speaking in a general way New York is a city of youth.

"Of the total population of the city, 24.3 per cent are under 15; 18.5 per cent are from 15 to 24; 35.8 per cent are from 25 to 44; 17.3 per cent are from 45 to 64 and 3.9 per cent are 65 and over.

"By combining groups it is made plain that three-fourths of the inhabitants of the city are under 44 years of age.

"The number in the various age groups are as follows:

Age	1930	1920
Under 5	535,600	560,869
Under 1	100,398	108,908
5 to 9	577,284	536,490
10 to 14	575,300	494,867
15 to 19	599,286	453,758
20 to 24	687,417	545,650
25 to 29	695,984	575,915
30 to 34	649,576	513,204
35 to 44	1,139,836	853,636
45 to 54	762,870	585,683
55 to 64	436,804	315,930
65 to 74	204,683	130,950
75 and over	59,820	45,281
Unknown	5,986	7,805

"On a percentage basis, persons in the age groups from 15 to 24 years and from 30 years upward represented a larger proportion of the total population in 1930 than in 1920, while for those in the age groups under 15 years and from 25 to 29 years the proportion was smaller than in 1920."

MAGICIANS FIGHT FORTUNE TELLERS

Magicians are legitimate entertainers who perform mystifying tricks, but disclaim any mystical or super-human power. They are scientists who seek to expose deceit in fortune tellers and others like them. The New York *Times* of July 15 has the following account of the offer made by the magicians to help expose the fortune telling fakers:

"What was described as the first step in an aggressive campaign to rid the city of fortune tellers, palmists, numerologists, soothsayers, clairvoyants, mediums and similar quacks was taken yesterday when Julian P. Proskauer, trustee of the Society of American Magicians, sent a letter to Police Commissioner Mulrooney offering the cooperation of the organization in discovering and prosecuting such persons.

"According to John Mulholland, first vice-president of the society, which for the last year has been conducting an educational campaign against fortune tellers, the organization was aroused by the recent suicide in Chicago of Mrs. Sarah Koestner, which was induced, news dispatches indicated, by the ominous predictions of a fortune teller.

" 'Fortune tellers and their kind break up more homes in the United States than any other one cause,' Mr. Mulholland, who has studied the machinations of the quacks for ten years, explained. 'People only go to such persons to get answers to two questions; questions about love and money. Fortune tellers have found that plain matter of fact answers do not interest their clients, so they tell them their wife or husband is interested in some other person and thus sow the seeds of jealousy, or else they predict some dire happenings.

" 'The public pays an annual fee of $125,000,000 to these racketeers, of which about $25,000,000 is spent in New York City, while the Chicago soothsayers receive annually about $10,000,000. There are about 125,000 of their breed in the United States, about half of whom are in New York.' "

BOOK REVIEWS

THE TREATMENT OF CHILDREN'S DISEASES with special formulas and drugs for childhood, and a short diagnostic summary of each clinical picture. By Prof. Dr. F. Lust. Authorized translation of the sixth German edition with additions by Sandor A. Levinsohn, M.D., Octavo of 513 pages. Philadelphia and London, J. B. Lippincott Company, 1930. Cloth, $8.00.

The reviewer can find very little in this book, either as a text or reference work, that deserves his recommendation.

The translator deserves great credit for his corrective footnotes. He would have done better had he omitted the author's treatment and substituted his own instead. The chapter on Appendicitis, is not only obsolete but if the method, the book teaches its readers to follow, were adopted, in the majority of cases, would prove disastrous to patient and Pediatrician alike.

The article on Diphtheria is not worthy of a modern work. The treatment of Hypertrophied Tonsils is twenty-five years behind the present times and accepted methods of to-day. The reviewer finds it very unpleasant to give this unhappy criticism of a work by which the translator has done so well and for which he deserves great credit.

HARRY APFEL.

ABNORMAL PSYCHOLOGY: Its Concepts and Theories. By H. L. HOLLINGWORTH, Ph.D. Octavo of 590 pages. New York, The Ronald Press Company, 1930. Cloth, $4.50. (Psychology Series.)

This book by Hollingworth will interest the average family physician. It gives a comprehensive review of defectiveness, the neuroses and psychoses. The writer, who has been a teacher at Columbia University for years, is known as a very close student of his subject. There is little else except praise to say of his book, excepting this: He has not drawn as fully as he might have from the psychoanalytic literature. He gives too much credence to Rosanoff's views on hysteria, which are not accepted by many psychiatrists. His failure to refer to workers like William Healy and Paul Schilder will probably be corrected in a later volume.

J. F. W. MEAGHER.

A SYSTEM OF BACTERIOLOGY IN RELATION TO MEDICINE. By Various Authors. (Prepared under the direction of the Medical Research Council.) Volume VI. Octavo of 538 pages. London, His Majesty's Stationery Office, 1931. Cloth, £8-8-0 a set; £1-1-0 each.

The entire volume of 535 pages is devoted to the subject of immunity. This, of course, makes possible a more detailed and extended discussion than is given in the usual texts on bacteriology. The various phases of immunity are presented in chapters on natural immunity, active immunization with toxin, antigens and antibodies, hemolysis, complement, opsonins, agglutination, precipitation, ferments, allergy and finally the relation of colloids to immunity and a short chapter on chemotherapy. In each chapter all important research on that subject from the beginning to the present time is summarized. In certain branches the volume of research has been very large. For example, the discussion of antitoxin covers 80 pages.

This is an excellent reference work on one of the most complicated subjects in medicine. E. B. SMITH.

AN INTRODUCTION TO PRACTICAL BACTERIOLOGY: A Guide to Bacteriological Laboratory Work. By T. J. MACKIE, M.D., D.P.H., and J. E. MCCARTNEY, M.D., D.Sc. Third edition. 12mo of 421 pages, illustrated. New York, William Wood & Company, 1931. Cloth, $3.50.

The original character of the book has been maintained in the new edition. Only those new subjects which are useful as a guide to practical bacteriology have been added. To avoid expansion, however, the authors have discarded those sections which time has shown to be of less practical value, and replaced them with newer and more practical information.

SILIK H. POLAYES.

METHODS AND PROBLEMS OF MEDICAL EDUCATION. (Eighteenth Series.) Quarto of 329 pages, illustrated. New York, The Rockefeller Foundation, 1930.

This volume contains the usual well-illustrated descriptions of medical school teaching units from various parts of the world. An especially instructive article on the photography of gross pathological specimens, written by W. G. MACCALLUM, is included. This may also be found in the *Bulletin of the Johns Hopkins Hospital* for March, 1929. It deserves wider reading. C. A. G.

THE DIET BOOK FOR DOCTOR, PATIENT AND HOUSEWIFE with specimen menus for one week and recipes. By MARGUERITE REQUA REA. 12mo of 197 pages. New York and London, Oxford University Press, 1931. Cloth, $2.75.

This is a practical book giving without theoretical consideration the actual diets for a number of diseases. It gives in detail what the patient is allowed to eat and what is forbidden. In the majority of instances a menu is given for one week with each dietary.

In Part Two, cooking instructions are given with tables of measures and weights, time required for digestion of various foods, food values and many recipes original with the author or tried by her in her work. The combination of diet lists with the detailed methods of actually preparing them is unusual and is a very convenient arrangement. W. E. MCCOLLOM.

EASIER MOTHERHOOD: A discussion of the abolition of needless pain. By CONSTANCE L. TODD. 12mo of 199 pages. New York, The John Day Company, 1931. Cloth, $2.00.

This volume is written by a layman for the laity, and apparently, it is the author's intention to instruct women concerning the various means of relieving the pains of childbirth so that they will demand from their doctor as much relief as possible during labor.

The book is written in simple language, which most women may easily understand, and the author has studied her subject deeply. She devotes much space to the Gwathmey Ether and Oil Analgesia, and she also notes the various other standard methods by which the pains of childbirth may be partially alleviated. She indites, in no uncertain terms, not only the elective version, but also those of the medical profession who do not give their patients proper care or proper relief of pain during labor. The book is worth reading by the profession, for it shows us the woman's point of view; it is worth reading by women, for it tells them what may be done to give them relief, and it may, as the author hopes, create a demand for the relief of the pains of labor, in localities where obstetrical analgesia is not practiced.

W. S. S.

OUR NEIGHBORS

HOUSE OF DELEGATES OF TEXAS

The June issue of the *Texas State Journal of Medicine* has seventy-three pages devoted to the proceedings of the House of Delegates which met on May 4-7, 1931, in Beaumont. The printed transactions include the reports of the officers and committees, and the action taken on their recommendations. The transactions are unusually clear, and one reading them carefully will get a clear conception of the scope of the activities of the Society.

The Secretary, Dr. Holman Taylor, reported 3329 members of the State Association, a loss of 170 from last year when the number of members was the largest ever listed. The Reference Committee, commenting on the number of members, said:

"The outstanding fact presented for your consideration in this report is that out of 11,000 regular physicians, licensed to practice medicine in Texas, there are at this time, only 3,329 members of the Texas State Medical Association. In other words, less than one-third of the legally qualified practitioners of medicine in Texas are now affiliated with the State Medical Association. This is, indeed, a pitiful showing, when we consider the very essential service rendered by organized medicine in Texas, not only to the doctors, but to the public as well.

"In seeking an answer for this condition the suggestion most frequently found was that the dues were probably the most decisive factor in determining the membership or non-membership in the County Society and State Association. Just how seriously this factor operates is, of course, impossible for your committee to properly evaluate, and yet it is the consensus of opinion of this committee that it is a definite and tangible factor."

The annual dues of the State Association have been ten dollars, but the House reduced them to eight dollars, although the proposed new dues was six dollars. The allocation of the dues, according to the by-laws, will be as follows:

To Medical Defense	$1.00
To Journal subscription	3.00
To general fund	4.00

Although the dues were reduced, the House voted to increase the salary of Dr. Holman Taylor, the Secretary, twenty-one years in office, to $10,000, although he is receiving $4,000 at present.

The financial report shows that the total receipts of the State Association from all sources is $64,359.95, of which $4,564.87 is from interest on reserve funds of about $71,000, as nearly as can be determined from the report. One argument for the reduction of dues was that the reserve fund was intended for use during times of financial depression as at present.

Donations to the funds and reserve of the Association are authorized by the Constitution, Article XIII, Section 4, which reads:

"The Trustees shall have the authority to receive volunteer contributions, for specific or general purposes, and shall dispose of said contributions in accordance with the terms of the donors, or its own judgment in the instance there are no such terms."

This provision is in contrast with the policy expressed by the House of Delegates of the Medical Society of the State of New York, not to accept financial donations.

The two-dollar reduction of dues is the same as the fee under the annual registration law which was adopted by the Legislature last winter. The Association had previously allocated about one dollar per member to the prosecution of illegal practitioners, and will continue that appropriation this year, for the registration law takes effect at the beginning of next year. The Association acts by assisting the local societies in prosecutions,—employing a full-time investigator for the purpose. During the last year, 101 cases were prosecuted by the State Association. This activity will be assumed by the Board of Medical Examiners next year.

The following editorial describes the work of the legislative work done by the Executive Council:

"The report of the Executive Council covers in great detail the successful passage of the two major measures of the Association in a legislative way, namely, the bill carrying amendments to the Medical Practice Act and its companion bill that provides for annual registration of practicing physicians.

"The provisions of the two measures are, we feel sure, well known to our readers. Suffice it to say here, that our State Board of Medical Examiners is now permanently organized, with an overlapping, long-time term of office for its twelve members, and with the right, and the money, to employ a permanent office and field force, and proceed in the enforcement of the Medical Practice Act. In addition to that, there will now be a central place of registration for

(*Continued on page 984—Adv. xiv*)

BOBBY JONES' CHAMPIONSHIP GOLF CLUBS



These are the matched clubs with which Bobby Jones retained the amateur golf championship.

IN GOLF, THE CLUB IS ADAPTED TO THE SHOT. IN INFANT FEEDING, THE DIET MATERIAL IS ADAPTED TO THE INDIVIDUAL REQUIREMENT OF THE INDIVIDUAL BABY.

IT IS possible to play over the entire course with a single club and bring in a fair score. But playing with only one club is a handicap. The best scores are made when the player carefully studies each shot, determining in advance how he is going to make it, then selects from his bag the particular club best adapted to execute that shot.

For many years, Mead Johnson & Company have offered "matched clubs", so to speak, best adapted to meet the individual requirements of the individual baby.

We believe this a more intelligent and helpful service than to attempt to make one "baby food" to which the baby must be adapted.

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POISON IVY EXTRACT (Lederle) is supplied in packages of four syringes containing 1 c. c. each, and in single syringe packages.

Literature upon request.

LEDERLE LABORATORIES

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NEW YORK

(Continued from page 982)

every doctor in the state of Texas who is authorized to practice medicine, with an annual check-up on credentials.

"We note with much interest the failing strength of chiropractors and christian scientists. It is our conclusion that the influence of these two very hurtful groups has faded away in proportion to the amount of education received by the members of the Legislature and by the public. It is our opinion that the endeavors of health workers to secure this helpful legislation has gone much further than that; it has served to educate the public on the very serious problem of the practice of medicine."

The minutes of the House of Delegates devote two pages to records of the votes of each member of the Legislature on each roll call relating to medical laws.

To read the seventy-three pages of the transaction is quite a task, with its nine columns of records of the election of officers and a half column of the Chaplain's prayer; yet the Journal says editorially:

"It is through the study of these transactions, and that way only, that a member of the organization may be informed as to its status. The report may appear to be long, and it is long, and perhaps it is not attractive reading on the face of it, but we assure our readers that it is most interesting and that if any will start in to read it the chances are they will finish the task."

The members of the Medical Society of New York State will be interested in the manner in which their Texas brethren conduct their annual meeting and other affairs, but they would consult the transactions with the greater profit if an index and cross references were added, as they are to transactions printed in the NEW YORK STATE JOURNAL OF MEDICINE of July first.

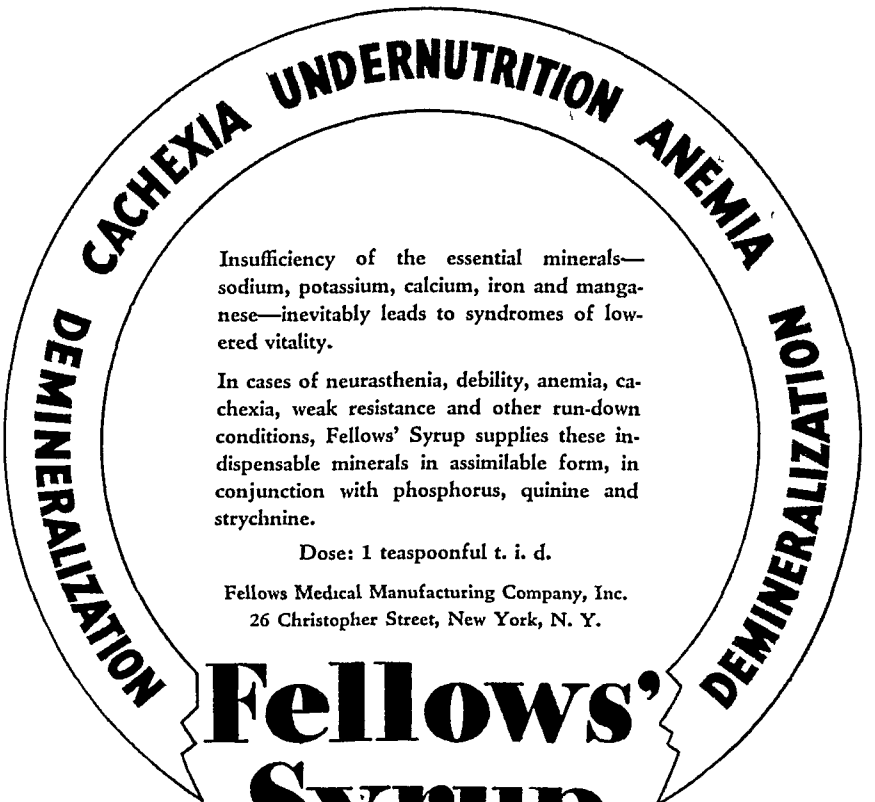
PRESIDENT'S REPORT IN CALIFORNIA

The June issue of *California and Western Medicine* contains the report of the California Medical Association given to the House of Delegates, April 27. President Lyett C. Kenney makes the following suggestions:

"The county medical society should educate its members in present economic problems. They should know what forces are molding public opinion and what changes are being demanded in medical practice. They should also be informed concerning the real facts in the cost of medical care and the relation of these costs to the individual and to the public as a whole. The county society should study the economic problems in its own community to determine what adjustments are necessary to meet modern needs. Our members should come to realize that the financing of medical service is but incidental, and

(Continued on page 986—Adv. xvi)

Break the vicious circle



Insufficiency of the essential minerals—sodium, potassium, calcium, iron and manganese—inevitably leads to syndromes of lowered vitality.

In cases of neurasthenia, debility, anemia, cachexia, weak resistance and other run-down conditions, Fellows' Syrup supplies these indispensable minerals in assimilable form, in conjunction with phosphorus, quinine and strychnine.

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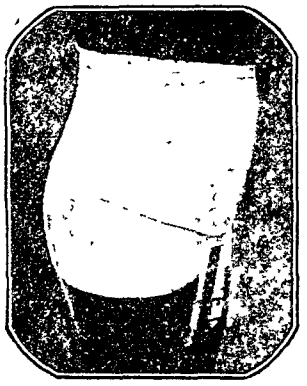
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One of three distinct types and there are many variations of each. "STORM" belts are being worn in every civilized land. For Ptosis, Hernia, Obesity, Pregnancy, Relaxed Sacroiliac Articulations. High and Low operations, etc.

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TINCTURE OF IODINE

Try

Mercurochrome-220 Soluble

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2% Solution

It stains, it penetrates, and it furnishes a deposit of the germicidal agent in the desired field.

It does not burn, irritate or injure tissue in any way.

Hynson, Westcott & Dunning

Baltimore, Maryland

(*Continued from page 984—Adv. xiv*)

that the real problem is to provide all classes with qualified medical care. The county societies should place as much emphasis on the study of these economic problems as they do on scientific and clinical medicine.

"The county medical society should put new emphasis on public health education. We *can* mold public opinion, but we have made very little organized effort to do so. The public is greedy for health education, and we cannot blame people if they are influenced by the vast amount of misinformation they receive. A Speakers' Bureau in the county society should be prepared to place speakers on health and medicine wherever they can be used.

"The Society has a dynamic force for public health education in our magazine, *Better Health*. With very little effort the county society can place this magazine in 50,000 homes in California and on the reading table of every club and library.

"The county medical society can lead and direct in all public health activities. The profession has hitherto either ignored or strongly criticized health activities by the state or lay organizations on the grounds that they interfered with private practice. Public opinion is behind these activities which are attempting to do the work of the community that the medical profession has not provided.

"The county medical society should be prepared to *direct* in health and medical legislation. The influence of the county unit is essential in legislative crises at Sacramento, but its legislative contacts should not be limited to the two months of the biennial session. The society should maintain continuous contacts with the legislators, and so establish confidence and respect for the judgment and requests of the medical profession.

"The California Medical Association should develop immediately a definite, detailed plan of public relations for the county medical societies. This involves a survey of the particular needs of this state and of the activities of other state associations. This program should include methods of public education and the providing of material therefor. It should include plans for advisory contact with all health officials and cooperation with all lay welfare organizations.

"In the near future the California Medical Association should employ a well trained executive to develop this program in and with the county societies. Under the present provisions of our Constitution the title might be that of 'Executive Secretary in Charge of Public Relations.' His duties should be to cooperate with the standing committees and carry out plans and policies which are directed and approved by the council.

"It is the custom in several states to grant the president a page each month in the journal of

(*Continued on page 987—Adv. xvii*)

(*Continued from page 986—Adv. xvi*)

he Association in order that he may bring to the nembers a frequent personal message. I respectully suggest that the California Medical Associaion adopt the policy of a President's Page in *Calfornia and Western Medicine.*

"I suggest for your consideration the formaion of a permanent Cancer Commission by the California Medical Association. This commision should be appointed by and report to the Council and should consist of the outstanding eaders in the pathology and therapy of cancer. The function of the commission should be to provide means for the education of the medical profession in the early recognition and diagnosis of cancer. It should also cooperate with the American College of Surgeons and the American Society for the Control of Cancer in developing a definite cancer program for California. This s a vital public health interest that should be led by the medical profession rather than controlled by the laity or the state."

These suggestions were "commended" by the reference committee.

JOURNAL OF CALIFORNIA

The report of Dr. George H. Kress, Editor of *California and Western Medicine,* to the House of Delegates of the California Medical Association on April 27, is printed in the June number of the Journal. Concerning the increasing number of papers read before the State Society, the following report reflects the policy of the NEW YORK STATE JOURNAL OF MEDICINE:

"The question arises whether or not more papers are being read at the annual sessions of our State Association than heretofore or whether too large a number of papers read before county medical societies have been accepted for publication. In answer to this it may be stated that it is both desirable and necessary that *California and Western Medicine* shall be something more than a so-called 'Annual Proceedings' volume, even though printed in twelve monthly installments. The official publication of the California Medical Association is not solely intended to put into printed form every paper presented at an annual session. In the matter of special or original articles, it should be a medical journal published under state medical association auspices, in the pages of which can be found a presentation of worthwhile work and investigation carried on by California physicians in all the fields of medicine and surgery, and its contents should be also of such nature to not only be of interest or of use

(*Continued on page 988—Adv. xviii*)

...There is a reason why Pil. Digitalis (Davies, Rose) have become the choice of Cardiologists...



. . . They are digitalis in its completeness—physiologically tested leaves in the form of physiologically standardized pills, giving double assurance of dependability.

. . . Each pill contains 0.1 gram, the equivalent of about 1½ grains of the leaf, or 15 minims of the tincture.

. . . Convenient, uniform, and more accurate than tincture drops.

Sample and literature upon request.

DAVIES, ROSE & CO., Ltd.

Pharmaceutical Manufacturers, BOSTON, MASS.

D15

(*Continued from page 987—Adv. xvii*)

to those members who may have been present at the preceding annual session, but particularly be of service to that very much larger number of members who are not so fortunate as to have been in annual session attendance.

"The number of annual session papers which are on hand and which have not been published at the opening of a succeeding annual session has been increasing year by year. This increase has been due to the larger number of sections and to the fact that some sections have a much larger number of papers on their programs than the average of other sections. The Executive Committee has considered this new problem, and in the effort to solve it to the best interests and satisfaction of all concerned, the rules laid down in this year's official program have been adopted, in the hope that the number of unpublished papers on hand at the beginning of a succeeding annual session may be considerably reduced. It must be conceded by all that annual session papers should all be printed within or almost within the succeeding twelve months."

Concerning the finances of the Journal, the Treasurer reported:

"The income of *California and Western Medicine* derived from advertising was $37,070; from allocated county society dues, $9,688.50; from the subscriptions, $2,829; and from sales of review books, $180; making a total income of $49,767.

"The expense of the Journal, including production, distribution, promotion and selling expense, totaled $37,132. The salaries of the editors and one-third of the clerical expense amounted to $12,473; the general expense, $4,249; a total of $53,858. The total income being $49,767, the loss for the Journal was $4,088. Deducted from the $14,162 gain made by the general office, the net income of the California Medical Association for 1930 is $10,074."

Commenting on the report of the Treasurer, the editor says:

"Turning now to the financial side of *California and Western Medicine,* the picture in this year of economic depression and financial hard times is not so good as a year ago. During this last year the advertising income fell off from $40,098.86 to $37,070.73, making a loss in advertising income for this last fiscal year of $3,028.13.

"The printing, production and distribution costs of the Journal last year were $29,012.42 and in the present year were $30,537.85 or an increase in these costs of $1,525.43. This is explained in part by somewhat larger issues, brought out in an effort to bring more of last year's annual session papers off the press. The editorial and clerical

(*Continued on page 989—Adv. xix*)



TO AID PHYSICIANS

EVERY physician will find it a valuable advantage to read and make use of the booklet, "High Blood Pressure," prepared by the Drug Products Co., Inc. It explains causes and symptoms and significance of High Blood Pressure cases. Clinical reports on The use of Pulvoids Natrico for symptomatic treatment of High Blood Pressure cases are also available.

Fill out the coupon below and we will send you a copy of the booklet and clinical reports Free.

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Kindly send me Free copy of Booklet on High Blood Pressure and clinical reports on use of Pulvoids Natrico.

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'OURNAL *when writing to advertisers*

(*Continued from page 988—Adv. xviii*)

salaries have remained practically the same, the increase for this last year amounting to $104.33 One-third of the general expenses of the central office and of the Association are also charged against the official Journal account. These general expenses are larger than heretofore because the new central offices of the Association pay a considerably higher rental and because the annual session expenses this year are also twice as great as last year."

The Editor also comments on the commercial exhibit at the annual meeting, and reports that only advertisers are allowed to purchase space in the booths.

AN EARLY DIAGNOSIS CAMPAIGN IN WISCONSIN

The June number of the *Wisconsin Medical Journal* describes an Early Diagnosis Campaign conducted by the Outagamie County Medical Society for the examination of the high school students of Appleton. The report says:

"During the last two weeks in April the Outagamie County Medical Society in conjunction with the Appleton Woman's Club sponsored the Early Diagnosis Campaign conducted by the Wisconsin Anti-Tuberculosis Association. Through this organization of forces, the Medical Society was able to carry on a far-reaching and effective piece of work. These dozens of people working together were better able to reach a larger proportion of Appleton's population than one or two workers could hope to do.

"The representatives of the Appleton Woman's Club, the City Nurses, the Principal of the Senior High School and Vocational School assisted materially in the campaign.

"This working group in turn enlisted the cooperation of the Appleton members of the County Medical Society, and twenty-six physicians carried on the examinations.

"A committee of four from the County Medical Society organized the members into eight teams of three members each—two members acting as substitutes to fill in when other members could not be present. One member of each team was appointed captain and he was held responsible for his team—all incidentals pertaining to such a campaign, such as talks before the Senior High School and Vocational School, purchasing of supplies, arranging of the schedule for examinations, were handled by the committee.

"The schedule arranged for each team to work for two hours a day. Thus four teams worked from 8 A. M. to 5 P. M. The following day the next four teams.

(*Continued on page 990—Adv. xx*)

SIMPLICITY



S. M. A. is simple to prepare
. . . and requires no modification

Breast milk is simple for the physician to prescribe, yet no physician ever refuses to prescribe it on account of its simplicity, its simplicity, on the contrary is one of the many advantages of breast milk. S.M.A., an adaptation to breast milk is likewise simple to prescribe and prepare and requires no modification for normal full term infants.

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Supplied in 4 oz., 12 oz., and 3 pt. bottles.

THE CHAS. H. PHILLIPS CHEMICAL CO.
New York and London

(*Continued from page 989—Adv. xix*)

"The results of the examination are to be found in the accompanying chart:

	"Appleton High School"
"Number examined	508
"Re-examinations made	20
"Referred for other Lab. Exams.	14
"Advise Vaccination	100
"Referred to family physicians	210
"Contact cases	5
"Apparently normal	237
"Defective teeth	29
"Diseased tonsils (cervical)	95
"Enlarged glands	2
"Goiters	29
"Goiters under treatment	5
"Acute bronchitis	4
"Anemia	5
"Referred to nose and throat specialist	23
"Heart disease	8
"Skin	38
"Underweight	9
"Obesity	2
"Posture (faulty)	12

"The Medical Society have taken the responsibility for all clinics in the future. These clinics will be carefully planned and well organized. The members themselves besides getting closer in touch with the people of the community are better able to guide them in the problems of health.

"THE COST OF THE CLINIC"

"Materials and supplies	$ 54.92
"To doctors	380.68
"To X-rays	142.00
	$577.60

"The $380.68 derived from the clinic has been placed to the credit of the County Medical Society, to be used as the society deems advisable."

MEDICAL LEADERSHIP IN WISCONSIN

The State Medical Society of Wisconsin has approved a plan for its close cooperation with the Wisconsin Hospital Association, and permitted the paid lay secretary and editor of the Journal of the Society, Mr. George Crownhart, to act as Secretary of the Association for a year. The direct benefits to the Society are stated as follows:

(*Continued on page 991—Adv. xxi*)

STANNOXYL

For BOILS, STYES, CARBUNCLES, ACNE and all other STAPHYLOCOCCUS INFECTIONS

Boils treated with Stannoxyl heal rapidly. If you start Stannoxyl today, you may expect pain to diminish and itching to cease by tomorrow.

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Fills the need for a dependable antacid mineral water

VICHY CÉLESTINS

This long renowned naturally alkaline mineral water assists in neutralizing excess acid and in regularizing functions of the digestive tract.

Bottled at the Spring in Vichy, France, under Government supervision, it meets the great need of the physician for constancy of composition.

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503 Fifth Avenue, Rooms 200-212, New York, N. Y.

(*Continued from page 990—Adv. xx*)

"1. To broaden the scope of the Journal so as to include in more prominent position the hospital activities of the State, having in mind that the alignment of physicians and hospital was becoming a more nearly identical one in facing the joint problems of the future.

"2. To secure, if possible, increased advertising revenue on the basis of the Journal being the publication medium of the Wisconsin Hospital Association. At the present time the Journal is not quite self-supporting. Because of high standards we are limited in securing additional copy from pharmaceutical houses. If the Journal were the medium of the Hospital Association I think we could secure some advertising of hospital supply houses, which copy is rarely secured at present"

Mr. Crownhart makes the following statements:

"In the interest of a clear understanding I wish to state here:

"1. Assuming that you continue your present compensation of the Secretary, such compensation will be to the State Medical Society and not to myself.

"2. The term would be not to exceed from year to year and at all times the Secretaryship may be summarily ended by your Board of Directors.

"3. Fully appreciative of the high personal compliment you convey to me in making the suggestion that I assume your Secretaryship, it is neither sought by this Society nor myself, but welcomed only as the future may prove it to be the means of joining in actuality what are already the joint interests of both organizations."

COOPERATIVE CLINICS BY ILLINOIS PHYSICIANS

The voluntary establishment of what the author calls "Cooperative Clinics," is proposed by Dr. J. K. Narat of Chicago, in an article headed, "S.O.S. A Rush Call for the Creation of Cooperative Clinics," printed in the June issue of the *Illinois Medical Journal*. While the plan does not seem to have been adopted by any medical society, yet the seriousness of the proposal is indicated by the heading of the article in the Journal.

Dr. Narat first diagnoses four evils which affect the doctors, as follows:

(*Continued on page 992—Adv. xxii*)

(*Continued from page 991—adv. xxi*)

1. The general economic depression.
2. Medical centers organized and controlled by industrial concerns, insurance, health departments and philanthropic agencies. (These seem to be more potent in Illinois than in New York. *Editor's note.*)
3. Pay clinics conducted by teaching institutions and hospitals.
4. Self-medication fostered by the custom of physicians prescribing proprietary medicine which patients may buy.

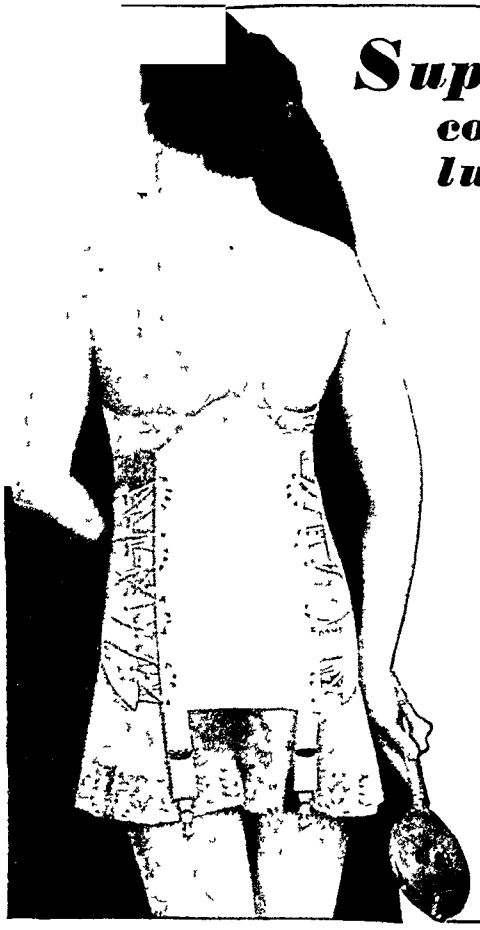
The remedy proposed is that set forth as follows:

"The question has resolved itself into a virtual tug-of-war; the fight between such institutions and individual physicians resembles a fight between a giant and a pygmy; it is evident that the lilliput is fighting a losing battle. Here again the only hope to combat the usurpation of the practice by the pay clinics is to fight the antagonists with their own weapon, i.e., to establish rival cooperative, well-equipped and well-conducted clinics owned by physicians."

"The chief stumbling block in the path of emergency service for individual practice is the lack of joint activity. The gospel of cooperation and organization should be spread among the medical fraternity as rapidly and vigorously as possible."

"Groups create material and spiritual links, and promote good will and understanding among physicians. The success of the existing pay clinics in various parts of the country vividly illustrates the soundness of the system. The patient patronizing such a clinic benefits by receiving service of well trained physicians with large experience and having all the modern laboratory facilities at their disposal; the fees and also charges for drugs can be considerably reduced. The physician benefits by gaining experience, having opportunities for specialization and all the facilities for a complete scientific examination at his disposal; economic advantages in form of smaller overhead expense; possibility of taking a postgraduate course or vacation without financial losses, etc. The matter of economic security, however, while fundamental, is not half so vital to the physician as the appreciation of the fact that he is given the opportunity to work in a thoroughly scientific man-

(*Continued on page 994—Adv. xxiv*)



Superior Back Support

combining sacro-iliac and lumbo-sacral features

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AUGUST to FROST HAY-FEVER

A BULLETIN—*2nd printing now available*

And it is important to emphasize that

COSEASONAL TREATMENT

i.e., treatment started after the onset of symptoms, is usually successful—and ***quickly aborts the attack*** as has been amply attested in the literature.

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provide the several ragweeds as regionally dispersed and are selected for delivery according to the locality.

If unavailable locally these extracts will be delivered direct postpaid, special delivery

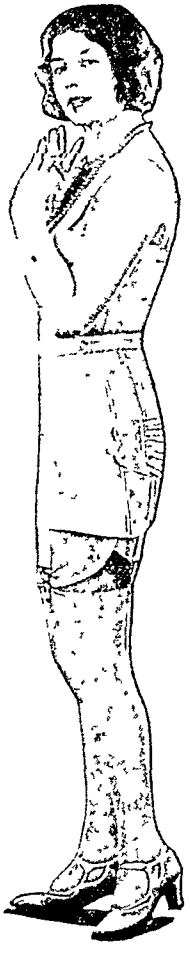
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The Pomeroy is ideal for this purpose, for it is so designed that the uplift is given by the corset itself with no need for additional belt or other contrivances. The intersecting laces give an extra upward and backward lift which further helps the muscles of the abdomen to give the necessary support.

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BROOKLYN	SPRINGFIELD	DETROIT
NEWARK	BOSTON	WILKES-BARRE

(*Continued from page 992—Adv. xxii*)

ner and render services to his patients at a cost which is not a burden to the sufferer.

"As to the question of organization of such clinics, it is the writer's opinion that the local medical societies should be prevailed upon to arrange a popular referendum in order to elucidate the problem. Anticipating from the opinions gathered in numerous conversations with physicians the overwhelming majority probably will be in favor of pay clinics. If it shall be found in the open forum that it is a wish of a great number of physicians to create such clinics, it should be the duty of the medical societies or their respective branches to nominate committees invested with the duty to work out suitable plans."

"The medical society should insist that the clinics hold in high esteem the principles of ethics and do not succumb to enticement of ballyhoo advertising. If the majority of members are of the opinion that advertising is essential for the success of the clinics, a standard advertisement should be worked out which in a dignified manner would inform the public regarding the location and the scope of the clinic. Each clinic can advertise separately or preferably in a cooperative manner using for instance a slogan 'In case of sickness consult your nearest health center.'

"If for some reason or other the medical societies should be reticent to active participation in this plan, the only solution of the problem lies in organization of physicians without the aid of the local medical society."

There is an association of something over two hundred such groups in the Middle West, composed principally of specialists. The article seems to propose the formation of such groups by general practitioners.

This article is reproduced simply to inform the physicians of New York regarding what their Illinois brethren are thinking about.

SCIENTIFIC SERVICE COMMITTEE IN ILLINOIS

The July number of the *Illinois Medical Journal* contains the report of the Scientific Service Committee to the House of Delegates of the Illinois State Medical Society on May 5, which says:

"The purpose for which the Committee was created was to make available to county societies speakers on any subject that might interest the society. By being assured of their ability to secure speakers, it was hoped that many societies would be encouraged to meet more frequently.

(*Continued on page 995—Adv. xxv*)

(*Continued from page 994—Adv. xxiv*)

Efforts were made to encourage a study of those aspects of medicine which were apt to put the doctor in a bad light in the public eye, such as the infant and maternal rate.

"Lately an attempt is being made to encourage the study of mental hygiene. The treatment both preventive and curative of mild mental disorders is being stressed as being within the province of the private practitioner, particularly the family doctor. This matter is being studied by a group of our most distinguished neuropsychiatrists. They expect to evolve a plan whereby this subject can be presented to the rest of us in a simple non-technical language. The objection to having speakers on mental hygiene and the treatment of mild mental disorders before county societies has been their language has been too highly technical. We expect this group to overcome that objection. It is hoped that county societies will then take an added interest in this very important subject. Remember that about twenty per cent of the hospital space in this country is devoted to nervous and mental cases. Announcements of progress in this matter will be made through the office of Doctor Camp and the Educational Committee.

"The entire field of medicine has been divided into a number of specialties or otherwise and various groups of men particularly qualified in these fields have been asked to outline that particular field. Speakers have been asked to volunteer for service before county societies. The response has been generous in both cases.

"During the past year the Committee gave the following service:

"116 speakers were scheduled for scientific meetings.

"17 talks on surgical subjects.

"26 talks on medical subjects.

"8 talks on endocrinology.

"3 talks on gall bladder diseases.

"5 talks on gastro-intestinal conditions.

"7 talks on nervous and neurological conditions.

"3 talks on obstetrics and gynecology.

"6 talks on orthopedics.

"6 talks on genito-urinary and protologic subjects.

"10 talks on medical economics and medical organization (we even have one business man, Mr. W. K. Lasher, who is presenting the doctor's problem from the business man's point of view).

"3 talks on pediatrics.

"3 talks on dermatology.

"19 talks on miscellaneous subjects.

"34 counties were served and several requests for speakers came in from other States."

THERAPEUTIC ALMANAC



JULY



AUGUST

Summer diarrhea, cyclic vomiting in children, occur in keeping with the rise of the thermometer. Adults suffer, too. Changed diet, insufficient water intake, the hustle-bustle of vacations, strenuous sports and insufficient rest, all lead to *acidosis*.

℞ ALKA-ZANE

A teaspoonful in a glass of water, taken after effervescence has subsided, two or three times daily, (children in proportion) provides a refreshing, invigorating drink, and prevents acidosis.

Note—Alka-Zane combines the carbonates, phosphates and citrates of sodium, potassium, calcium and magnesium. No sulphates, tartrates or lactates; no sodium chloride.

ALKA-ZANE *for Acidosis*

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Beautiful residence ideally situated in the most picturesque village of Vermont. Special care of the Convalescents and Invalids. Physician in attendance at all times. Opening July 1. Write or 'phone, Dr. W. J. McNamara, North Park Place, Fair Haven, Vt. Tel. Fair Haven —I.

FOR SALE—Office equipment and practice. Chelsea section, New York City. Especially built, modern office in apartment. Lease controlled. Well established, successful, general practice. Mostly office work, cash basis. Exceptional opportunity. Price, ¼ of average yearly income. E. B. Prout, M. D., 301 W. 24th St., N. Y. City.

WANTED—Physician at once. Good location, roads, collections and hospital appointments. About $7,000 year. Village in northern N. Y. Sell house and 10 years' practice at real estate value. Dr. leaving to specialize. Address Box 156, c/o N. Y. State Journal of Medicine.

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$8,500 cash general practice; upstate city; complete office equipment, instruments, drugs, etc.; Price $800; no real estate; income from start; Ill health makes change necessary. Box 157. Care of N. Y. State Journal of Medicine.

ANNOUNCEMENT

The Post-Graduate Medical School and Hospital became on July 1 the Post-Graduate School of Medicine of Columbia University and will be controlled by an Administrative Board on which will be represented members of the governing body of the University, the Undergraduate Medical School, and the Post-Graduate School of Medicine. This Board will have general oversight and control of all post-graduate instruction in medicine offered by the University, whether at the Medical Center, the Post-Graduate Medical School or elsewhere in the city. Dr. Edward H. Hume will be the Director, and Dr. Alan R. Anderson, the Associate Director of the Post-Graduate School.

This incorporation of the New York Post-Graduate Medical School into the teaching system of Columbia University as its post-graduate school of medicine, distinct from the undergraduate school, carries into fruition, after some forty-nine years, the ambition of the seven founders of the Post-Graduate who resigned from the Faculty of the New York University upon the refusal of the Trustees to grant them a separate building for post-graduate instruction and, early in the year 1882, organized the present New York Post-Graduate Medical School and Hospital.

Dr. D. B. St. John Roosa, the leader of this small group of pioneers in graduate medical education, and first president of the institution he helped to found, in his inaugural address in November, 1882, pointed out that while temporarily undertaken in an independent institution, this type of medical education rightly belonged with other forms of professional instruction, within a university and closed with the forecast, "the time will come when this institution will be included within a great university." July first of this year will see this prophecy fulfilled.—See page xxxi—*Adv.*

The Westport Sanitarium

WESTPORT CONN.

A Private Institution for the Care and Treatment of Nervous and Mental Diseases

Large private grounds. Home-like surroundings. Modern appointments. Separate building for Patients desiring special attention. Single room or suite. Hydrotherapeutic apparatus. Terms reasonable. New York Office, 121 East 60th St., 1st and 3rd Wednesdays only, from 1 to 3 P. M. Tel., Regent 1613.

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Amytal (iso-amyl ethyl barbituric acid), a product of the Lilly Research Laboratories, meets the need for hypnosis and sedation in a wide variety of cases. Since its introduction to the medical profession a few years ago, Eli Lilly and Company report that there has been an ever-increasing demand for this safe and satisfactory hypnotic and sedative. Recently, in response to the demand for a smaller dosage to produce sedation in ambulatory cases, the Lilly Laboratories made available Tablets Amytal, Half Strength, in ¾ grain tablets.

Tablets Amytal are sold through the drug trade. Inquiries for further information may be addressed to Eli Lilly and Company, Indianapolis.—See page xii.—*Adv.*

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TYPES AND LOCATIONS OF BRAIN TUMORS AND OTHER SPACE-DISPLACING MASSES WITHIN THE CRANIAL CAVITY OCCURRING WITHOUT "CHOKED DISK"

Report of Seventeen Cases

By DONALD L. BUTTERFIELD, M.D., ROCHESTER, N. Y.

From The Department of Surgery, Neurological Division, The University of Rochester, School of Medicine and Dentistry, Rochester, New York.

THE difficulties of diagnosis of brain tumor in a new neurosurgical clinic are not unlike those in general practice. Cases are seen early and at a time when complaints are difficult to interpret and may lead in any direction. Likewise characteristic physical signs may be lacking or sparse or difficult to interpret. Even more puzzling are the comatose or paralytic patients brought to the hospital with little or no history available. For this reason it may be helpful to present in some detail seventeen case records of space displacing brain lesions where "choked disk," the "sheet anchor" of the triad of headache, vomiting and "choked disk," was lacking. It may also serve to emphasize the need of keeping in mind the possibility of brain tumor or an equivalent mass even where that of a degenerative or vascular lesion seems a more enticing one.

The report of the occurrence of brain tumor or space displacing masses within the cranium without "choked disk" is of course not new. It has been going on spasmodically ever since vonGrafe[1] first demonstrated and described this phenomenon and associated it with intracranial lesions. Albutt[2], Jackson[3] and MacDonald[4] were early contributors to this fact. Beerman[5] in 1913 reported six cases. André Thomas[6] in 1921 reported that ten to twenty per cent of all tumors are not accompanied by "choked disk." Paton[7] places the figure at twenty per cent of 200 cases, Brain[8] at 21.6 among 60 cases, VanWagenen[9] at 16.5 per cent among 109 cases of cerebral and cerebellar tumors. All told, it is a hopeful sign that even this large a percentage of brain tumors is recognized before the development of choked disk and foretells a period when the acumen of the general practitioner will increase it still more.

The following seventeen case reports from the neurosurgical service of the Strong Memorial Hospital were observed over a period of approximately a year and a half. Fourteen of the seventeen cases represent brain tumors. The large cortical cyst of the parieto-occipital region was encountered which may have been present since birth. The other two cases—pacchymeningitis hemorrhagica interna—evidently of fairly long standing, are presented.

CASE REPORTS

Case 1. No. 32962. Ependymoma of fourth ventricle.

C. A., a 40-year-old woman referred by Dr. Boudreau of Syracuse, entered the hospital because of very severe attacks of pain in the left side of the face that closely simulated tic douloureux. Opiates relieved the pain but partially. Sleep was interrupted and inadequate. She also complained of diplopia, vertigo, nausea and vomiting. The first symptom was diplopia which came on some four months prior to entry. This was soon followed by symptoms of a left sixth nerve weakness and weakness of conjugate deviation to the left. Unsteadiness of gait soon followed and she was confined to bed most of the time.

Physical examination showed a woman who was rather emaciated from inability to take or retain food and lack of sleep. She was having frequent attacks of severe pain over the distribution of the right fifth nerve not exactly typical of trifacial neuralgia in onset, cessation, etc., but nevertheless very severe. There was a limitation of conjugate deviation of the eye movements to the left. Frequent examinations of the eye grounds showed them to be normal. A peripheral type of right facial weakness was also noted. Hypoaesthesia to pin prick over the right side of the face developed during the stay in the hospital as well as motor weakness of the right fifth nerve. Slight hypoaesthesia over the distribution

of cranial nerves nine and ten also developed. Deep reflexes over the left side became increased. Abdominal reflexes were absent. Laboratory studies and r-rays of the skull were within nor-

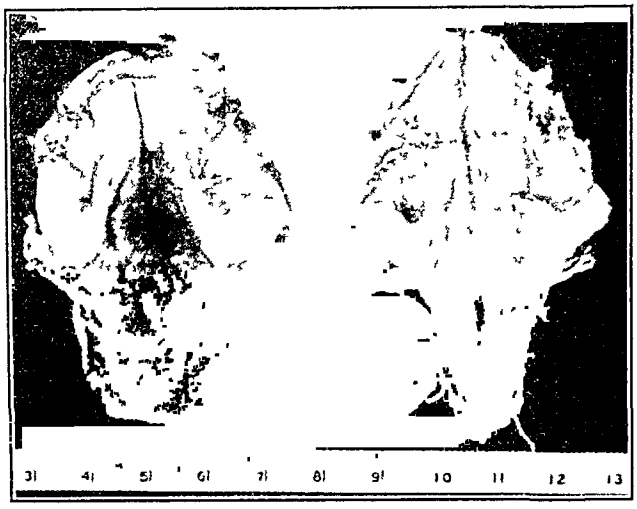


FIGURE 1

Case 1. Photograph showing extent of the bed of the tumor after the major portion had been surgically removed. It extended from the calamus scriptorius to the Sylvian aqueduct and from one side of the ventricle to the other.

mal limits. A diagnosis of tumor of the fourth ventricle and pons or multiple sclerosis was made The pain in the face became so severe that it was decided to section the posterior root of the fifth nerve through the extracerebellar route and at the same time, explore the region of the fourth ventricle. At operation, a tumor in the fourth ventricle was encountered. It extended from the region of the calamus scriptorius cephalad into the lower end of the Sylvian aqueduct and was everywhere broadly attached to the floor of the pons. Enough of the tumor was removed to free the opening of the Sylvian aqueduct. The patient succumbed some ten hours postoperative from hyperthermia and medullary edema.

Pathologically, the tumor proved to be an ependymoma. Fig. I and II.

Case 2. No. 28078. *Ependymoma of the fourth ventricle.*

E. B., a seven-year-old boy referred by Dr. John O'Connor, of Rochester entered because of weakness of the right arm, slight awkardness of gait, and general apathy for a period of some six weeks Mild fever was recorded from time to time during this period. An encephalitis lethargica was at first suspected.

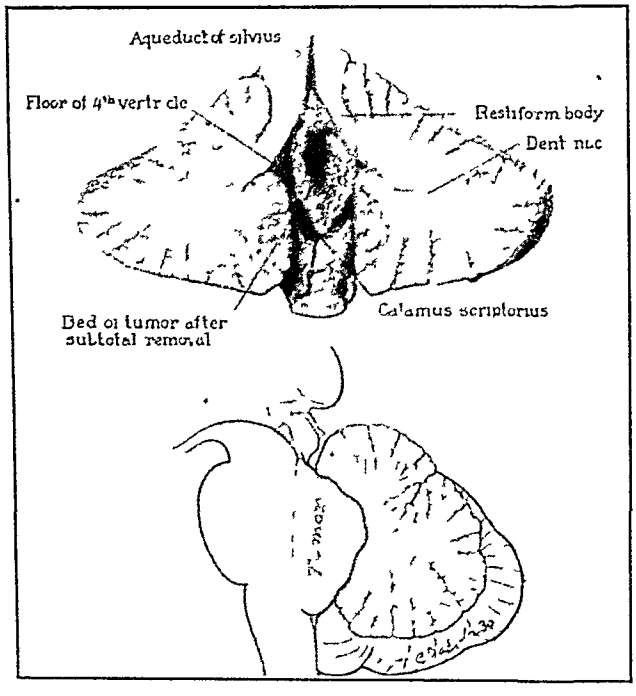


FIGURE 2

Case 1. Drawing showing the extent of the tumor and its relation to the fourth ventricle. Also a side view showing relationships.

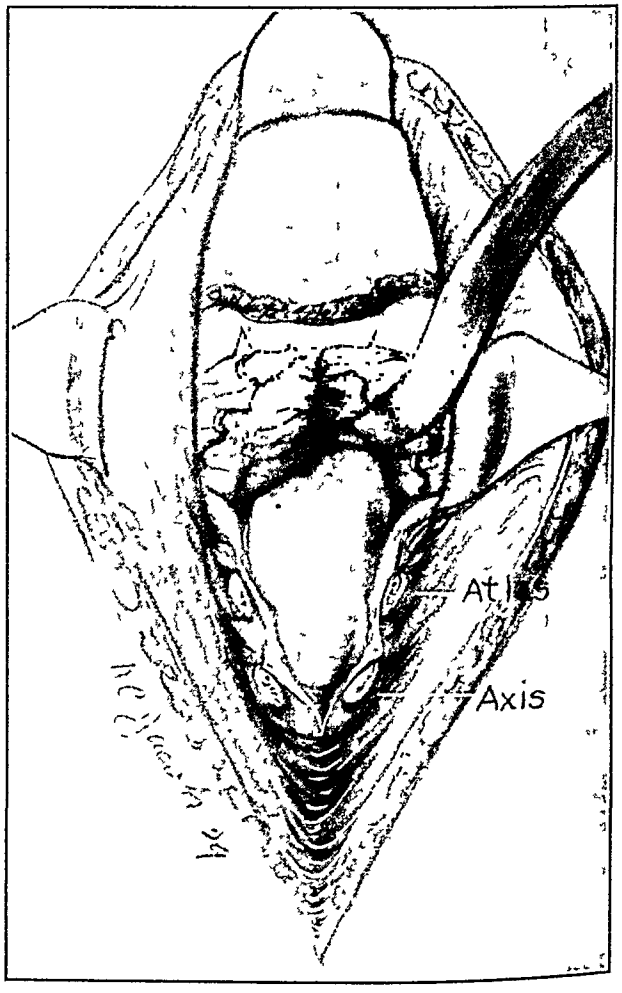


FIGURE 3

Case 2. Drawing showing the size and location of the tumor, an ependymoma of the fourth ventricle, its relation to the fourth ventricle and also the atlas and axis.

Physical examination showed little except hyperactive deep reflexes—possibly a little greater on the right than left. Babinski's sign was bilaterally positive as well as an ankle clonus. There was slight spasticity and ataxia of movements of the right arm and beginning atrophy of muscles of the thenar eminence of the right hand Romberg was at times positive Abdominal reflexes were absent. Vibratory sense was diminished below the clavicles though sense of position was normal. Sensation to pin prick and wool normal. The eye grounds were normal. Three attempts at lumbar puncture resulted in a "dry tap." A cisterna puncture and a lumbar puncture done under gas anesthesia showed a complete block below the level of the foramen magnum. Lipiodol injected into the cistern failed to leave in several hours.

A diagnosis of a tumor about the foramen magnum was made.

The cerebellum was exposed through a Cushing cross-bow incision and the arch of the atlas and axis removed after a tumor extending down into the foramen magnum was encountered. This tumor extended from about the level of the axis upward into the middle of the fourth ventricle It arose by a relatively small pedicle from about the left side of the calamus scriptorius and was easily removed at a second stage operation. Fig III. Pathologically it proved to be an ependymoma. The patient is entirely well to date, some ten months later.

Case 3. No. 19338. *Glioma invading the pons.*

R. P. a 50-year-old farmer, referred by Dr. Parker Murphy, of Rochester entered because of difficulty in speech and swallowing, numbness of the left arm as well as weakness and twitching of the muscles of that member. He also complained of moderately severe left frontal headache, and occasional attacks of vertigo and vomiting. The whole history dated back about a year. He had been able to work, however, until eight weeks before admission.

Physical examination showed a large man who had lost considerable weight presumably from inability to swallow food readily. There was obvious weakness of the right masticator group of muscles and the right pharyngeal and laryngeal group as well as the right trapezius and sternocleidomastoid. Slight weakness of the right seventh nerve was also noted. The eye grounds were normal. There was a left-sided hypoaesthesia to pin prick and wool, most marked over the left arm. Vibratory sense diminished over the left. Romberg positive. Deep reflexes were slightly increased over the left side but without ankle clonus or positive Babinski sign. Lumbar puncture failed to show any evidence of block and examination of the fluid was entirely within normal limits.

A diagnosis of a lesion involving the bulb was obvious but it was difficult to differentiate between a syringobulbia and a tumor of the floor of the fourth ventricle. The presence of headache suggested that he might have a hydrocephalus and for this reason a ventriculogram was done but the ventricles were of normal size and contour. In spite of this a diagnosis of a tumor of the fourth ventricle was hazarded and cerebellar exploration done through a Cushing cross-bow incision. A glioma of the pons was encountered. A portion of this tumor was taken for histological study and proved to be a glioma, type undetermined. Fig. IV.

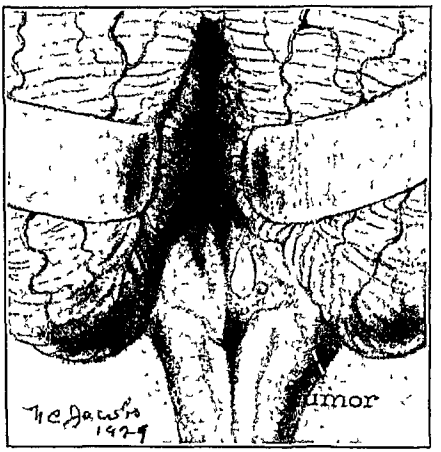


FIGURE 4

Case 3 Drawing made at operation showing the location of the tumor, a glioma of the pons, and its relation to the fourth ventricle.

Case 4. No. 21044. *Hemangioma of the pons extending into the fourth ventricle.*

H. B. a 36-year-old male referred by Dr. Eugene Boudreau, of Syracuse because of diplopia, staggering gait, deafness on the right side, weakness of the right arm and leg and thickness of speech.

The exact date of onset of present illness is difficult to determine. It probably extended back some ten or eleven years. At the time—1918—the patient complained of transient attacks of tinnitus in the right ear. This, however, disappeared in a few weeks and he was able to continue until about December, 1926. At that time, he had an attack of diplopia which lasted about one month. This was accompanied by a certain amount of vertigo and unsteadiness of gait, slight headache, and a feeling of general malaise. The above symptoms recurred in March, 1928, but were somewhat more marked. He was so un-

steady on his feet that he was confined to bed for a time. These symptoms cleared up in 2-3 months except for the diplopia which persisted at intervals up to the date of admission in January, 1929. The patient was able to work until November, 1928 as a die caster in a foundry. At this time, the diplopia, staggering gait and weakness of the right arm became so marked that he was finally discharged. Shortly after, he began to have thickness of speech, projectile vomiting on occasions, deafness in the right ear with ringing noise referred to that ear and an occasional attack of incontinence. Headaches became very marked during the last week or two prior to admission.

Physical examination showed a bilateral nystagmus, with a bilateral sixth nerve weakness more marked on the left side. The right pupil was larger than the left; there was a marked hypoaesthesia over the distribution of the right trigeminal nerve with a weakness of the jaw muscles on both sides. A right facial paralysis of the peripheral type was noted. There was a "nerve" deafness noted on the right side. A diagnosis of a tumor involving the pons and region of the fourth ventricle was made. Cerebellar exploration showed a marked bulging in the region of the inferior vermis. This portion of the cerebellum was split and a very vascular tumor encountered which bled profusely at the slightest touch. Evidence of bleeding from the tumor into the region of the fourth ventricle was apparent and some clots were removed from about the lower end of the tumor. A diagnosis of a hemangioma of the fourth ventricle was made, and the wound closed. The patient succumbed to medullary edema some forty-eight hours later. Autopsy revealed an extensive haziness of the pons which had invaded the floor of the fourth ventricle. Fig. V.

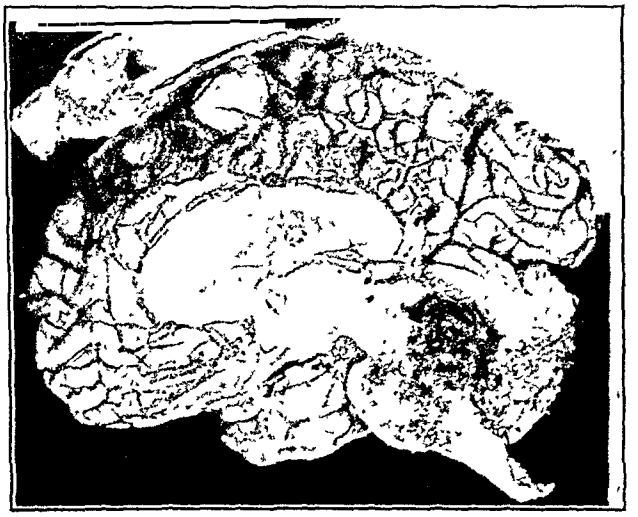


FIGURE 5

Case 4. Photograph of sagittal section of the brain showing the size and location of a hemangioma of the pons with extension into the fourth ventricle.

Case 5. No. 26746. *Metastatic tumor of the cerebellum—carcinoma of the lung.*

E. S. a 44-year-old woman referred by Dr. Charles Briggs of Fairport, entered because of headache, diplopia, staggering gait, deafness of the right ear and generalized weakness. The onset was relatively acute with difficulty in walking for three or four weeks prior to admission. She next became extremely dizzy on occasions and was confined to bed because of this. Vomiting attacks occasionally occurred. Diplopia had been present for about four days prior to admission. Headache had been fairly marked for three weeks prior to admission and was localized chiefly over the occiput.

Past history was essentially negative except for the complaint of general malaise and weakness for several months past. The patient was observed in the hospital over a period of three weeks. During this time symptoms became progressively worse. Emaciation due to inability to take or retain food continued to increase. Ataxia of both arms also developed as well as a bilateral mystagmus. A presumptive diagnosis of tumor of the cerebellum was made although the patient had no evidence of increased intracranial pressure. Consequently she was given deep *x*-ray therapy which seemed to aggravate existing symptoms.

Up to about this time the disks were well within normal limits, but began to show haziness about the border.

Physical examination in general was well within normal limits except for the emaciation. There were no obvious cranial palsies and no abnormal pyramidal tract signs. Otological examination showed a near deafness of the right ear.

A cerebellar exploration was done at which time a bulging and fullness in the region of the vermis was encountered. Vermis was split down the midline and a tough, fairly vascular tumor encountered about the size of a golf ball. The greater portion of this was enucleated. The patient made a fairly satisfactory postoperative recovery and was discharged some six weeks after operation.

Pathological examination of the tissue removed showed it to be carcinoma cells which were made up of columnar epithelium with a tendency to acinar formation. It was suggested that the gastrointestinal tract might be a source for this tumor metastases. Gastrointestinal *x*-rays however were negative. *X*-rays of the chest showed extensive involvement of both lungs, presumably due to carcinoma.

The patient died at home several weeks later. Autopsy was not obtained.

Case 6. No. 34303. *Left temporo-occipital glioma, ependymoma.*

A. C. a 50-year-old man referred by Dr. Benjamin Slater of Rochester, because of head-

ache, irritability, personality changes, lapses of memory and inability to use the right hand well. History dates back to a period about nine years ago. At that time he began to complain of numbness of the right hand which would last for a week to ten days at a time. This was occasionally accompanied by weakness of the arm and some weakness of the legs. The patient cleared up from this illness and was able to work most of the time until some three years ago when he developed diplopia and dizziness This persisted for a period of ten days and he was confined to a hospital for observation. Nothing in particular was made out and as his symptoms cleared he again returned to work. About three or four months prior to admission he again noted slight difficulty in bending and supinating the right hand. Shortly after this he experienced a blurring of vision which was not due to diplopia. About two weeks prior to admission marked changes in personality were noted, he became exceedingly untidy, irritable, seemed to walk about as though in a daze and suffered greatly from lapses of memory. It seemed to be impossible for him to remember details of work more than a few moments at a time. Weakness of the right arm and right leg soon incapacitated him for all work.

Physical examination showed a right homonymous hemianopsia, right sided weakness with increase in deep reflexes over that side including

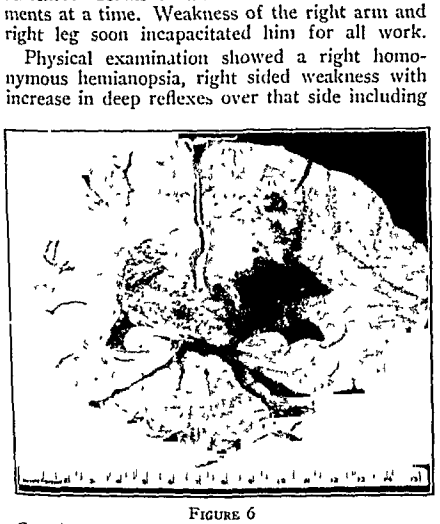


FIGURE 6

Case 6 Photograph showing the size and extent of the tumor, also its relation to the lateral ventricle. The measure is in centimeters.

an ankle clonus but no positive Babinski sign. There was a right-sided hypoaesthesia to pinprick, diminished superficial reflexes over the right side. There was a very definite apraxia and a bilateral astereognosis. Ophthalmic examination showed no evidence of choking of the disks. *X*-rays of the skull showed that the pineal gland was shifted toward the left side. It also showed an area of increased density to the left of the pineal gland and slightly above it. This was believed to be calcification in the tumor. At operation a large tumor was encountered in the left temporo-occipital region which was grossly invading the ventricle. A mass of tumor about the size of a hen's egg was removed before it became apparent that it was extending well across the midline and totally beyond the possibility of surgical removal. The patient died several days later; autopsy was obtained which showed involvement of the corpus callosum, thalamus, third ventricle with extension across the midline into the opposite ventricle. Histologically the tumor proved to be an ependymoma. The areas of increased density observed in the *x*-ray plates were verified to be due to calcification in the tumor. Figure VI.

Case 7. No. 36458. *Left subcortical glioma—fibrillary astrocytoma.*

E Z. a 41-year-old Russian woman referred by Dr. W. D. Ayer of Syracuse, was admitted because of Jacksonian attacks involving the right leg and to a lesser extent the right arm for a period of seven to eight weeks. At this time she began to notice twitchings about the right thigh muscles On one of these occasions she lost consciousness, had a generalized convulsion lasting 15-25 minutes followed by numbness of the right lower extremity. This was followed by six more attacks within the next few days

Physical examination showed a large, well developed woman having almost constant Jacksonian attacks involving the right leg and to a lesser extent the right arm. Two point discrimination was diminished over the right side. No differences in reflexes could be made out. At operation a burr hole was made over the left leg area and resistance encountered to the exploring brain needle. Consequently a bone flap was turned down in the postcentral region near the midline. There was seen to be elevation of the cortex above the surrounding brain surface. Palpation in this area revealed a hardness not encountered elsewhere. This was borne out by puncture with brain needle. It was thought at first that this was a metastatic tumor although *x*-rays of the chest taken with this in mind had previously proven negative The area was resected. Pathological examination showed the tumor to be a fibrillary type of astrocytoma.

This illustrates the possibility of the presence of a fairly large subcortical glioma without displacement of the pineal body to either side or without presence of headache, choked disks or vomiting.

Case 8. No. 20251. *Left temporal lobe glioma —unverified.*

F. B. a 56-year-old male who was referred by Dr. F. B. Collins of Webster, because of headache and personality changes such as refusal to eat, drowsiness and general apathy.

During the past year he grew irritable and uncooperative. During the last few weeks he had generalized headaches, and sometimes was confused and disoriented. He was somewhat drowsy, but could be aroused. A physical examination showed a left homonymous hemianopsia, nystagmus on deviation of the eyes to the right, weakness of the conjugate movement of the eyes to the left. Examination of the eye grounds showed them to be within normal limits. Within a few days, however, he developed haziness of the borders of the disk margins, the hemianopsia became much more pronounced, left sided weakness fairly marked and hypoaesthesia over the left side was noted. A right sided bone flap was turned down exposing the temporal lobe and the lower motor cortex. The brain was under increased tension. A surface or slightly subcortical tumor was not encountered. The ventricle on the right side seemed to be collapsed. Consequently a decompression was done and the wound closed. The patient has done extremely well under *x*-ray therapy and is back at work on a farm some one and a half years later.

Case 9. No. 34909. *Left postcentral glioma—histologically unverified.*

W. J. Y. a 49-year-old man referred by Dr. H. F. Knight of Rochester, because of a complaint of numbness and weakness of the right leg. The patient's complaints date back some four and a half months when the numbness and heaviness of the right leg were first noted. About two weeks later the same thing appeared in the arm giving him considerable difficulty in handling tools, etc. About a month after onset there was noted a tendency to a right sided toe drop.

On physical examination there was nothing of note except a slight weakness of all muscle groups of the right leg accompanied by an increase in deep reflexes over that side. There was also moderate loss of sense of position of the joints of the right lower extremity. *X*-ray examination showed what was interpreted as a pineal shadow displaced downward by a mass above it.

At operation a left sided bone flap was turned down exposing the upper motor cortex. The arachnoid over the leg area was very grey and thick, the brain beneath this seemed to be harder than normal and was exceedingly resistant to the exploring needle. There were so many large veins going across this area into the longitudinal sinus that it was felt inadvisable to divide them in order to explore the medial surface of the left hemisphere. A diagnosis of a glioma in the postcentral leg area seemed certain from inspection and palpation and material was not taken for histological study owing to the vascularity of the field. A decompression was done and the wound closed. He has been given heavy radiation with *x*-ray and radium apparently with good effect and is back at work some three months later.

Case 10. No. 1147. *Meningioma of the right lateral ventricle.*

A. L. C. a 47-year-old woman who was referred to the hospital by Dr. J. A. Cormier of Rochester, because of a complaint of drowsiness and vomiting over a period of two months. There was little else in the present illness or past history to warrant attention.

The only physical finding of note was that of a bilateral intention tremor brought out on effort. Reflexes were hyperactive throughout. On occasions there were noted nystagmus with a weakness component to the left and also varying estimations of normality of corneal reflexes on the right. The tongue at times deviated toward the left. On occasions the motor power of the right hand and arm was decreased compared with the left. Examination of eye grounds was entirely normal. Laboratory examinations throughout were generally negative. Examination of the skull showed a densely calcified mass occupying the region of the right ventricle and apparently representing a calcification in a tumor in the choroid plexus. Patient has been followed over a period of four years and is essentially well. No surgical intervention has been attempted. Figure VII.

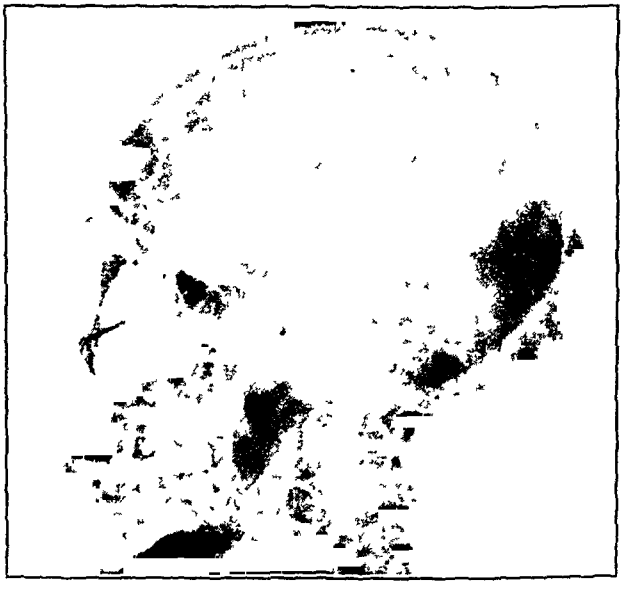


FIGURE 7

Case 10. Reproduction of x-ray film showing a densely calcified mass in the region of the right ventricle.

Case 11. No. 27690. *Cortical cyst of parieto-occipital region.*

R. S. aged 19 was admitted to the hospital complaining of "epilepsy." At the age of eight the patient had a series of seizures which occurred on an average of 1-3 times a day. Little could be found out regarding the exact nature of these early seizures, they have continued up to date with but few periods of freedom. A typical attack begins with a blurring of vision followed by loss of consciousness, overactivity of the muscles of the left side and oftentimes sensory changes over the left side. Many petit mal as well as grand mal attacks have occurred. On physical examination there was seen to be a well developed and nourished young woman with a few of the stigmata of chronic convulsive seizures. She was mentally retarded, suffered from rather poor memory and inability to reason or calculate rapidly. However she might have been able to do a considerable amount of work had it not been for the persistence of Jacksonian attacks. There was a left external squint, left homonymous hemianopsia, pallor of the nasal half of the left disk but no evidence of any elevation of the margins; left lower facial weakness on forced movements. A ventriculogram was done which showed a right sided hydrocephalus with enlargement of the ventricles posteriorly. The ventricles seemed to be displaced upward.

At operation a bone flap was turned down over the right parieto-occipital region. On opening the dura a large cortical cyst was encountered which contained about 250-300 cc. of brownish, chocolate colored fluid. Near the anterior end of this cyst was a definite hard, well marked out scar in the cortex of the post-central leg area. Both the cyst and scar were removed. Figure VIII. In so doing, the ventricle was opened and difficulty was experienced in the postoperative course in preventing a continued cerebrospinal fluid leak. It was only after removing the bone flap that this was accomplished. Patient has had a marked improvement in the number of attacks but is continuing to have an occasional seizure at the time of menstruation.

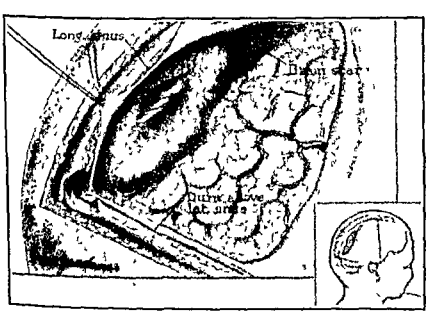


FIGURE 8

Drawing showing the size and extent of a cortical cyst adjoining the longitudinal and lateral sinuses. A brain scar anterior to the cyst extends into the post-central region.

Case 12. No. 18443. *Papilloma of left choroid plexus.*

J. S. an infant, aged three months, was admitted to the surgical service on September 3, 1928, because of bilateral internal squint and gradual enlargement of the head. The patient, a first child, was born at full term, weighing 8½ pounds (3.8 kg.). There was nothing of note in the birth record except slight difficulty in getting the patient to breathe following a normal delivery. Vomiting occurred several times at the age of five or six days, and hypodermoclyses of saline solution were given because of dehydration. At the age of 2½ months a left internal squint was noticed which cleared up in a day or so and then recurred shortly after, with an internal squint on the opposite side. This persisted up to the time of admission. About two weeks prior to entry the head was noted to be enlarging, the veins of the scalp to be more prominent, and the fontanels to be bulging more than usual. Vomiting had occurred only once in this two week period, and feedings had been taken about as usual.

Physical Examination: The patient was a well developed and well nourished active infant with a moderately enlarged head which measured 46 cm. in its greatest circumference and 30 cm. from the glabella to the external occipital protuberance. The fontanels were bulging moderately, and the veins of the scalp were fairly prominent. The only cranial nerve palsy noted was a bilateral abducens of moderate degree. The left arm and leg did not seem to be moved quite as much as the right though there was not any actual weakness noted. Deep reflexes on the left side were slightly increased over those on the right; neither observation was in keeping with subsequently disclosed conditions. On October 1, 1928, the right ventricle was tapped and clear fluid under increased tension escaped. Twenty cubic centimeters of a one per cent solution of indigo carmine was introduced into the ventricle, and the left ventricle was tapped a few moments later. On tapping the left ventricle, highly xanthochromic fluid, also under tension, escaped but no trace of the dye was encountered. A lumbar puncture done about a half hour later showed that a faint trace of the dye had reached the lumbar sac.

At operation under ether anesthesia a left sided bone flap was turned down. The surface of the brain showed much flattening of the convolutions especially in the temporal region. An incision was made in the postparietal region through the

thinned cortex extending into the distended ventricle. On the medial wall of the ventricle, about opposite the pineal gland region there was seen an irregular tumor mass 5-6 cm. in length and 4-5 cm. in height. The surface was grayish-red. Around this tumor was a delicate envelope which was rather closely adherent to it. The tumor appeared on inspection to be too vascular for biopsy. Consequently an opening about 1 cm. in diameter was made through the septum pellucidum to allow fluid to escape into the opposite ventricle. A small decompression in the left subtemporal region was made. The patient made an uneventful recovery from the operation and was discharged on the tenth postoperative day.

The patient received deep roentgen treatments on October 16, and November 6, 1928 and on January 15, 1929. There was moderate vomiting after each of these treatments. On February 6, 1929 the patient was readmitted because of the slowly increasing size of the head in spite of the roentgen treatment. Otherwise the patient had developed normally, and had gained steadily in weight and strength. The head measured 52 cm. in the greatest circumference, as compared with 46 cm. on the previous admission. There were no cranial nerve or pyramidal tract palsies. A right homonymous hemianopsia seemed certain from repeated examinations. The fontanels were under moderate tension.

Operation: On February 7, 1929 the left-sided craniotomy wound was reopened and the tumor exposed. There was at once apparent a striking change in its size and consistency. The tumor was firmer, appeared less vascular, and seemed to have decreased about 2 cm. in size in all dimensions. On dissection around the base it was found to be connected with the choroid plexus. Excision in toto was accomplished with the aid of the electrocautery. The patient made a good recovery from the operation, did not appear to have any pyramidal tract palsies and was again discharged on the tenth postoperative day.

Comment: The anterior portion of the choroid plexus was left intact though it probably would have been better to have put a silver clip on its blood supply or to have excised it entirely.

Pathological Examination: After hardening in a diluted solution of formaldehyde (ten percent) the tumor measured 4.5 by 3 cm. It was definitely limited on all sides by a thin delicate membrane of glial tissue. On cut section the granular papillary structure of the tumor could be made out. Numerous minute cysts were encountered. Two fairly large arteries could be seen going into the tumor at its base where it was connected with the choroid plexus. Histological examination of the tumor showed it to be a typical papilloma of the choroid plexus. Each section showed myriads of papillary projections most of which had a connective tissue core, as demonstrated by vanGieson's and Perdrau's stains. The papillae were covered for the most part by a single layer of cuboidal or columnar epithelium. Pseudostratification occurred in some areas. No cilia could be seen, and blepharoplasten could be demonstrated by either Hortega's silver carbonate or Bailey's ethyl violet orange G stain. Glia fibers in the stroma of the tumor could not be made out. The diagnosis was papilloma of the choroid plexus of the left lateral ventricle. Fig. IX.



FIGURE 9

Section of tumor—papilloma of choroid plexus—showing its size in centimeters and granular surface.

Clinical Course: Since discharge, now eight months ago, the patient has been relieved of the cerebrospinal fluid block. The head measures 49 cm. in its greatest circumference as compared with 53 cm. before the second operation and 46 cm. before the first. There are no pyramidal tract palsies. A partial right homonymous hemianopsia persists. Physical growth has continued normally. There has been in the last few weeks, however, a series of petit mal attacks. Mental growth has been much retarded.

Case 13. No. 17976. *Pachymeningitis hemorrhagica interna, left.*

E. M. This patient was brought into the hospital unconscious and without any history available. The pulse was 56 and respirations were 28 per minute. There was a fresh scalp wound over the left temporo-frontal region. Neurological examination showed a moderate degree of left sixth

nerve weakness, generalized rigidity and spasticity of all extremities with a positive Babinski sign on both sides, more marked on the left and bilateral ankle clonus. Examination of the eye grounds failed to show any variations from normal. Lumbar puncture showed spinal fluid to be under increased pressure—270 mm. water—and the fluid was definitely xanthochromic. A diagnosis of pachymeningitis hemorrhagica interna was postulated and a burr hole made over each parietal region. A large sac was encountered on the left side extending from the frontal region well toward the occiput and down over the temporal region. This was removed entirely leaving an enormous dead space which had to be filled with saline. Patient was much improved during the next 72 hours but gradually lapsed into a semicomatosed state. The wound was re-explored and an extradural clot evacuated. The patient then made an uneventful recovery following this Additional history furnishes the information that he sustained a hard blow over the left parietal region some 3-4 months prior to admission. This may have been an exciting factor in the etiology. The serology was negative throughout.

Case 14. No. 19010. *Hemangioma of left cerebral cortex.*

F. M. a 48-year-old man came to the hospital complaining of attacks of unconsciousness of five years' duration. During the year previous to admission, the attacks became more frequent and severe. They usually began as clonic spasm of the left foot which spread over the entire left side of the body and usually lasted about ten minutes during which he was unconscious. Following the attack he was usually quite confused and very tired for about one hour. The only other symptom was occasional mild headache.

On examination the patient was rather drowsy but was easily aroused and responded promptly Pupils were equal and regular and responded promptly to light and accommodation. Extraocular movements were normal. Ophthalmic examination showed only a slight blurring of the nasal margin of the disks. There was no "choking" noted. The cranial nerves were intact. General neurological examination revealed nothing abnormal.

A lumbar puncture showed the fluid to be under slightly increased pressure with normal rise and fall on jugular pressure. Stereoscopic x-rays of the skull were of no particular help. A ventriculogram showed dilatation of the left lateral ventricle. At operation a vascular tumor about 5 cm. in diameter was encountered in the right motor leg area which was adjacent to the longitudinal sinus and many vessels were seen going to and from the tumor. Because of the vascularity, no attempt was made to remove the tumor. Fig. X. The bone flap, however, was removed to expose the tumor more completely to x-ray radiation. Convalescence from operation was uneventful. He has had a fairly intense course of deep therapy. For one reason or another he has not had any further attacks. A few months after operation he began to lose weight and strength and re-entered the hospital for re-examination. Examination at that time showed weakness, emaciation and slow speech and other symptoms commonly ascribed to a low metabolism. A basal metabolic reading was —30. The patient was given thyroid extract 0.1 gm. t.i.d.

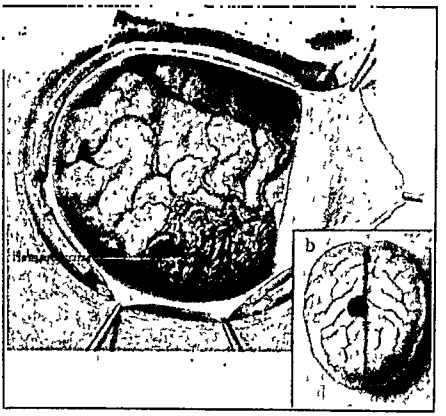


FIGURE 10
Hemangioma of cortex—leg area.

which he has taken intermittently without improvement for six months. When seen two years after operation, he has not had any more attacks but slight headaches have continued. Loss of weight and strength has persisted in spite of the treatment with thyroid extract.

Case 15. No. 40326. *Glioma of the right frontal lobe.*

C. M. a 40-year-old man referred by Dr. Norman Moore of Ithaca entered the hospital with the complaint of headache and fainting spells of seven weeks' duration. The fainting spells lasted approximately two minutes. This was followed by a severe headache over the vertex of the skull which radiated to the temporal regions lasting about two hours. At first these attacks occurred about every five days but became progressively more frequent and at the time of admission they were occurring three or four times daily. During the attacks there was some drooping of the left side of the mouth and rolling upward of the eyes. For four weeks previous to admission there was some roaring in the right ear and diminution in the sense of smell. For two days previous to admission, there had been nausea and vomiting. On the day before he came to the hospital, he noticed that he was unable to stand alone readily.

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TRYPARSAMIDE IN THE TREATMENT OF NEUROSYPHILIS*

By H. C. SOLOMON, M.D., and S. H. EPSTEIN, M.D., BOSTON, MASS.

From the Boston Psychopathic Hospital, Boston, Mass.

TRYPARSAMIDE is a rather extraordinary drug in that it has a very definite beneficial effect on syphilis of the central nervous system, whereas it has very little spirochetal effect as measured by the results of treatment in cases of early syphilis. The manner in which its effect on neurosyphilis is accomplished has never been established. There are only two theories which have been advanced that are even sufficiently suggestive to merit discussion. The first is that the action of the drug is through a stimulation of metabolism. The basis for this statement is that patients often gain weight when the drug is given. No other evidence of change in metabolism has been produced, however, and the gain in weight is usually a transitory effect and not long-lasting, so that this hypothesis does not seem to be reasonably well established.

The other explanation of its effectiveness is that it penetrates the central nervous system more satisfactorily than do most other arsenical preparations. It has so very little spirocheticidal value, however, that even if it were able to penetrate to a much greater extent than is the case, there would not be a high expectancy for therapeutic benefit. It would therefore seem that at the present time we must be content with evaluating any results that may be obtained without being able to explain the mode of action.

In this paper we shall attempt to briefly outline our own conclusions as to the effect of this drug in early and late syphilis of the central nervous system, comparing it more or less to the effects of arsphenamin on the one hand, and fever therapy on the other. No attempt will be made to give detailed statistical tables. It is felt that such tables are very misleading as statistical material must vary so greatly, with such a high factor of change in the type of case that is treated. This is true, at any rate, as regards the cases of general paresis and tabes.

In our experience, the cases of early neurosyphilis of the meningeal variety, respond extremely well, practically without exception, in fact we have had no case of meningeal syphilis that has not responded extremely well to tryparsamide. This statement also holds for the ordinary type of early meningo-vascular neurosyphilis. Almost always clinical improvement will be noted in the course of three or four weeks. Serological cure is to be expected in these cases in the course of a few months, and as has already been indicated, a serological cure is, in our experience, inevitable.

This type of result relates to the central nervous system only, and not to the systemic infection, and it is in this respect that the great difference between arsphenamin and tryparsamide is made apparent. It is well recognized that there are many cases of syphilis treated from the primary stage which develop central nervous system syphilis despite the ordinary routine treatment with arsphenamin, mercury, bismuth, and iodides. Many of these cases develop both the symptoms and a positive spinal fluid serology during treatment which has been successful in clearing up the primary and secondary skin manifestations, and which has produced a negative Wassermann reaction in the blood.

A case of ours which has shown this interesting differentiation of the effect of arsphenamin and tryparsamide, is that of a man who presented himself for treatment during the late part of his primary period. Under conventional arsphenamin, bismuth, and mercurial treatment, his blood became negative and he was symptom-free. A year after the beginning of treatment he complained of severe headaches. A careful examination then revealed evidences of a syphilitic meningitis. The spinal fluid proved to be strongly positive in each test, with approximately 1000 cells per cmm. This syphilitic meningitis developed during conventional treatment and in the presence of a negative blood Wassermann. He was given weekly injections of tryparsamide unaided by any other drug. The symptoms promptly receded and at the end of a few months, the spinal fluid had become negative. While on this treatment, however, he had a relapse of blood Wassermann, which became positive, and about a year after the beginning of tryparsamide treatment he developed recurrent secondary skin and mucous membrane lesions, the latter containing many spirochetes. One injection of arsphenamin was followed by immediate improvement of the skin lesions, and after a short period of treatment with arsphenamin, the lesions all disappeared and the blood again became negative.

This case is particularly illuminating because of the development of central nervous system symptoms while under arsphenamin, the cure of these symptoms with tryparsamide, the development of skin manifestations while being treated with tryparsamide, and the disappearance once more of the skin lesions under arsphenamin. Much more frequently one sees the development of central nervous system symptoms while the patient is receiving ars-

* Read at the Annual Meeting of the Medical Society of the State of New York, at Syracuse, N. Y., June 2, 1931.

phenamin with their involution following tryparsamide.

This sequence of events may occur in the late course of syphilis as well as in the early course. For example, a patient presented himself for treatment because of a positive blood Wassermann, and an old history of syphilis which began to concern him when his wife became pregnant. Examination at this time showed no clinical symptoms. The neurological examination was entirely negative, and the spinal fluid was in all respects normal. While on treatment consisting of arsphenamin, bismuth, and the iodides, the patient developed very definite mental and neurological symptoms of general paresis. Examination of the spinal fluid divulged a typically paretic formula. Under treatment with tryparsamide, the mental symptoms disappeared, patient returned to normal intellectual functioning, and the spinal fluid became entirely normal once more.

Similarly, in the late cases tryparsamide may have no effect on systemic symptoms, whereas arsphenamin is most effective. A woman diagnosed as a syphilitic epileptic with a positive spinal fluid, was treated for two years with tryparsamide and fever therapy. Just subsequent to the second series of malarial fevers, while receiving tryparsamide, she developed a tumor on the forehead. An X-ray picture was typical of a gumma involving the frontal bone. This occurred under our very eyes during a period in which there was clinical improvement as regards the convulsions and mental state of the patient, and with the spinal fluid which had become entirely normal. A few injections of arsphenamin was followed by improvement in the gumma as demonstrated both by the superficial tumor and the X-ray findings, and in the course of a few months of treatment with arsphenamin, the bone again appeared normal.

In late neurosyphilis of the more benign varieties, that is, in the cases of so-called cerebrospinal syphilis, or meningo-vascular neurosyphilis, predominantly of the meningeal type, tryparsamide is effective much as in the early cases, but there are undoubtedly exceptions to this rule. When one deals with late neurosyphilis, there is always a possibility of having pathological changes that are fixed and irreparable. Therefore, in a general discussion it is possibly well to consider the evidences derived from the serology. In many cases of the type mentioned, the spinal fluid will become negative with tryparsamide after a very few injections. There is no constancy or rule in this, however, and there are a fair proportion of the cases in which months of treatment are required for serological cure. In fact, we have one example of a patient with a typical clinical picture of meningo-vascular neurosyphilis whose spinal fluid was brought to normal only after six years of almost constant treatment.

At this point we would like to divert long enough to discuss the moot question of the relation of clinical and serological results. It has often been stated, especially in the discussion of the treatment of general paresis, that patients with serological improvement may show no clinical parallelism, and on the contrary, patients who make excellent clinical improvement may show no serological response. Without doubt, this is at times the truth, but our experience inclines us to the belief that in the first place the ideal is to have both clinical improvement and serological cure. In the second place, we are very strongly of the opinion that the cases which show clinical improvement without concomitant serological improvement, are quite likely to relapse. Finally, it is our opinion that the cases which show complete serological cure are likely to have a complete arrest of the activity and if clinical improvement has not occurred, it is because damage to functioning elements prevents improvement. A further point that we would strongly emphasize is the not infrequent serological relapse. As one follows cases under treatment with repeated spinal fluid examinations, one finds an occasional tendency for improvement to occur or even a normal fluid to be obtained, and then at a later period the fluid more strongly pathological in one or all of the tests. In our experience, when this occurs, it is only a question of time until a clinical relapse will also appear unless with continued treatment the spinal fluid has again returned to normal.

While on the subject of serology, one may further interrupt the course of the discussion to briefly mention the response to tryparsamide on the Wassermann reaction in the blood. Recognizing that tryparsamide has so little effect on systemic syphilis, one might conclude *a priori* that the blood Wassermann would not be greatly affected by tryparsamide. As a matter of fact, one frequently sees cases of neurosyphilis in which a long period of arsphenamin treatment has had no effect on the blood reactions, whereas, after a few injections of tryparsamide, the blood becomes negative and remains negative. Again, one sees cases which have had no previous arsphenamin treatment, in which the blood becomes negative after a very few injections of tryparsamide. On the other hand, in some cases, one, two, or three years or more of tryparsamide will be followed by a negative Wassermann reaction. Finally, there are still

other cases in which apparently a continuation of tryparsamide for a period of years will produce no change.

More crucial than the response of the simpler meningo-vascular type of neurosyphilis is the response to tryparsamide of cases of general paresis. Here the contrast between the effect of arsphenamin and tryparsamide is most striking. It is indeed exceptional for the spinal fluid serology to improve under arsphenamin treatment. On the contrary, it is the rule for improvement to take place when an adequate amount of tryparsamide is used. In fact, our experience has taught us that it is only the exceptional case of general paresis in which a definite improvement of the spinal fluid could not be obtained if tryparsamide is continued long enough. The time element is extremely important. Only in rare cases will the spinal fluid become negative in less than two years of continuous treatment, and in the majority of cases, at least three years is required, and in a great many cases five, six, seven, or more years are necessary.

We have been particularly impressed in studying the effects of tryparsamide on a group of rather chronic deteriorated cases of paresis. In two groups studied at two institutions, we have obtained almost invariable serological cure. These patients, markedly deteriorated mentally before treatment was begun, have remained unfit socially and require care in mental hospitals, but they have continued in good physical condition and the duration of life has been on the average more than five years, and, as mentioned, the serological result has been a normal spinal fluid.

It has been stated by many observers that clinical improvement with tryparsamide is usually obtained rather promptly, that is, within three or four months, and that if no clinical improvement occurs within this period, it is not likely to occur. In a general way, we are in accord with this statement. Improvement of clinical symptoms usually occurs rather promptly if it occurs at all. This, it seems to us, depends upon the fact that the inflammatory and irritative effects of the disease are fairly promptly improved, leaving what is the result of permanent nerve damage. On the other hand, relapses may occur either while the drug is being continuously used, or after it has been discontinued. As we have already mentioned, it is our opinion that the spinal fluid is a rather valid index of what is going to occur in this regard. Cases in which the spinal fluid does not show improvement at the end of a year or two of treatment, are likely to show mental relapse, and especially does it seem to follow that cases which have shown serological improvement and then a serological relapse, are almost certain to show a relapse in the clinical state in a short time.

In cases of this sort, we have had some rather satisfying experiences with the effect of fever therapy induced by malaria. The following case is a good example of clinical remission with preliminary serological improvement with subsequent serological relapse followed shortly by a clinical relapse, and then clinical and serological improvement after malaria.

A patient who showed signs of neurosyphilis with strongly positive serology and a depressed mental state in 1924, was put on tryparsamide therapy with clinical and serological improvement. After four years of treatment, during which time he received ninety-four injections of tryparsamide in doses of 3 gm. each, he presented the typical mental picture of paresis and the spinal fluid which had been improving again became strongly positive. After a course of therapeutic malaria, he immediately showed striking clinical improvement. About a year and a half later, the patient suffered another clinical relapse, and became profoundly depressed. Another course of febrile therapy was given, combined with tryparsamide. In a very short while the patient again improved clinically, and after a longer period of time the spinal fluid became practically negative.

This brings up the question of the comparative value of tryparsamide and fever therapy. This is a subject that we would very much like to avoid, largely because we do not feel able to give an adequate answer. To be sure, we do not believe that any adequate answer is available today. We will go so far as to say that we feel that by and large the results are fairly similar; that is, one may expect a thoroughly good clinical response in approximately 30 to 35% of the cases of general paresis treated by either method. As the above-described case indicates, a combination of the two methods is often much more satisfactory than either used alone.

Our routine is to give malaria, when possible, in cases of general paresis, following this invariably by tryparsamide until the serology has become normal and remains so for a period of several years. On the other hand, in the exigencies of our work, we find cases that we cannot hospitalize for malaria, or whose physical condition is such that we do not consider malaria advisable, in which case we treat them with tryparsamide. If the results are not satisfactory, then we give fever treatment.

One will find in the literature several state-

ments regarding the combination of fever and arsenicals. One statement frequently encountered is that cases that have had arsenical treatment, either arsphenamin or tryparsamide, do not do so well with fever treatment as the cases that are given fever without previous treatment. We have seen absolutely no evidence that this is the case. The history given above is an example, which we can repeat many times, of the beneficial effects of fever following tryparsamide.

A second statement is that it is dangerous to give arsenical products after malaria because of the effect upon the liver. As we have already mentioned, it is our invariable custom to follow malaria by tryparsamide, and as a rule we give two or three injections of arsphenamin immediately after the malarial fever in order to improve the anemia consequent on malaria, and because of its curative effect upon the malaria. In our experience of the past six years of this technique, we have seen no evidence of danger from this procedure.

Incidentally, another difference between the effects of arsphenamin and tryparsamide is seen in their effects on malaria. Arsphenamin will stop the inoculation malaria very promptly. Tryparsamide, on the other hand, has no obvious effect on the course of the disease and may be given simultaneously.

The effects of tryparsamide in the treatment of tabes dorsalis is not as easy to evaluate as it is in the other types of neurosyphilis. The results, on the whole, are good. In many cases, particularly when the symptoms are of quite recent origin, it is extremely striking. On the other hand, in late degenerative cases the clinical results are quite doubtful. It is in this group of cases that one not infrequently finds intolerance to the drug. The patient feels worse and loses weight and does not respond well.

As to the serological response, there is again a tremendous difference between cases. In some cases a very few injections of the drug will give a complete serological cure, whereas in other cases serological cure is obtained only after years of treatment. For example, a patient who had received his initial infection in 1912 had been treated for several years with arsphenamin and mercury. In 1920 he first noticed pains in his legs, and examination in 1921 showed signs of tabes with strongly positive serology. Arsphenamin treatment with spinal drainage was begun and continued until 1923. He was then started on tryparsamide which was continued for the next five years, during which time he received 137 injections of 3 gm. each. In spite of this treatment, the symptoms persisted, and the spinal fluid was changed but little.

We have not satisfied ourselves as to tryparsamide being more effective in tabes than is intraspinal therapy with the Swift-Ellis method. We do feel, however, that because of the much easier administration and less inconvenience to the patient, that it should be given in preference until it has been found to be relatively ineffective, in which case one would turn to another method, possibly the intraspinal. Likewise, we are unable to offer any conclusion in the comparative value of tryparsamide and malaria in the treatment of tabes. Again, our attitude is that tryparsamide should be tried first. As a matter of fact, we have used malaria very rarely in the cases of tabes, and generally in cases that have had an extremely rapid course. Here we have thought that considerable benefit accrued. We have also seen beneficial effects of malaria in cases of gastric crises which did not respond favorably to tryparsamide or intraspinal therapy. But here, the effect is probably not antispecific but more probaly due to change in the vasomotor and sympathetic systems.

There are some untoward effects to be met with in the use of tryparsamide, the most important of which is the occasional damage to the optic nerve. It has been stated that this is due to a reactive process in the interstitial tissue due to too rapid stimulation by the drug. Although we have no definite evidence to disprove this contention, we are still not satisfied with this explanation, and rather continue to accept the original hypothesis that it is an arsenic damage. However this may be, interference with vision occurs in about 3% of the cases treated. As a rule this is neither fargoing nor permanent. However, in an occasional case, very marked visual loss occurs. In one such case in which practically complete blindness occurred, Dr. Castner did prolonged and repeated spinal fluid drainage with very marked improvement of vision. In a few cases in which visual symptoms have occurred in our patients since that experience, we have used this method of spinal fluid drainage and there has been marked improvement in all such cases. Occasionally patients show dermatitis, although we have never seen a typical exfoliative dermatitis. Jaundice also is occasionally encountered but in none of our cases has this been serious. Rarely a patient shows intolerance to the drug as manifested by fever, sweating, nausea, vomiting, anorexia, and loss of weight. In our experience it is most likely to occur, as already noted, in rather advanced cases of tabes or patients whose spinal fluid is almost negative, or the rather burnt-out type. Finally, we occasionally meet with intolerance to the drug occurring after many months or several years of treatment.

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GENERAL HOSPITAL NEURO-PSYCHIATRY*

By G. KIRBY COLLIER, M.D., ROCHESTER, N. Y.

THE importance of the care of the mental and nervous patient is coming to be more and more of a problem which we must seriously consider. The state has, through its munificence gradually assumed the care of the mentally ill until today there are in New York State sixteen hospitals for the care of mental diseases, provided by the State government at the enormous cost of sixty-five million dollars, in addition to twenty-nine private licensed institutions and four hospitals now under process of construction by the State. The State Hospitals, according to the last report of the Commission of Mental Hygiene, had a population of forty-seven thousand and the private licensed institutions were caring for twenty-six hundred patients. The State, through legislative appropriations and Bond issues, has been endeavoring to keep pace with the annual increase in the demand for their facilities, this annual increase being now around the two thousand mark, and we have no reason to doubt but that this increase will become greater as time goes on unless every member of the medical profession takes an active interest in the work of prevention or Mental Hygiene.

Dr. William A. White, in his inaugural address as President of the First International Congress on Mental Hygiene, recently held in Washington, stated, "Today, if we believe the statistician, there are walking the streets of our lands, five million young people who sometime in their life, will suffer from some form of mental illness."

In a study made by the late Dr. Thomas W. Salmon, he found that in a given year, one out of every twenty-two of the deaths reported to the New York State Health Department, occurred in hospitals for mental patients, and he concluded from his data, that about one out of every ten or eleven persons, became mentally ill in the course of a generation.

In a more recent study by Dr. Pollock of the New York State Mental Hygiene Commission, he shows a recovery rate o 20% in first admissions.

With these amazing figures before us, we should consider mental disease, not as an isolated problem to be cared for only in special hospitals for mental diseases, but as medical men viewing the broad problem of health from its every angle; we should consider as to whether our general hospitals are doing their duty in the care of this group of so-called psychiatric cases.

Our general hospitals occupy an important place in the preventive health activities of their respective communities. With the extension of the practice of medicine, the hospitals relationship to the communities are constantly widening and their services are ever being broadened to include all classes of the community. Health activities radiate from these hospitals, aiming at the prevention of disease and the promotion of personal as well as public health.

The general hospital of today, is, in a large measure, an educational institution, and it is gradually broadening this field.

Every patient and every hospital visitor, should and does receive some health educational stimulus from his or her contact with the general hospital of today.

We are all familiar with what has been done by organized medicine in the recognition, control and early care of the contageous diseases—tuberculosis, syphilis, etc. What has been accomplished by medicine in the last decade, reads almost like fiction, and we must and will expect an even greater productiveness in preventive medicine in the future.

With the growing recognition of the importance of early diagnosis and treatment of mental diseases, the modern general hospital is today being asked to give the nervous and mental patient the same chance to get well, as is afforded the physically ill patient: to repeat, when we consider that in New York State alone there are about fifty thousand patients cared for in hospitals for mental diseases, it is time that more consideration be given toward an earlier recognition of this class of patient and every aid at our command used in his care and treatment.

With the knowledge of the situation as it exists; are our general hospitals doing their duty toward this so-called group of psychiatric cases?

There is a common agreement among physicians and psychiatrists, who treat patients suffering from the milder mental and nervous disorders, that the existing modern general hospital, by adding a psychiatric department, would be able to offer effective care to many of this large group of patients.

It may be said, that the treatment and care which the nervous and mental patient requires is the same as that required by the average run of patients of general hospitals. All the diagnostic and treatment facilities, both in the matter of personnelle and equipment which are already a part of the general hospital, could be utilized in the interest of the mental patient.

Unfortunately, the lay public has not as yet adjusted itself to the fact that mental disease is in no way different than a physical disorder and that the mental patient requires equally as early and as good care, and as careful and as intensive study, as does that member of the family showing evidence of a physical disorder. He or she is entitled to the benefit of every diagnostic

* Read at the Annual Meeting of the Medical Society of the State of New York, at Rochester, N. Y., June 3, 1930.

method at our command but how often do we find that patient who shows early mental trends of a pathological nature, being kept at home, "under cover" so to speak, with the attitude on the part of the family, that it is a disgrace to have such a disease condition in the family.

The general practitioner or family physician is the first to meet this problem, and today his only place for care and treatment is in the home, where oftentimes, factors exist which are responsible for the lighting up of the disease or aggravating it, or else in a State Hospital.

That early borderland problem but seldom will accept State Hospital care and treatment even for short periods, but is quite willing to go to a general hospital for study. The general hospital is free of the prejudices which surround the mental hospital and we, as physicians, must rid ourselves of this prejudice first and the public will follow.

When it becomes known that patients with early mental symptoms would be treated in a general hospital having psychiatric facilities in the same way as other hospital patients, nervous and mental patients will be quite willing to go to the general hospital for study and treatment, at the stage when considerable help could be had, although they are most often unwilling to enter voluntarily, a mental hospital, even for temporary treatment.

The importance of the early diagnosis and treatment of mental diseases is being recognized more and more, and the question arises again; is the general hospital doing its part in the care of this group of the sick?

Under proper care and treatment in the psychiatric section of a general hospital, many cases would make a good adjustment or recovery and be restored to their family and friends without the so-called stigma of being committed to a mental hospital. The realization that through the psychiatric department of the local general hospital, adequate facilities for psychiatric treatment are available, means that the early treatment and care of mental diseases would be encouraged and effective steps taken in the prevention of the more serious forms of mental disease.

The type of nervous and mental patient to be reached by the general hospital, would include that growing number of persons whom we designate as nervous, exhibiting vague mental symptoms, or anomalies of conduct and of feeling, or some specific problem of behavior in children, persons whose nervousness is not severe enough to be regarded as illness, but whose condition renders it difficult for them to carry out life's normal activities and to assume life's responsibilities. It would take in those who are seeking help in the troubles which are common to everyone, fatigue, worry, jealousy, feelings of inferiority and insecurity, and mood changes. It would include the over-conscientious, as well as those who expect justice in the world, or those who meet the responsibility of the grown-up in a childish fashion, in other words, it would meet the needs of that mal-adjusted individual. By this recognition of the mental aspect of disease, the general hospital would be rounding out the services it offers to the community in combating disease and preserving health and would thereby take a more important place in the community's activities for the prevention and treatment of mental disease. The community would be saved the considerable expense that would be involved in the establishment and maintenance of a separate psychiatric clinic, since the hospital already has the medical staff and the diagnostic and treatment facilities needed for the modern care of mental patients.

The house officers, and the other members of the staff would become interested in the psychiatric case and their outlook broadened regarding the psychopathic personality, and the resultant transfers would be lessened. There would soon grow a new attitude toward the mental patient and a greater consideration of the individual rather than any disease process, and when you find a hospital, where the individual is considered, there you will find a complete hospital.

At the last meeting of the State Society, Heldt of Detroit, read a very interesting paper showing the comparative ease of care of the mental case in the Henry Ford Hospital. There a separate ward is provided for the psychiatric service, but in some of our general hospitals, beds are provided in the medical and surgical services for these cases.

In a recent statement made by Mathers of the Manitoba Canada General Hospital, where a ward of 32 beds is provided, he states that 65% of their admissions are returned to society.

In conclusion, permit me to stress:—

1. The importance of a more active interest on the part of the medical profession in the field of psychiatry, and mental hygiene.
2. The importance of the early recognition and care of mental disease.
3. The fulfillment of the general hospitals objective in caring for the sick of the community inclusive of all illness, whether physical or mental.
4. The comparative ease of care of the mentally ill in the general hospital in contradistinction to the generally accepted idea that he is a disturbing factor.

THE SIGNS AND SYMPTOMS OF MULTIPLE SCLEROSIS WITH PARTICULAR REFERENCE TO EARLY MANIFESTATIONS*

By ALBERT G. ODELL, M.D., CLIFTON SPRINGS, N. Y.

SO many of the statistical reviews of multiple sclerosis are based on the histories of patients treated in special hospitals for nervous conditions that it occurred to the writer to prepare a review based on the cases appearing over a term of years in a clinic of a general type such as Clifton Springs. As the study progressed there appeared some rather unusual facts which are noted in the body of the paper.

In this day, when more careful diagnostic studies are being made, many cases formerly diagnosed as sciatica are now known to be some form of spinal cord condition. Multiple sclerosis appears more frequently than in earlier years. This is undoubtedly due to the fact that we no longer wait for the Charcot triad before making a diagnosis.

A chart of the symptoms and signs in 48 patients is shown giving the number of those in whom the condition appeared and its percentage of frequency as well.

CHART A.

	Frequency	Per Cent of Frequency
Pallor of Discs	32	66.66
Absent Abdominal Reflex	31	64.58
Babinski	31	64.58
" (Questionable 2)		
Increased Knee Jerk	30	62.50
Nystagmus	25	52.08
Difficulty in Walking	24	50.00
Spasticity Present	23	47.91
Ankle Clonus	20	41.66
Speech	14	29.15
Slow or hesitant 8-16.66%		
Scanning 6-12.50%		
Bladder Irritability	13	27.08
Rhomberg	12	25.00
Ataxic or Spastic Gait	12	25.00
Loss of Vibration Sense	10	20.83
Intention Tremor	9	18.75
Loss of Position Sense	9	18.75
Numbness	7	14.58
Lessened Temperature Sense	6	12.50
Incoordination	6	12.50
Lessened Pain Sense	5	10.41
Lessened Passive Motion	3	6.25
Foot Drop	3	6.25
Oppenheim Reflex	3	6.25
Lessened Light Touch	2	4.16
Loss of Control of Bowels	2	4.16
Muscle Twitching	2	4.16

In our series about one-half of the cases gave as the initial complaint some disturbance in walking. This varied in degree from inability to lift the feet appreciably and resulting in a marked shuffling gait to slight difficulty as shown by tripping over obstacles or inequalities in the walks or pavements. In nearly all these cases there had been a gradual increase in the degree of the disturbance. It could not be ascertained from the history as to whether this involved one or both legs. The next most frequent complaint was a feeling of numbness or stiffness in the legs. With the average patient it seemed to be difficult for them to distinguish clearly between these two. It will be seen from the table that the difficulty in walking and spasticity are not so frequent findings as are other symptoms. This may be due to the fact that most patients do not apply for treatment until the process has become sufficiently advanced as to interfere with their comfort or ability to work.

For a long time, we have been accustomed to think of the Charcot triad of symptoms (intention tremor, scanning speech and nystagmus) as necessary to a diagnosis of insular sclerosis. Yet, in our patients these symptoms are well down in the list. Nystagmus is in fifth place being preceded by pallor of the discs (usually the temporal half being involved), absent abdominal reflex, the presence of a Babinski reflex, and increased knee jerks. Scanning speech appears well down in the list and intention tremor appears still more rarely. Lest it be said that there might be some question as to the diagnosis in cases used in the tabulation, there should be kept in mind the fact that only those cases were used in which no doubt of the diagnosis could be raised. For this reason ten cases diagnosed in the records as insular sclerosis were discarded.

A tabulation of the age and sex incidence is also interesting. In considering the age, it should be remembered that the age given is the age at which the patient came under treatment and not the age of the appearance of the initial symptoms. The latter is most difficult to obtain with any degree of accuracy but it may be assumed that the average patient had the symptoms for a period of one to three years before coming under observation.

CHART B.

Age	*Female*	*Male*
15-20	1	
20-30	5	
30-40	9	8
40-50	9	3
50-60	4	4
60-70	2	
70 +		1
Total	30	16

* Read at the Annual Meeting of the Medical Society of the State of New York, at Syracuse, N. Y., June 3, 1931.

In two cases, both females, the age was not given. This makes the incidence in 48 cases, 32 females and 16 miles or a 2 to 1 proportion in favor of the former. The age of greatest incidence is the same in both. The period between 30 and 50 years shows 18 women and 11 men. Put in the terms of percent, of the women 60% and the men 68¾% occurred in those two decades. The period from 30 to 60 years contains practically all the men and 73⅓% of the women. Why the women should be predominantly afflicted by this condition is a hard question to answer and one that will not be attempted in this paper.

Foci of infection have often been blamed for the occurrence of this condition. Yet a study of the records of these 48 cases, show that tonsillar infection is noted in ten patients only while carious teeth and peridental infection is spoken of in nine.

There were abnormal changes in the blood pressure recorded in six patients. Of these four were 105 systolic or below while two showed an increase to 170 systolic or above. Twelve patients had a secondary anemia and one a count suggestive of pernicious anemia but in whom that diagnosis was not confirmed.

Spinal fluid examinations were recorded in six cases. The sugar in two was noted as 0.056 and 0.073. Cell counts were recorded in five as follows: 42-15-14-10-6.

The physical condition of practically all the patients except as noted in the tables and the paragraphs following was very satisfactory, *i.e.*, no gross chest or abdominal pathology was found in any of the cases. In fact, most of them except for the neurological findings seemed in very good health.

For the purpose of a study of the frequency of this diagnosis among the patients admitted, the total number of diagnosis made, as well as those especially limited to the nervous system and finally the cases of multiple sclerosis from June 1, 1922, to May 31, 1930, are here set forth.

CHART C.

Years	Total number patients	Total diagnosis all diseases	Total diagnosis nervous system	Multiple sclerosis
1922-1923	3430	6074	791	8
1923-1924	3648	6687	1013	4
1924-1925	3870	7720	881	3
1925-1926	4250	10854	1023	4
1926-1927	4679	12247	1002	2
1927-1928	4602	12990	1119	5
1928-1929	4738	10169	1153	11
1929-1930	4469	10240	1139	10
Totals	33686	76981	8121	47

These show that a diagnosis of multiple sclerosis was made 47 times. During this same time there was a total of 76981 diagnoses of various sorts making the proportion of multiple sclerosis 1-1638 or 0.006%. Of the 76981 diagnoses made 8121 were neurological ones. They include all forms, organic, functional, etc. The proportion is 1-173 or 0.58%. In this period, 33686 patients were admitted to the clinic for study. Forty-seven of these were diagnosed insular sclerosis, making the proportion 1-717, or 0.14%. This means that with this proportion each year out of every 717 patients admitted, at least one will be suffering from multiple sclerosis.

Brain, in his monograph on this subject in the *Quarterly Journal of Medicine* (April, 1930) says that of 33090 admissions to the London Hospital in the years 1924-28, 116 or 0.35% were diagnosed as insular sclerosis. This is a much larger incidence than is shown among our 33686 admissions. However, there is abundant evidence showing that the incidence is much lower in the United States than in England and Wales. Brain believed that the occurrence in the general population is not over 0.005% in the United States as compared with an estimate of 0.016% in Great Britain. This would make the incidence in the United States about ⅓ that of England and Wales. Our group shows about ¼ the number of cases in approximately the same number of patients. He finds in the literature a marked divergence from our findings as regards males and females. In the literature as he reviewed it, the males predominate approximately 3-2. In our series the females predominate almost 2-1. Our general admissions from May 1, 1919 to April 30, 1930 show males 17637 and females 26633 or a ratio of 1½-1.

CHART D

	Ours	Birley & Dudgeon	Sachs & Friedman	Marquezy	Bohmig
Pallor of discs	1				
Absent abdominal reflex	2	3			2
Babinski reflex	3	1	2	1	
Increased knee jerks	4				
Nystagmus	5	4	3	4	3
Difficulty in walking	6			2	
Spasticity	7				

This chart shows the variability of the occurrence of symptoms and signs as recorded by various observers when compared with their order of frequency here. These figures are quoted from Brain. Note the wide variation of early and frequent symptoms as recorded by the men whom he quotes. It would seem that if one waits to make a diagnosis until the Charcot triad (nystagmus, intention tremor and scanning speech) are present, the patient will be well along in the disease.

Brain's statement is to the effect that this triad occurs in 10-12% of cases only.

It will be noticed that no attempt has been made to discuss etiology, treatment, or differential diagnosis. The writer wishes, however, to emphasize one point and that is the necessity of the use of lumbar puncture, lipiodal, and *x*-ray before making a positive diagnosis of insular sclerosis. This point is forcibly brought out by Ayer in a paper given last year and by Palfrey in its discussion. (Symptoms and signs of Tumors involving the Spinal Cord, *N. E. Jour. Med.*, 203, 295, 1930).

Summary: Our studies seem to indicate that when any patient complains of vague difficulty with the legs, especially in walking, a thorough neurological examination is in order and that this should include an *x*-ray study of the spine after the intra-thecal injection of lipiodal to rule out the presence of a cord tumor. It also confirms the findings of others to the effect that among the earlier signs of insular sclerosis will be found difficulty in walking, temporal pallor of optic discs, absent abdominal reflex, hyperactive knee jerks, and nystagmus.

As a rule, if scanning speech and intention tremor do appear in the picture, they will be late symptoms and their appearance should not be awaited, if one wishes to make an early diagnosis of multiple sclerosis.

HEATING APPARATUS FOR INTRAVENOUS SOLUTIONS

By HAROLD F. MORRISON, M.D., TUXEDO PARK, N. Y.

The described method has been used at the Tuxedo Memorial Hospital for maintaining the temperature of intravenous and subcutaneous medications. The apparatus consists of a narrow wooden box, containing two ordinary finger bulbs in the back, these furnish the heat. The front is open and in this opening is placed the graduated cylinder of the ordinary intravenous set.

Figure 1 shows the apparatus with one side removed to show the lights and cylinder in position.

In practice the heating box is hung on an irrigation stand and lights turned on. The intravenous set is filled with the solution which has previously been warmed and all air expelled from the tubing. The cylinder is then slipped into the front of the heating box.

At the ordinary rate of flow for intravenous medications the temperature in the cylinder is constant for all practical purposes.

The advantages are:

1. Cost: Inexpensive, the heating box can be made by any carpenter.
2. Simplicity: The usual intravenous set with cylinder container can be used without change.
3. Temperature: Constant.
4. Illumination: Because of lights behind the cylinder the rate of flow and amount given are easily read.

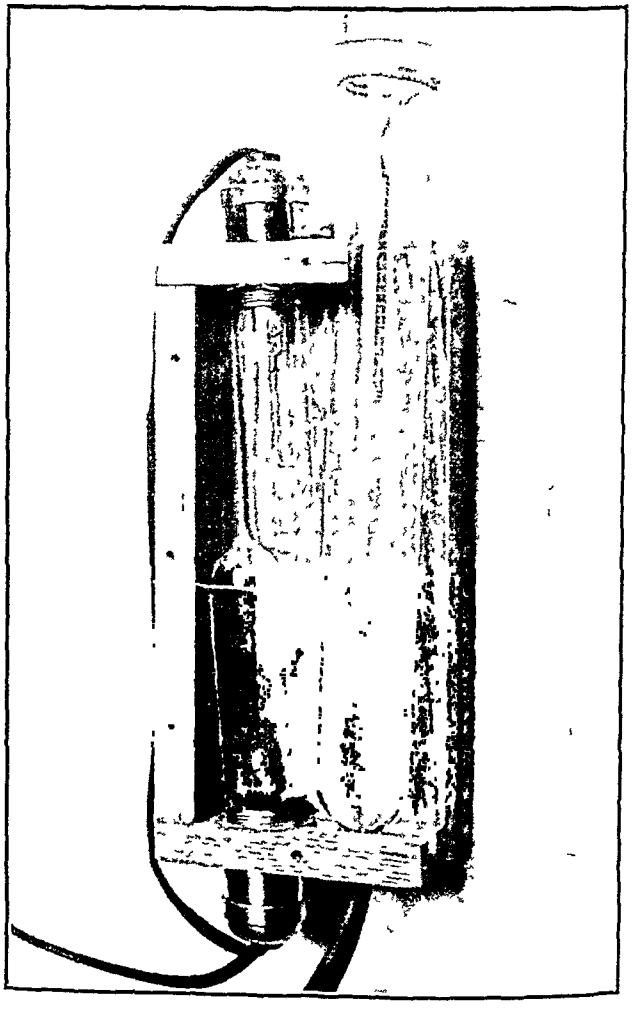


FIGURE 1

POSTOPERATIVE ILEUS, ITS EARLY RECOGNITION AND CONTROL*

By DONALD GUTHRIE, M.D., SAYRE, PENNSYLVANIA

MODERN preoperative preparation, the development of operating technique to the highest degree and the intelligent and watchful postoperative care of the patient requiring an abdominal operation have greatly lessened the mortality and the morbidity of abdominal operations of all types. Although occurring much less frequently than in former days, postoperative ileus—and by this term I include the two types, dynamic or mechanical and adynamic or non-mechanical—is still the cause of much of the present day mortality following abdominal surgery.

All measures which tend to prevent the occurrence of this serious complication are well worth consideration at all times and at any medical gathering; and even more important is a review of the early symptoms which makes it possible to recognize and control the condition early, for here the time factor is of greatest importance. Both types of ileus may be caused by prolonged operations, badly given anesthesia, rough handling of the patient's tissues and his viscera, great loss of heat, time and bodily fluids and the leaving behind of raw surfaces within the abdomen, although it must be remembered that mechanical ileus may follow the most trivial sort of an abdominal operation. The experienced surgeon can often tell just how smooth or stormy the postoperative course of a given patient may be by the amount of trauma necessary to employ at the time of the operation. All measures which promote gentle, intelligent, accurate, rapid work should be encouraged. The advantages of a well trained operating team and the skillful administration of the anesthetic are most important. A very important part of the young surgeon's training should be to develop in his mind, early in his work, a holy and sacred regard for the unconscious man's tissues, and it should not be beneath the dignity of any house surgeon to be given a retractor and taught how to handle it correctly. For this very reason I have never used or allowed to be used in my clinic any form of self-retaining retractor. Sharp dissection at all times should be carried out and rough gauze dissection discouraged.

Several years ago I described a method of Trendelenburg anesthesia. The sole object of the method is to prevent the use of gauze packing in pelvic surgery. Briefly, the anesthetic is begun with the patient in high Trendelenburg position. By the time the abdomen is opened, the pelvis will be practically free of all loose intestinal coils, so that it is often only necessary to use the end of a square of gauze in the upper angle of the wound in order to obtain adequate exposure. Naturally, one may expect a far less degree of postoperative reaction and a far less degree of meteorism or ileus in a patient operated upon by such technique, than one in whom it is necessary to use large quantities of gauze and much rough manipulation within the abdomen in order to obtain the necessary amount of exposure.

One of the advantages of spinal anesthesia in the carefully chosen case, is the complete relaxation of the abdominal wall and the collapsed state of the small intestine which permits complete exposure with the use of the smallest amount of gauze. Let me emphasize the importance of avoiding trauma within the abdomen, especially to the small intestine and particularly to the upper portion of the small intestine, for trauma here is not well borne and is one of the commonest causes of postoperative ileus.

The symptoms of postoperative adynamic ileus are not by any means cardinal and the condition is oftentimes hard to diagnose from mechanical ileus low down in the intestinal tube or beginning general peritonitis. The patient is apt to belong to the highly strung neurotic type who stands psychical and physical trauma badly—I remember a fatal case of gastro-mesenteric ileus, proved by autopsy, which followed the most trivial injury—there has been a certain unusual degree of operative trauma employed during the operation and there may have been a degree of postoperative shock. During the day following the operation the patient is restless, the expression is anxious, the pulse is fast, the abdomen is distended and silent and there is regurgitation of gastric and duodenal contents. Mild degrees of ileus are encountered, of course, which are self-limiting and disappear at the end of 24 to 36 hours after onset.

The treatment should be fluids in large quantities, sodium chloride and glucose—an inlaying nasal catheter, if well borne; if not, frequent gastric lavages through a Levine tube to keep the stomach free of gas and secretions; heat to the abdomen and psychical support to the highest degree. It is extremely harmful to frighten these patients during this critical time. The abdomen should be auscultated at frequent intervals, for the appearance of peristaltic sound is generally a harbinger of a prompt improvement. The rebellious case which does not improve is the one which de-

* Read at the Annual Meeting of the Medical Society of the State of New York, at Syracuse, N. Y., June 3, 1931.

mands our closest observation and prompt radical measures to control. As mentioned above, the condition is often hard to differentiate from early mechanical ileus developing near the ileocecal valve, or beginning general peritonitis—both such conditions may have an ileus plus the mechanical fault as well, and the abdomen is distressingly silent during this stage.

We have used the method suggested a year ago by Willard Bartlett to great advantage in our work. Bartlett recommends spinal anesthesia postoperatively, as the best means of differentiating between adynamic and dynamic ileus. The operating room is in readiness. The patient's family understand an operation may be necessary and have given their consent to it; the patient is given a spinal anesthetic and if the bowels do not move in the bed within fifteen minutes the patient is taken to the operating room and an enterostomy or a more radical operation is carried out while the patient is still under the spinal anesthetic. Should a mechanical lesion be present, the fallacy of not operating at once is easily understood, for the contraction of the intestine may hurry the intestinal contents up stream. I regard the use of pituitrin or purgation in these cases as extremely dangerous. We have employed Bartlett's method six times in our work within the past year. We obtained immediate bowel evacuations in four patients, two other patients were operated upon immediately for a mechanical fault. Before employing Bartlett's method, we used enterostomy to control these cases in all instances, the operation acting as a means of deflating the intestinal tube, but we still use enterostomy for the case which will not respond to spinal anesthesia.

I believe a greatly distended small intestine, at times, is unable to contract even though the inhibitory impulses are removed by the spinal anesthetic. A greatly distended intestinal tube is very much like a distended inner tube, oftentimes, which will form a mechanical obstructive point where it turns a corner and is kinked. Bartlett's method works beautifully in the early case before great distention has occurred, but enterostomy should be employed for the aggravated case of adynamic ileus.

We have six living patients upon whom it has been necessary to employ multiple enterostomies in order to save them; one is the wife of a physician—one is the daughter of a physician.

Dynamic ileus is easier to recognize than adynamic ileus. As a rule, an operation leaving raw surface in its wake has been performed, or some inflammatory lesion has been present. When the obstruction is high or at a point midway in the intestinal tube, there is early vomiting—not great distension, and the patient is seized with regular recurring cramp-like pain with periods of quiescence. Early in the attack, the patient can almost time the period of pain recurrence. Auscultation of the abdomen is the most important of all diagnostic methods to be employed, for one can elicit exaggerated peristaltic sounds and the recoil of trapped gas and fluids during the periods of pain. These sounds are most characteristic, and we should teach our younger men to interpret them. Intestinal patterns are also pathognomonic of dynamic ileus and they should be looked for in all suspected cases. Careful inspection of the patient's well bared abdomen is most important and the examiner should spend much time to inspect such an abdomen during the periods of quiescence and pain, even though this requires a long time.

Barium enemas or barium by mouth should not be given or relied upon to make the diagnosis. Barium by mouth is dangerous—by enema, it reveals nothing except that the obstruction may be in the big intestine, and the technique of administration causes delay and the loss of valuable time. One may, however, learn much by an x-ray plate; if the obstruction is in the small intestine, we will find a collapsed large intestine and the parallel coils of distended small intestine, showing the herring bone pattern or Kerkring's folds. Obstruction in the large intestine may be made out by x-ray and often the surgeon may plan his incision to cope with the obstruction, the site of which can be told by x-ray.

Recurring pain, vomiting, exaggerated peristaltic sounds with the presence of intestinal patterns are all the symptoms one needs to diagnose postoperative intestinal obstruction and the sooner these patients are operated upon, the better. This is no time or place for a hypodermic of morphine, until the diagnosis is firmly established and arrangements have been made for an operation; then, and then only should morphine be given. There are many writers who believe that morphine is responsible for more than half the deaths occurring in acute obstruction. It is only by repeated warnings that surgeons can educate the general practitioners to withhold morphine in all acute abdominal conditions, until the diagnosis has been made and the seriousness of the situation explained. It is regrettable, also, that so few abdominal conditions, which are purely medical, require morphine. Morphine disguises symptoms, interferes with a correct diagnosis and gives a sense of false and dangerous security in all acute abdominal surgical conditions.

Unfortunately, there is often much delay—the surgeon dreads to re-operate upon his patient—the family may sense his uncertain frame of mind and begin to lose confidence; the nurse reports the passage of gas with the last enema—false encouragement, for the gas passed is probably in the tube below the point of obstruction; more purgation may be resorted to—a murderous practice, for the purgatives, if retained in the stomach, hurry the trapped intestinal contents higher up in the intestinal tube. Finally, the patient develops great distension, the pulse is very fast, the skin leaky, the abdomen is silent, fatally so; there is vomiting of fecal matter—all signs of impending death.

It is regrettable that patients are admitted to our hospitals in such terminal stages of acute intestinal obstruction; it is far more regrettable, in fact, deplorable oftentimes, that the postoperative case is allowed to pass into such a stage in some hospitals, because the operating surgeon lacked the courage or the knowledge to cope with the symptoms of early postoperative mechanical obstruction.

There are two types of treatment, depending upon the promptness of the diagnosis, the amount of distention of the abdomen and the general condition of the patient, all of which will vary with the time the operation is decided upon.

If the original operation has not been performed for an infective or suppurative process and the obstruction occurs midway or high in the small gut, if the diagnosis is made promptly, if there is little distension and if the general condition of the patient is good, it may then be safe to re-open the incision and correct the mechanical fault. If there is great distention, and the patient's condition affected, enterostomy is by far the best procedure and will save life; if the original operation has been performed for an infective process, it is best not to disturb the infected field, but do an enterostomy. I cannot agree with those who advocate entero-anastomosis between greatly distended and collapsed coils. This operation is contrary to all the principles which govern intestinal anastomosis.

In operating originally upon a case in which there is widespread early infection, we do not hesitate to perform a complemental enterostomy. In this way an obstruction duplex, should it develop, is controlled early. We also have, not a few, but many cases of widespread peritonitis which, I am sure, would have died without thorough drainage of the intestine.

Unquestionably, surgeons in the past have been responsible for some of the high mortality in all types of intestinal obstruction, because, in their efforts to help the patient, their operations have been far too radical and the patient far too ill to withstand the operative attack. The simple operation of enterostomy has come into great favor and is a life-saving measure. I should be almost as loath to attempt abdominal surgery without it, as I would to do goiter surgery without the use of Lugol's solution, or treat diabetes, were I a clinician, without insulin—for properly performed—it saves many patients, which in former days were lost. It is not always possible and not always necessary to relieve the point of obstruction; as you well know, many points of obstruction relieve themselves after the distended coils are deflated. We have not few, but many patients recover by this simple measure, whom we would have lost had we been more radical. The method, described lately by Holden, of evisceration of every patient who has obstruction, with direct emptying of all the distended coils, I consider dangerous—for so many patients may be saved by simpler, safer and less radical methods. Should strangulation be present, the simple operation of enterostomy will not correct the pathology, but the life of a very ill patient with strangulation, may be saved by the simple operation of enterostomy done as a first stage procedure, preliminary to a later resection when the patient's condition will warrant such an operation. Let me urge you not to be too radical with these very ill patients and urge you to use enterostomy.

If we appreciate the effect of the toxin upon the chemistry of the body, it is important to give quantities of fluid with salt before operation. Time should always be taken out for this measure. Quantities of salt solution should be given before, during and after the operation. Fluids, fluids and NaCl—isotonic and hypertonic salt solution. Hughson has shown that hypertonic salt solution stimulates peristalsis and may be a factor in stimulating the distended and paralyzed bowel. The intake of salt may be rapidly increased by giving two per cent solution by hypodermoclysis and a three to five per cent solution intravenously.

The chemical processes of the body cannot function properly without a sufficient supply of water; therefore, in patients very ill with obstruction we give from five to six liters of water every twenty-four hours subcutaneously, intravenously and by rectum. We agree with Crile, who advises water early, water continuously and water late.

Earlier in this paper I took exception to Holden's radical advice of evisceration of all these patients, and with drainage of the contents of the obstructed loop. In analyzing Holden's article, I find many of his patients

were immediate postoperative ones occurring in his own hospital. I am sure the diagnosis was made early and there was no need for such radical procedures as he advocates.

The remarkable thing about enterostomy is the infrequency with which anything further is required. It is the rarest thing to be forced to re-operate and correct the obstructed lesions —they generally correct themselves. I am sure that those who have had much experience in this work will agree with this statement.

The operation of enterostomy is a simple procedure, but it is well to call attention to a few technical points which are very important and to emphasize the need of intelligent postoperative attention to the tube, to keep it draining and prevent the intestinal contents from being retained. In very ill patients the operation may be performed under local anesthesia; if the case is an early one and the condition of the patient good, we prefer to use ethylene.

A left rectus incision extends from the left costal arch, downward, for a distance of not more than 6 c.m., unless there is a large amount of subcutaneous fat, then a larger incision is used. The peritoneum is opened only for a sufficient distance to permit the exit of a single knuckle of distended small intestine. Should the omentum block the incision and be adherent in the pelvis so that it is impossible to catspaw it upward and out of the way, we do not hestitate to split the omentum through an avascular zone and allow a distended knuckle of gut to slide through the split into the incision. Let me strongly advise against a large incision which will favor the release of several distended coils of intestine through the incision.

In the control of mechanical obstruction, it is best to have the end of the rectal tube pointing downward in order to take advantage of the reverse peristaltic waves. The direction of the gut may be easily determined by Monks' method, by insinuating two fingers down along the mesentery of the gut to the root of the mesentery. When the mesentery is followed down with the fingers on the left side of the intestine the fingers must enter the left fossa and cannot get into the right fossa without first crossing over the intestine. On the other hand, if the right side of the mesentery is followed down to its root, the fingers can only go into the right fossa. One side of the mesentery leads to the left fossa only, and the other side to the right fossa.

The operation is performed between two intestinal clamps. After the upper one is locked, the gas in the distended coil is expressed downward into the gut by squeezing the coil between the fingers. When the knuckle is collapsed the lower clamp is closed. This is a very important technical point, for it is hazardous to place a purse string suture in a greatly distended thinned-out loop of small intestine. The first purse string suture is placed so that the center will easily admit a rectal tube of small size, clamped at its distal end. This tube not only has an open end, but a side opening is made one inch from the end. The gut is opened with a sharp-pointed knife in the center of the area included by the purse string and the small amount of bowel contents carefully caught in sponges; the tube is inserted—end pointing downstream and the purse string tightened and tied, and the ends tied about the tube; the ends of the suture are cut and a similar purse string is placed about the tube, tightened and tied—the ends are again tied about the tube. The clamps are now removed and the loop containing the tube is allowed to become distended with gas. If the loop has been brought up through a split in the omentum, the edges of the fold are brought together over the tube with a suture or two of catgut; if the loop has been free, a gentle attempt is made to find the omentum—lift up its free end into the incision, split it and draw the clamped end of the rectal tube through the split. This serves as an excellent protection to the suture line and safeguards the patient against the development of a fecal fistula. Even though it is impossible to use this omentum as a protective pad, a fistula following a properly performed enterostomy is rarely ever seen.

The clamp is now removed from the rectal tube and the bowel contents with quantities of gas are allowed to drain into a basin placed beside the patient. It is now easy to return the collapsed loop into the abdomen. The wound is closed by interrupted figure of eight sutures of chromic gut and the skin and superficial fascia with silkworm sutures. The ends of the middle silkworm suture are left long and tied about the tube. The tube is irrigated at least hourly with water injected without pressure, or oftener, should the drainage cease. Let me urge the constant attention to the tube, beginning immediately after operation in order to encourage free and constant drainage.

RATIONAL TOPICAL SKIN THERAPY*

By OSCAR L. LEVIN, M.D., NEW YORK, N. Y.

Read before the Dutchess Putnam Medical Society, at a meeting held December 10, 1930.

THE skin should be looked upon as an important organ of the body that has definite functions to perform which normally co-operate with the functions of the internal organs. Disorders of the skin may affect the health of the rest of the body. Constitutional disturbances may produce abnormal cutaneous conditions. The origin of the great majority of skin diseases is internal dysfunction or cutaneous predisposition induced by a constitutional state. Even in local infections, like ringworm, impetigo, and furuncles, or dermatitides excited by external chemical or physical agents, the types and degrees of cutaneous reactions vary with the constitution of the individual affected.

The purpose of treatment is to cure or relieve, whether a diseased condition is constitutional or limited to the skin. To be scientific and systematic is essential for the physician who applies practical therapeutics. Therefore, in the scientific treatment of skin diseases measures are employed to (1) correct the physiology of the internal organs, (2) remove the local excitant, (3) eradicate the local predisposing factors, and (4) apply special local therapeutic measures which may be mechanical, chemical, and physical.

It is my purpose to devote this paper entirely to an explanation of the rationale for the application of the most commonly used topical applications. These are powders, lotions, pastes, creams and ointments.

In the treatment of an eruption it must be remembered that the various lesions represent visible manifestations of pathological changes in the structure and function of the skin. The local treatment depends upon a clear understanding of the pathology of the lesions and its correct interpretation to enable the proper application of remedies to rectify the abnormal changes.

Take, for instance, the simplest form of skin reaction—erythema simplex. When such a lesion is examined under the microscope it is found that the changes consist essentially of a dilatation of the blood vessels in the corium and papillary bodies, serous exudation, migration of leucocytes and diapadesis of the erythrocytes into the surrounding tissues. These changes manifest themselves clinically by redness and slight elevation of the skin. Because of the dilatation of the blood vessels there is an increased amount of blood in the affected skin resulting in increased heat, and as a result of the engorgement, the increased tension and irritation of the cutaneous nerves, there are subjective complaints of burning and itching.

Excellent agents for the correction of such acute simple lesions are powders which, when dusted on the skin, act by virtue of their physical properties. Fine, compactly arranged granules cover and protect the underlying tissue from external irritation and afford increased surface for heat radiation from the skin. This increased radiation and the capillary attraction to remove the fluids quickly cool the skin, blood vessels are contracted and the congestion relieved. Powder is, therefore, valuable for the protection, cooling and drying of the skin.

The most active powders are the mineral ones like zinc oxide, zinc stearate, magnesium carbonate, prepared chalk, bismuth subnitrate, terra silica and kaolin. The first are finer and more soothing while the last are heavier and take up large amounts of fluid, and are especially valuable in the presence of fluid discharges. However, the gradual admixture with the fluid causes a caking so that they must be more frequently removed and applied.

The vegetable powders like starch, corn, rice and lycopodium are also valuable but must be employed with caution. The granules tend to swell, ferment, and decompose when mixed with sweat or other fluids so that they eventually irritate the skin. They should not be allowed to remain for a long time on the skin, especially in a caked condition, as they may eventually roughen the skin, obstruct the pilo-sebaceous follicles, and predispose to pyogenic infection.

For purposes of antisepsis, boric acid, salicylic acid and calomel are added, while phenol and menthol are used for antipruritic and cooling effect.

If there is a more inflammatory reaction as in the case of eczema, we advise lotions which are essentially fluids containing powders. In acute papular and vasicular eczema and allied conditions, there is a catarrh of the skin. The changes observed are at first similar to those in the erythemas. But the reaction tends to be accentuated, resulting in congestion, an infiltration of round and polynuclear cells in the corium, swelling with œdema in the corium and epidermis, extracellular and intracellular œdema of the epidermal cells, with ballooning and gradual breaking down of the cells to form cavities of broken down cells—microscopic vesicles. Thus to the naked eye there are redness, swelling, solid elevations—

papules, elevations containing fluid, vesicles, and with escape of fluid there is moisture.

Lotions should be shaken and spread on the skin with cotton or a soft camel-hair brush, and allowed to dry. The evaporation of the liquid cools the skin while the coating of powder remaining continues its action. Glycerine is frequently added for its hygroscopic action and also to keep the powder more continuously in contact with the skin. It is omitted or reduced in cold weather because it may make the skin cold and clammy. The proportion of glycerine is increased in warm weather but its strength is rarely above ten per cent, when used for acute inflammations, as it may become irritating. The fluids are usually lime water and rose water. When too drying, distilled water may replace the lime water. Alcohol is sometimes added for antiseptic, cooling and drying purposes.

No field of medicine requires the services of a scientific pharmacist more than does dermatology. The quality of the ingredients as well as the care with which the prescriptions are compounded are of great importance. A simple, and probably the most frequently used and useful lotion is the calamine and zinc oxide lotion.

Rx.	Prepared calamine	8.0
	Zinc oxide	8.0
	Glycerin	12.0
	Lime water	15.0
	Rose water, enough to make	120.0

Even this simple lotion may show a difference in appearance and in its effect on the skin when not properly prepared. In this preparation, chemically pure zinc oxide and a fine pink prepared zinc carbonate (prepared calamine) should be sifted through a fine sieve. The mixture should then be rubbed with the glycerin and a small amount of the official limewater added to make a fine paste. Then the rest of the limewater and rosewater are added. The zinc oxide and calamine act as a powder after the waters have evaporated and the glycerin soothes and keeps the powder in contact with the skin. Menthol and phenol should be rubbed together and a small amount of alcohol added to aid the liquefaction. These are used for anti-pruritic and cooling effect.

The rupture or tearing open of the vesicles results in the escape of fluid on the surface of the skin. When this desiccates, crusts result. In crusted cutaneous conditions it becomes necessary to remove the crusts before attacking the underlying pathological tissue. Watery solutions applied as wet dressings are not only efficient cleansing agents, but they also act to reduce inflammation. A pad containing several layers of gauze is soaked with a weak solution like a one to ten Burrow's solution, a two per cent boric acid solution, or a saturated solution of magnesium sulphate, and then applied to the inflamed crusted surface. The fluid softens and macerates the crust which is gradually detached. The gauze should be saturated and more fluid frequently added to maintain sufficient moisture. In acute conditions the gauze should not be covered with an impervious material like gutta percha or rubber tissue, as this prevents evaporation and causes retention of heat which results in irritation of the acutely inflamed skin. On the other hand, it may be desirable to stimulate rapid softening and breaking down as in the presence of chronic inflammations with firmly adherent thick crusts, or when hasty necrosis is desirable as for furuncles. In such cases the impervious covering may be justified. Subsequent to the removal of the crusts the lesions should be treated as suggested for acute vesicular eczema.

Cutaneous conditions of several weeks' duration usually show cellular infiltration, changes in the collogen, hypertrophy of the rete pegs—acanthosis, hypertrophy of the epidermal cells and especially of the cells of the stratum corneum resulting in parakeratosis and hyperkeratosis. The skin appears dark red, thickened and scaly. Both lotions and pastes act well in such cases. The latter are fat preparations containing high percentages of powder.

When spread on the skin, the fat covers, protects, softens and lubricates the skin. The incorporated powders favor absorption of secretion, radiation of heat, and relief of congestion. Lassar's paste contains approximately fifty per cent of powder—equal parts of zinc oxide and powdered starch—and fifty per cent of fat—usually vaseline. This makes a thick paste that is more or less difficult to spread and it is more practical to reduce the powder to twenty-five to forty per cent without affecting the efficiency of the preparation. Salicylic acid, in one to three per cent strength, is frequently added as a mild antiseptic, to prevent fermentation of the discharges and to dissolve the abnormal surface scales. When secondary pyogenic infections have caused pustule formation, an antispetic like ammoniate of mercury may be added to the paste preparations. Other drugs like tar, mercury, and sulphur are added for specific reasons.

Cold cream makes a splendid fat base for pastes and enhances the value of the paste by cooling and reducing congestion.

Creams are fatty preparations that contain water—usually about twenty per cent. The fat covers the skin, the water in the cream

evaporates, the cream then absorbs water from the skin, especially if there is inflammation, reducing the temperature of the skin. This action is the reason they are called cold creams. Many of them contain anhydrous lanolin or aquaphor to aid in taking up water from the skin. Petrolatum makes a good base as it does not decompose. Wax may be added to make creams firmer. Since they tend to become rancid, it is necessary to add a mild antiseptic such as boric acid to the fat and water, while some such perfume as rose water may be added for esthetic purposes.

The chief uses of creams are to cleanse, to protect from external irritants, to supply oil and fat where the natural excretions are deficient, and to serve as a base.

They are spread on the skin and covered with a powder or gently rubbed into the skin, making it soft, smooth and lustrous. They are excellent non-drying solvents and may be used for dry, scaly, chapped and cracked skin.

For chronic lesions of the skin, ointments are most frequently employed. These consist almost entirely of fat with drugs added for medicinal action. When fat is spread on the skin it covers it like an impervious material and prevents escape of fluid and causes retention of heat. The ultimate result is irritation which stimulates the sluggish skin. Circulation is improved, absorption is favored, resulting in a tendency to the formation of new normal cells. Surface scales and crusts are also softened and rendered more easily removable as the surface cells swell as a result of the penetrating action of the fat.

Drugs employed in ointments for specific medicinal purposes are varied. Tar, sulphur and resorcin are commonly employed for antipruritic, antiseptic and keratolytic action; salicylic acid to dissolve hyperplastic tissue; chrysarobin and pyrogallic acid as reducing agents and caustics, and so on. Many of the drugs that are incorporated act as keratoplastics when present in small amounts, and as keratolytic agents when more concentrated.

As ointments are used in chronic conditions and where stimulation is desirable, rubbing in of the preparation is advisable. In old, obstinate, resistant, thickened patches, the action of an ointment may be increased by covering it with impervious material like oiled silk. If the irritation is excessive, an acute inflammation may supervene. This result is often desirable and is subsequently treated as an acute eczema.

When surface action for a dry condition is the aim, petrolatum is good. Lanolin or goose grease may be added to increase penetration, anhydrous lanolin is used for moist areas, and wax is incorporated when the preparation needs stiffening.

Descriptions of the procedures pursued in the treatment of eruptions in two patients recently observed are appended as illustrative examples.

CASE I

In the case of G. J., a schoolboy, who had suffered from dermatophytosis (eczematoid ringworm) of his feet, acquired at camp about five months ago, the following local applications resulted in a cure in a little over two weeks.

At the first examination the patient was unable to walk and was lying in bed. The plantar surfaces of the feet were covered with large, elevated, inflammatory, pustulo-bullous patches with tense, sharply-demarcated borders. The feet were swollen, oedematous, and showed discrete and aggregated small and large vesicles, pustules and scaly patches. Scattered over the upper extremities and buttocks there were numerous small, red, scaly follicular papules. It was evident that the patient would do best in bed to prevent local irritation and pressure in order to obviate further dissemination of toxin through the circulation, which was already happening as evidenced by the trichophytides of the extremities.

Before beginning active treatment dirt and adhesive plaster were removed with benzine and a soap and water foot-bath. A wet dressing of a 1 to 2000 solution of potassium permanganate was kept constantly applied during the day. This acted as an antiseptic; it kept the discharges free of odor, and by radiation, evaporation and slight astringent action, reduced the oedema, swelling and infiltration. At night an ointment, containing petrolatum as a protective emollient base, three per cent each of salicylic acid and benzoic acid for antiseptic, antifermentative and slight keratolytic action, and one-half of one per cent phenol for antipruritic effect, was applied. Precautions were observed against covering with a tight dressing to avoid skin gangrene from the phenol. Two days later the acute inflammatory reaction had subsided and wet dressings were discontinued. A cooling evaporating lotion of alcohol with three per cent each of salicylic acid and resorcin was then dabbed on several times during the day, to increase keratolysis. The feet were also allowed to remain in the sun and fresh air to aid desiccation. The ointment was continued during the night. At the end of five days the infected skin had completely desquamated. The mild ointment was applied during the day and night. Two days later when the denuded areas were no longer tender a stronger salicylic acid and

benzoic acid ointment was applied, especially on the surrounding old, hyperkeratotic, scaly patches and the nails. When last seen about two days ago, the patient walked into the office without any discomfort and the skin was completely healed but for slight redness, denudation and slight scaling. At present the salicylic acid and benzoic acid ointment together with three per cent carboneol (technical coal tar) is being rubbed in twice daily. The tar was added as an antipruritic and keratoplastic.

The generalized trichophytides were treated by means of frequent applications of the following lotion:

Carbolic acid	2.0
Menthol	1.0
Zinc oxide	8.0
Magnesium carbonate	12.0
Glycerin	2.0
Oil of sweet almond	30.0
Lime water	60.0
Rose water enough to make	240.0

Directions: Shake, pour into saucer and dab on skin.

To prepare this properly the oil should be combined with the lime water by shaking it vigorously in a bottle. The powders are mixed together and to them the oil and lime water mixture is gradually added. The carbolic acid and menthol are dissolved in a small amount of alcohol, and finally enough rose water is added to make the eight ounces.

This makes a smooth, white preparation, and shows no separation in the finished product, even after standing for a long time.

CASE II

Another common skin disease is psoriasis, which usually calls for judicious selection of proper local therapy. In one instance, M. K., a married female, had had recurrent attacks of psoriasis. She presented a generalized eruption of mummular and geographical patches that were covered with thick layers of scales and crusts. Although psoriasis is dry and not itchy, it is at times moist and crusted because of acute congestion which may be induced by irritation as from overzealous stimulating treatment. Therefore, in this case, it was first necessary to remove the thick crusts. Subsequently the psoriasis itself would require treatment. The main changes in psoriasis consist of hyperkeratosis and parakeratosis of the horny cells, uniform hypertrophy of the rete pegs — acanthosis, small abscesses and increased air in the epidermal cells. There are also congestion and infiltration in the upper corium and papillary bodies.

After a cleansing, soothing alkaline bath the following protective, soothing, softening cream was applied for several days:

Zinc oxide	30.
Oil of sweet almond	30.
Anhydrous lanolin	6.
Limewater	12.

In the preparation of this cream the zinc oxide is rubbed with oil. The lime water is then added little by little until it emulsifies. Then the lanolin is added. This should be a smooth product.

At the end of this period when the crusts were softened and loosened, five per cent of salicylic acid was applied to hasten the falling off and melting away of the covering epidermal cells. Subsequently when the lesions were clean, exposed and less inflamed, a two per cent ointment of chrysarobin was rubbed in twice daily. Chrysarobin acts as a reducing agent. When prescribing this drug, patients should be warned of the danger of conjunctival irritations, staining of clothes, and untoward secondary inflammation. Under this method of attack the lesions faded and with the onset of a slight increase in the redness a soothing calamine and zinc oxide lotion was prescribed for the general skin and Lassar's paste for the folds of the joints.

The question is often asked—Why not use the Roentgen rays in the treatment of psoriasis? It has been the writer's experience that although marked improvement and rapid disappearance often occurs in psoriasis with this form of skin therapy, it is advisable not to employ the Roentgen rays except for occasional localized patches. In a disease like psoriasis which is frequently recurrent, it is often noted that patients who have had *x*-ray therapy later tend to resist the action of the rays, and recurrences are more persistent and accompanied by intense itching.

Although it was not intended to discuss any other form of external treatment, it seems advisable to say that in *x*-ray therapy of the skin, great advances have been made, and that much benefit often occurs from the careful application of properly measured doses of the ray by the experienced dermatologist who properly diagnoses the clinical lesions and is able to interpret these in terms of their histopathology and knows how to obtain the best biological effects without injuring the integument.

In conclusion it is reiterated that cutaneous therapeutics cannot be divorced from general medicine. Every weapon in our medical armamentarium should be employed in curing the patient, as well as the skin. The attempt

has been made in this paper to describe briefly the simple local rational measures that may be used by the physician who does not practice dermatology as a specialty. For this reason specialized methods of procedure and skin physical therapy are not included. Success in the management of a case often depends upon the proper preparation of the products applied, and co-operation with a good pharmacist is valuable. Emphasis should be placed on the factor that to obtain the best results by means of topical treatment the physician, after making his dermatological diagnosis, should utilize the various local applications to correct the abnormal pathology and encourage the return of normal skin.

FUNGOUS INFECTIONS OF THE FEET; OBSERVATION OF THEIR INCIDENCE IN A SCHOOL IN NEW YORK CITY*

By GEORGE C. ANDREWS, M.D., and FREDERICK W. BIRKMAN, M.D., NEW YORK, N. Y.

DURING the past decade dermatologists in particular, and other observers as well, have been aware of an ever increasing number of cases of fungous infection of the feet and hands. The practice of making microscopic and cultural examinations of fragments of the skin in suspicious lesions often reveals the presence of fungi in eruptions which a few years ago were probably labeled pompholyx, eczema, or perhaps dermatitis venenata. However, more accurate diagnosis does not alone account for the marked increase in the number of cases of ringworm of the feet and hands. There has undoubtedly been an actual increase in the incidence of the condition. It has been found that various kinds of fungi may be responsible for clinically similar skin lesions, and that the appearance of the primary lesions may be markedly altered by the secondary invasion of pyogenic bacteria.

Recent Reports of Incidence

The increasing importance of fungous infection has led to numerous clinical and laboratory studies of its incidence, some of which have been reported in the literature. A few of the most recent studies on the subject are here briefly summarized.

In 1925, Hulsey and Jordan[1] reported the results of the examination of the feet of 100 medical students at the University of Pennsylvania. They found 67 percent with clinically positive dermatophytosis, 49 percent positive microscopically, and obtained positive cultures in 5 percent. The students were from all parts of the United States but residence bore no relation to the incidence of the condition in this series. A small portion gave a history of previously active dermatophytosis.

During 1928 and 1929, as a part of the routine physical examination of freshman students at the University of California, the University physician looked for clinical signs of ringworm infection of the feet. Among 3100 students examined the clinical incidence of the disease was 53.5 percent in the men and 15.3 percent among the women, showing that the disease was common among high school and preparatory school students. At the end of the year, a number of the students were reexamined, when among 1000 men 78 percent were found clinically positive, an increase of 25 percent, and among 997 women 17.3 percent showed clinical evidence of ringworm of the feet. The conclusion was that the increase of 25 percent in the incidence of the disease among the men was due to the use of common showers, swimming pools and apparatus in the gymnasiums, during the interval between the two examinations; no special precautions having been taken to prevent the spread of ringworm. That the rate of increase among the women was much smaller, only 2 percent, in this interval, was explained by the fact that they used a new gymnasium with new equipment and were required to wear slippers in all activities. They even wore rubber slippers while in the swimming pool.[2]

In 1930, Beckett reported the results of an examination of the feet of patients in the Veterans' Hospital at Gulfport, Mississippi. Two hundred and fifty-nine were examined, of whom 98, or 37.8 percent, presented clinical manifestations of fungous infection of the feet.[3]

Similar observations of the prevalence of fungous infections are being reported from all parts of the world. Recently, a study has been reported from Peiping Union Medical College, Peiping, China.[4] Clinical, microscopic and cultural examinations were made of the feet of 204 individuals. Fifty-four or 25 percent of the number examined presented evidence of active or latent fungous disease; 150 showed no clinical evidence of the disease but nevertheless 5 of these gave positive microscopic findings and 3, positive cultural findings.

In May of this year, Goodman[5] made a statis-

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tical report, showing the percentage of cases of eczema, acne and tinea among all patients in the dermatological service at the New York Skin and Cancer Hospital during recent years. Tinea was either eighth or ninth in the order of incidence of the most common diseases of the skin each year from 1913 to 1927, inclusive; while during 1928 and 1929 it rose to second place among all diagnoses, being exceeded only by eczema.

The Present Study

In order to shed some light on the incidence of this disease among students in New York City, we have undertaken a routine examination of the feet of a large number of public school and university students. The present report includes our findings in a clinical examination of a series of 520 public school boys between the ages of 14 and 20 years, and cultural studies of an additional group of 50 boys in the same school.

Clinical Observations.—The clinical examination consisted simply of a careful inspection of both feet,—particular attention being given to the webs between the toes and to the skin at the junction of the toes and the balls of the feet. The condition of the toe nails was also noted. However, since it is practically impossible to differentiate nails infected by fungi from nails affected by other diseases without the aid of microscopic or cultural study, we did not presume that the student had onychomycosis unless there were also positive clinical signs on the skin. In addition to the inspection, each boy was questioned as to whether in the past he had noted signs of fungous disease of the feet.

The results of our examination were as follows:

Total number examined 520
Number showing clinical signs of fungous disease .....65 or 12½ percent

A past history of active fungous infection was given by 31, or 6 percent. However, only 10 of this number showed any present evidence of infection.

Among the 65 positive cases, the disease was manifested chiefly by sodden, macerated or scaling epidermis of the webs between the toes, or by small fissures in the skin of the webs or beneath the toes. Of these positive cases, 20 also presented one or more of the abnormalities of the toe nails which are so commonly observed in ringworm of the feet. These were chiefly thickening and discoloration of one or more nails, longitudinal striations or ridges, transverse grooves, friable and irregular edges, and white powdery scales heaped beneath the nails.

The great majority of the subjects examined were not even aware of the presence of these relatively latent forms of the disease. Only 4 in the entire series presented a more active form of the disease, namely, groups of small vesicles on the toes or soles.

It will be noted that the percentage of clinically positive cases is small (12½ percent) in comparison with the percentages obtained in both studies among college men, which were 67 percent and 53 to 78 percent respectively. The geographical factor may be of some significance, but we are inclined to believe that the incidence of the disease is fairly uniform throughout the country. One factor that seems to be of importance in accounting for the relatively low percentage of positive findings in our series is the difference in the social status and the hygienic habits of those examined. Probably the feet of most of the college students were subject to frequent bathing and the use of common showers, swimming pools and gymnasiums. The group of New York boys, on the other hand, were students in a trade school, which they attended only one day a week, being otherwise variously employed during the other days. There are no athletic activities in the school, no swimming pool, no showers and hence no common exposure. The students were in a large measure from families rather low in the social scale. Upon examination, the feet in a large majority of cases showed no signs of the use of soap and water. In fact, it was especially noticeable that most of the positives were among the cleanest feet; whereas other feet with loose moist dirt between the toes, almost enough soil for growing vegetables, showed no clinical evidence of dermatophytosis. Another fact to account for the relatively low percentage of clinically positive cases in our group may have been the younger age of the boys compared with that of the college students.

Cultural Examination.—In addition, we made a cultural examination of the toe nails and of the skin between the toes of an unselected group of 50 boys. Clippings from several toe nails, particularly from nails which seemed most likely to be infected, were taken from each boy. The fragments were cut into small pieces, washed for five minutes in 95 percent alcohol and planted on honey agar slants. Three or four tubes were planted with four to six pieces of nail in each tube, depending upon the amount of material available. Cultures from the skin between the toes were taken after first sponging it with alcohol by scraping the selected area with a scalpel. The loosened epidermis was planted directly with the knife on the agar slants, three or more tubes being planted in each case. As growths appeared in the primary cultures, subcultures were made on appropriate media for purposes of identification.

The following is a brief summary of our cultural findings: Of the 50 boys examined, 44 were clinically negative; the remaining 6 were clinically positive, presenting chiefly white sodden areas of

macerated epidermis in the interdigital skin, or fissures between the toes. There were no cases of the more severe types of ringworm infection among them. In the 6 clinically positive cases, the results of the cultures were:

(1) In one case a growth of Trichophyton gypseum was obtained in one nail culture and in one skin culture, the other cultures from the skin and the nails failing to grow this organism.

(2) One case presented a growth of Trichophyton gypseum in one skin culture. The other skin tubes and all the nail tubes failed to develop the organism.

(3) The cultures in two cases developed growths of moniliae, one from the epidermis alone; the other from both the epidermis and the nail.

(4) The cultures in two cases presented growths of cryptococci, the one from the skin alone; the other from both the skin and the toe nail.

The results of the cultures made in 44 cases in which the feet showed no definite signs of fungous involvement, were:

(1) One growth of Trichophyton gypseum occurred in a skin culture. The remaining skin tubes and nail tubes failed to grow this organism.

(2) Moniliae appeared in 7 cases from toe nail cultures and in 2 cases from skin cultures.

(3) Cryptococci grew in 5 cases in the cultures of both the skin and toe nail; in 10 cases in the cultures of the toe nail alone; and in 4 cases in the cultures from the skin alone.

Discussion

We do not stress the importance of our cultural findings. Statistical analysis in any study of this kind illustrates the possibilities of error. If one depends upon cultures and finds that positive cases show dermatophytes in only one out of 6 or 8 tubes, it is probable that a survey by this method gives too low an incidence. If, on the other hand, one depends upon inspection, it is quite likely that one will include cases of dermatitis not caused by dermatophytes.

It seems evident that the mere presence of pathogenic fungi on the skin is not sufficient to cause active invasion; just as the presence of staphylococci or streptococci on the skin or in the throat may not necessarily result in the development of furunculosis or tonsillitis. None of the moniliae found in our series was Monilia albicans, the variety which has been definitely shown to be pathogenic. Nor can we conclude that the cryptococci were pathogenic. Trichophyton gypseum, which undoubtedly is pathogenic, was found on apparently normal skin in one case. However, this finding is by no means unique. In a series of examinations of the normal skin in 36 individuals, Williams[6] found dermatophytes in two cases. Cornbleet[7] made examinations of scrapings from apparently normal interdigital skin with three positives out of 100 examined. Burgess[8] made a similar study of the normal interdigital skin of 100 individuals, but failed to find ringworm fungus of any kind.

To us, the most interesting fact revealed by our study is the small percentage of clinically positive cases of ringworm of the feet among our particular group of public school boys in comparison with the incidence found in similar studies at the University of Pennsylvania and the University of California. Our results seem to substantiate the general opinion that the disease is spread chiefly by exposure of the bare feet to floors in common showers, dressing rooms, swimming pools and the like. They also agree with the observations of Sabouraud, Kaufman-Wolf, Williams and others that tinea of the feet is found less often among the poorer classes than among the well-to-do.

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THE DIAGNOSIS OF INTRACRANIAL HEMORRHAGE IN THE NEW-BORN*

By CLIFFORD G. GRULEE, M.D., CHICAGO, ILL.

Introduction

IN INTRODUCING this subject, I should first like to quote passages from two recent articles. Peterman[1] speaking of intracranial hemorrhage makes the following statement, "It is responsible for most of the convulsions which occur in the first year and for almost all of the hemiplegias, diplegias, paraplegias and paralyses found in childhood." I believe that this statement is one which is commonly held by pediatricians and I doubt very much if it is justified. In the first place, most of the convusions in the first year of life certainly beyond the new-born period cannot be attributed to hemorrhage and I wonder if many of the nervous disorders which have been attributed to intracranial hemorrhage may not be rather on the basis of a congenital brain defect than upon destruction through a hemorrhage at the time of birth.

The second quotation I should like to give you is that by Donald Munro[2], who has based his conclusions on 117 cases, which have been carefully observed over seven years, which I think represents the nearest approach that I have found to an adequate, or nearly adequate observation of these cases, he says, "The diagnosis of intracranial hemorrhage of the new-born must be expanded to include cerebral edema and fracture of the skull and should be stated as "cranial and intracranial damage in the new-born." It seems to me that this second quotation is even more interesting than the first. It is very evident that Munro recognizes our inability at the present time, to make a definite diagnosis of intracranial hemorrhage and tries to cover the whole subject with a blanket. I am just wondering whether such a proposal affecting adult life would not meet very short shrift. The second statement calls attention to the ignorance concerning conditions at this age, but if we accept the second statement, we must admit that the first statement (that of Peterman) is exaggerated. I would even go a step further than Munro and include cerebral congestion and anemia as conditions which might produce symptoms very akin to intracranial hemorrhage. The problems which present themselves then are first, "What are the symptoms and physical signs of intracranial hemorrhage?" Second, "How do they differ from those of other conditions with which they may be confused?" Third, "If this difference is not sufficiently marked, by what means may we advance our knowledge of the subject in order to obtain the desired information?"

* Read at the Annual Meeting of the Medical Society of the State of New York, at Syracuse, N. Y., June 3, 1931.

[1] Peterman, M. G., *M. J. & Rec.*, 1930, *131*, 601.

[2] Munro, Donald, *Surg., Gyn. & Obst.*, 1928, *48* (Nov.), 622.

SYMPTOMS

Let us take first those symptoms which are commonly associated with the diagnosis of intracranial hemorrhage. Nearly every one who writes on this subject mentions lethargy. It is true that in the early stages, lethargy is a symptom. The child is drowsy, hard to arouse and if this symptom continues in increasing degree, it may lead to coma, but anyone who has had much experience with the care of newly-born infants, must realize that lethargy is a common state. This is particularly true of premature infants. It is not uncommon to have to exert oneself even to the point of mild punishment in order to arouse a perfectly normal newly-born infant sufficiently so that it will nurse. We therefore may be assured that ordinary lethargy is not in any way peculiar to hemorrhage; it is however, frequently met with in that condition.

The same may be said of newly-born infants refusing to nurse. Many of them cannot be aroused sufficiently to nurse the breast and when they are, they perhaps nurse two or three times and then stop. Both these conditions are particularly frequent in the newly-born infant at the age in which intracranial hemorrhage first produces symptoms, that is, on the first, second and third days.

A great deal has been said about the whining cry and I think with reason, but the whining cry may be heard in other conditions. It is present in infection. It is often present in those children who have had very little nourishment. Neither of these conditions, however, manifests itself in the first, second or third day of life as a rule, so that a whining cry may well represent at this time some cerebral irritation. One should, however, distinguish between cerebral irritation and intracranial hemorrhage.

Coma is more definitely a symptom of intracranial hemorrhage than any of the above mentioned, but coma comes almost without exception in fatal cases, so much so that one may question the diagnosis if the infant recovers. These are the particular symptoms which have been suggested in the diagnosis of intracranial hemorrhage and of these we find but one at all characteristic and that characteristic only of a severe degree with probable fatal outcome.

Physical Findings: Certainly the majority of the cases of cephalhematoma are not associated with intracranial hemorrhage. Over-riding of the sutures of the skull is suggestive in the presence of marked trauma. Such over-riding, however, must be marked representing a molding process of a severe degree. Examination of the anterior fontanelle leads frequently to very sug-

gestive evidence. Bulging of the fontanelle is suggestive of increased pressure within the cranial cavity. It is true that this pressure may be due to something other than intracranial hemorrhage. A slight degree may be due to edema, or to skull fracture, or on the third day of life, it is conceivable that such bulging of the fontanelle may be due to meningitis. The only difficulty regarding the bulging of the fontanelle is that where there is pressure and appreciable bulging of the fontanelle, there is likely to be marked destruction of the cerebral cortex from the hemorrhage and the outlook is quite unfavorable. Intracranial hemorrhage may occur, however, with a depressed or a flush fontanelle. It should be noted, however, that two difficulties come with respect to the fontanelle. One is, that in many newlyborns, the fontanelle is quite small and the question of bulging cannot be determined because of this. This is true in perfectly normal infants. Again, where hemorrhage is subtentorial, bulging of the fontanelle is an unusual feature.

Something can be learned regarding the condition of the child from a general observation of its appearance. Pallor is of frequent occurrence especially immediately after birth when a severe case of intracranial hemorrhage is often associated with asphyxia pallida. Another sign which is suggestive of intracranial hemorrhage is continued cyanosis of a mild degree. We are speaking now of course, of the first two or three days of life. Such a cyanosis is not uncommon at this time in the most severe forms of asphyxia livida, or occasionally in severe cases of congenital heart lesions where the right side of the heart is largely involved. Pallor is a much more suggestive symptom than is cyanosis, but neither can be regarded as more than suggestive since both are to be encountered in many other conditions.

When we come to look into the question of the neuro-muscular apparatus, we are confronted with certain barriers to diagnosis which are not encountered after this period of life. Focal signs are practically absent. When convulsive seizures occur on the right side they are not indicative of a lesion on the left side of the brain. Like as not, if the child dies, the autopsy findings will reveal that the lesion is on the right side and not on the left. No dependence either as to location, or kind of lesion is to be placed on the focal signs. Eye symptoms are peculiarly unreliable. Careful observation of the optic disc in all suspected cases (over a number of years) both by one of my associates and by one of the competent men of the ophthalmology department, failed to reveal any change that could be determined as peculiar to intracranial hemorrhage, or to an increased intracranial pressure at this age. The retinal hemorrhages noted cannot be regarded as especially significant since they are frequently associated with conditions other than intracranial hemorrhage, or may be present in perfectly normal infants.

Flaccidity of the muscles is certainly more suggestive than rigidity. The newly born infant is physiologically spastic as compared to later age. This is probably to a large extent, due to its cramped quarters in utero. For instance, it is not uncommon to see a child born in frank breech presentation stay for some days with legs extended at knees and sharply flexed at the hips, held along side the body, so that one wonders whether there is not a dislocation of the hip present. If one is to interpret rigidity as a sign of intracranial hemorrhage, one must be very sure that he is conversant with the different phases of rigidity as it appears in the normal newly born. It is extremely hard sometimes to say what is normal and what abnormal. *Muscular twitchings* too are given as a sign of intracranial hemorrhage, but twitchings of the muscles at this age are of rather frequent occurrence and do not always, by any means, usually represent anything especially abnormal. Where the twitching is occasional and transient, the likelihood is that there is nothing wrong. Where on the other hand there is continual twitching, especially if that is located in one part of the body and not in others, such as in an arm or leg, the probabilities are that there is some cerebral disturbance. *Convulsions* are a fairly definite indication of irritation of the cerebral cortex at this age. While I know there is some controversy as to the anatomical region from which convulsions proceed, still from a practical standpoint, the connection between the cortical lesions and convulsions is so frequent that there seems to be a definite causal relationship. However, as I have called to your attention, convulsions by no means always indicate intracranial hemorrhages. I have seen at least two infants on which I had made the diagnosis of intracranial hemorrhage both of which had convulsions and twitchings, one had also a distinct and marked unilateral perspiration. At autopsy, no signs of anything pathological except congenital heart lesions were found in either. In both instances the chief determining factor in diagnosis was the presence of convulsions, though in one a strongly suggestive phenomenon was the sweating. It is very evident from these facts that all cases of convulsions in the newly born are by no means due to intracranial hemorrhage. The chief cause of convulsions in the new-born is, however, most probably intracranial hemorrhage.

There seems, quite naturally, to be supreme confidence in information obtained by means of lumbar puncture, but I would call your attention to the fact that lumbar puncture at this age has not the value as a diagnostic measure that it has in older individuals. In the first place, where an intracranial hemorrhage is strongly suspected,

one hesitates to place the child in the position which is most favorable for lumbar puncture, but such a position is necessary if one is to be successful, as a little experience will definitely prove. However, if the procedure may be justified either from a diagnostic or therapeutic standpoint, then there is always the excuse for taking the chance. It is not here the time nor place to discuss the therapeutic advantage of lumbar puncture. As to its diagnostic advantages interpretation must be hedged in by many qualifications. In the first place, it does not take long for one who has had much experience with lumbar puncture at this age to come to the conclusion that bloody fluid is not always the result of intracranial hemorrhage previous to the time of puncture. If one be honest with himself, or perhaps I might say, in the process of being honest with myself, I have come to the conclusion that my technique and that of my assistants in this procedure is not such that we can be assured that bloody fluid is not produced by the puncture rather than by a foregoing intracranial hemorrhage. It is extremely easy to get blood from the spinal canal of newly born infants by puncturing one of the veins which are so luxuriant on the inner wall of the canal, or even by puncturing the venous sinuses in the bodies of the lumbar vertebrae. However, given a bloody fluid, if it be examined immediately and crenated cells found, specially if these be in large numbers, we have direct evidence of hemorrhage into the spinal canal. This hemorrhage may come from several sources. It may come from a spinal rather than a cerebral lesion. It may come from diapedesis rather than rupture of a vessel. There may be no blood even though a large hemorrhage is present. The amount of blood in the spinal fluid is by no means indicative in a given case of the size of the hemorrhage. If therefore, we are to derive any special knowledge from lumbar puncture, we must be very sure of our technique and we must examine an absolutely fresh specimen. The absence of blood does not mean absence of hemorrhage, nor does the quantity of blood determine the extent of hemorrhage. One other point regarding spinal fluid, the presence of xanthro-chromatic fluid in the first, second or third days of life is much more likely to be due to icterus than to decomposed blood. It is perfectly easy to determine this by laboratory tests, but one should always bear it in mind. A xanthrochromatic fluid from intracranial hemorrhage would not be expected certainly until the lapse of several days.

Cisterna puncture as advocated by Loeber,[3] would seem to be a much more rational procedure if we are to obtain spinal fluid from which we may draw conclusions. In the first place, we can be sure that bloody fluid obtained in this way if it came from hemorrhage into the nervous system at all, came from hemorrhage from above. In the second place, such puncture is not likely to be associated with hemorrhage produced by the trauma of the puncture. It would, however, be wise in estimating the value of such fluid to limit it with the same restrictions as in examination of spinal fluid obtained by lumbar puncture.

Another procedure which conceivably might be of some value in cases where hemorrhage from the choroid plexus is suspected, is puncture of the lateral ventricle through the anterior fontanelle. I have never attempted this because I have never been able to differentiate with sufficient accuracy lateral ventricle hemorrhage from that in other parts of the cranial cavity. On one or two occasions, however, I have been able to obtain the blood from over the surface of the parietal lobes by introducing a needle through the anterior fontanelle under the parietal bone directing it parallel with the surface of that bone. This procedure is not to be advocated unless one is pretty sure that the hemorrhage is located in that area.

Just a word regarding the evidence in later life of intracranial hemorrhage of the new-born. We are prone to think that every spastic paralysis of a chronic nature in childhood and later life, especially if it gives a history of existing from birth, or early infancy, has its origin in intracranial hemorrhage. One wonders just how much we are justified in taking this position. How do we know for instance that the condition is not primarily a brain defect with secondary hemorrhage over that portion of the brain? How can we be sure that encephalitis, local or general, is not responsible for many of these conditions? What reason have we for thinking that the majority of cases of spastic diaplegia or Little's Disease are due to intracranial hemorrhage? It seems to me that we have too readily blamed this condition for a multitude of ills that may have their basis on some other quite different disease process.

If we review carefully the facts, we find that there is very little in the way of positive information which is to be gleamed, in other words, diagnosis rests not upon single facts, but upon a careful weighing of the whole situation and mature judgment. If we stop to think, we will recognize the fact that not only hemorrhage but other pathologic conditions can cause the symptoms referable to the cerebral cortex which practically means all the symptoms found in this condition. I am quite well persuaded from some experience that I have had that such evidence of cerebral irritation may be due to anemia, congestion, edema, hemorrhage or inflammation and the evidence of hemorrhage must be obtained therefore by examination of the spinal fluid, or by some other method not yet devised. As we

[3] Loeber, Maud, *N. O. Med. & Surg. J.*, 1931 (Feb.), *83*, 536.

have seen, the examination of the spinal fluid is not satisfactory, so that at the present time it is extremely difficult in many instances to make the diagnosis of intracranial hemorrhage of the new-born.

Let us now consider what conditions are likely to be confused with intracranial hemorrhage and whether or not we have definite criteria by which to judge as to their presence. Let us take first that condition which has been known for a long time as *hemorrhagic disease* of the new-born. The nature of this is unknown; that it is associated with a prolonged coagulation time without much change in the bleeding time of the blood is pretty generally accepted. We are scarcely justified in making a diagnosis of this condition until such evidence is at hand. In rare instances this condition may be associated with intracranial hemorrhage. I think we may well abandon any idea that intracranial hemorrhage causes the condition since no evidence in favor of this has ever been brought out. However, in the severe anemia produced in this condition by bleeding, there may be convulsive seizures and the entire picture of intracranial hemorrhage without such hemorrhage being present. A complete recovery can occur as the result of transfusion. Hemorrhagic disease however rarely puts in its appearance before the third day and consequently the hemorrhages occurring in this disease manifest themselves later than those in true intracranial hemorrhage of traumatic origin.

As to *sepsis* in the new-born, the problem is less intricate. Sepsis rarely manifests itself before the third or fourth day and is nearly always associated with fever. Convulsive seizures occur if at all, quite late and not early as in intracranial hemorrhage. The evidence of the route of infection may be present and all in all sepsis offers very little in the way of difficulty. *Icterus gravis* is in its modern conception very often an icterus associated with sepsis, so that much of what has been said regarding sepsis is true of icterus gravis. There is, however, one rare form of familial icterus gravis where there is marked involvement of the basal nuclei, it is conceivable that a differentiation between this and intracranial hemorrhage might be extremely hard or impossible. The problem in the *premature* is rather peculiar. In the first place, as we all know, premature infants are especially predisposed to intracranial hemorrhage. They are frequently afflicted with cyanotic attacks; they are definitely lethargic and are frequently hard to revive at the time of birth. The question we have is how much of the condition is on the basis of an intracranial hemorrhage and how much on the prematurity. As a matter of fact anyone who has had much experience with prematures and has followed those who died to the autopsy table, must recognize that many of the symptoms which have ordinarily been regarded as very suggestive of intracranial hemorrhage may be due to prematurity alone without any evidence whatever of hemorrhage. Certainly this is true of lethargy asphyxia livida and cyanotic attacks.

We might discuss in a few words a number of conditions which have been suggested as offering differences in diagnoses. Diaphragmatic hernia should in the majority of instances offer very little trouble. The same is true of atelectasis and pneumonia. An enlarged thymus has been offered as a condition which might simulate intracranial hemorrhage, but I think we should know first how to determine what an enlarged thymus is before we attempt to differentiate the the symptoms produced by it from those of intracranial hemorrhage. However, the difficulty of differentiating these two must be present only in extremely few cases. This may be said of the other conditions just mentioned. At first, one might think that congenital heart disease would offer no difficulty. On the other hand, as previously mentioned I have seen at least two cases with convulsions where the only findings at autopsy was congenital heart disease. It seems to me that if we are to attribute the symptoms to the heart lesion, we must conclude that these were produced by either congestion, or anoxemia of the cerebral cortex.

We come finally to those intracranial conditions which most often appear to be confused with intracranial hemorrhage, namely, edema, pressure from fracture and congenital brain defect. That edema is responsible for the picture which we have always associated with intracranial hemorrhage must be true in many instances. A prompt recovery of these infants with no evidence of physical or mental defect over a period of years, certainly speaks for a lesion which is irritating, but not destructive. The same may be said of depressed skull fracture. While this condition is relatively uncommon, it produces few if any symptoms after the depressed portion of the bone is raised. A simple fracture of the skull without depression unless it ruptures a blood vessel, is very unlikely to cause hemorrhages. I remember a small premature infant who was in a rather lofty incubator. The attending man felt that the infant was not getting sufficient air so he ordered that the door be left open. He had not reckoned upon the activity of the child. The premature precipitated itself on to the floor and received a long skull fracture over the vertex. This child suffered no apparent harm from the accident. The only evidence we had was the *x*-ray picture and the local evidence of crepitation which was hard to obtain.

As to the congenital brain defects I have long wondered. It seems altogether rational to suppose that a congenital brain defect capped by an edema ex vacuo would be an ideal place for

an intracranial hemorrhage. I confess not to have seen such a condition in a newly born, but such a condition would not seem to be in the majority of cases especially fatal, since there would be little destruction of the brain tissue and the results of the brain defect would show only later. I wonder if some of the conditions which we have been attributing to intracranial hemorrhage of the new-born are not really on the basis of brain defect.

Conclusions

In this brief summary, several points are brought to light. Primarily we are at present in no position to make a diagnosis of intracranial hemorrhage in the new-born in the majority of instances. Many of the cases which are now diagnosed hemorrhage are unquestionably due to other conditions. Information received from lumbar puncture is by no means always reliable and must be subjected to very critical judgment. The reason for this lies primarily in the failure of physicians to realize the difference in symptomatology between the newly born and the older infant. It also lies in the lack of study of this group of conditions at this age, and in complacence with our present knowledge which would not be tolerated at any other period of life.

THE KETOGENIC DIET IN THE TREATMENT OF EPILEPSY IN CHILDREN*

By FLORENCE E. WARNER, M.D., BINGHAMTON, N. Y.

THE ketogenic diet has been used in the treatment of epilepsy in children for about ten years, and the results seem sufficiently successful to justify this form of therapy. Complete disappearance of the seizures is produced in about 33 per cent of the cases so treated. (1) In a series of cases treated at the Mayo Clinic, of 141 patients treated more than one year 43 have been free of seizures for one to seven years, 32 definitely improved, having fewer and milder attacks, and 66 unimproved. Of 30 cases treated less than one year 11 have been free from seizures, 13 definitely improved and 6 unimproved (2).

The diet is most useful in the cases of frequent early or pre-epileptic attacks in which luminal is often ineffective. These consist of sudden periodic symptoms such as pallor, screaming, staggering, trembling and other manifestations of momentary duration. They must be controlled as soon as possible because each seizure produces changes in the brain which favor recurrence and tend to establish the epileptic habit. Cure can be achieved only by the prevention of attacks for a long time.

Since attacks in children cease or diminish during starvation with the development of acidosis, it was suggested by Wilder of the Mayo Clinic that a diet producing a similar acidosis might produce a similar effect. No definite basis for the successful results of the ketogenic diet has been established. The improvement accompanying either fasting or the ketogenic diet is associated with acidosis, ketosis, lowering of the blood sugar and diminution of the alkaline reserve. No one of these factors can definitely be credited with the results. Acidosis produced by the ingestion of a mineral acid such s ammonium chloride has no effect. Lowering the blood sugar by insulin shows no effect until the level of insulin shock is reached, when hypoglycemic convulsions occur. Administration of sodium bicarbonate does not induce attacks as would be expected if the shift of the acid-base equilibrium to the alkaline side were responsible. Wilder's theory that the sedative and anesthetic action of acetone and diacetic acid produces the effect still deserves consideration (1).

The effect in successfully treated cases is a rapid reduction in the number and severity of seizures, especially of the petit mal type, and a marked improvement in irritability, mental condition and general health. The improvement is in proportion to the acidosis. (6) Acidosis is not harmful even when maintained over long periods of time except in cases of diabetes mellitus. The diet can be maintained during the course of infectious diseases such as measles, whooping cough and scarlet fever.

It should be continued four to six months after the seizures have entirely disappeared, after which a normal diet may gradually be substituted. Cases have been reported free from attacks three to four years after resuming a normal diet. (3) In others attacks reappear on any change in diet, and in some the diet must be supplemented by drugs. These cases often cannot be controlled by either diet or drugs alone, but respond to the combination.

The ketogenic diet is calculated to produce a state of detosis in the body similar to that produced by starvation, while providing an

* Read at the Meeting of the Women's Medical Society, held at Syracuse, N. Y., June 1, 1931.

adequate caloric intake for maintenance and growth. Ketosis is recognized by the demonstration of acetone and diacetic acid in the urine, and is produced whenever there is incomplete combustion of fats. In order to oxidize the fatty acids completely to carbon dioxide and water 1 gram of glucose forming elements must be available for 1.5 grams of fatty acid elements in the diet. The glucose forming or antiketogenic elements include all of the carbohydrate and 58% of the protein; therefore the amounts of carbohydrate and protein must be kept much lower than the amount of fat.

The caloric requirement is calculated as 50% above the basal caloric need according to the expected weight for the patient's age and height (7).

The protein requirement is estimated according to the minimal protein requirement as established by workers in diabetic research at 1 gram per kilogram of body weight.

A sudden change from the average diet which is relatively high in carbohydrate to a diet much lower in carbohydrate and higher in fat may cause gastrointestinal disturbances such as nausea and vomiting. Accordingly the change should be made gradually, beginning with a diet in which the relation of the fat to the carbohydrate and protein may be expressed as a ratio of 1:1. (4).

Figuring a diet for a patient weighing 40 kilograms with a caloric requirement of 2400 would be accomplished according to this 1:1 ratio as follows:

Let F = the number of grams of fat; P = the number of grams of protein; C = the number of grams of carbohydrate.

$$\begin{aligned} \text{Let } x &= C+P \\ F:x &= 1:1 \\ F &= x \end{aligned}$$

Each gram of P produces 4 calories
Each gram of C produces 4 calories
Each gram of F produces 9 calories

$$\begin{aligned} \text{Then } 9F+4(C+P) &= 2400 \\ 9F+4x &= 2400 \\ 9x+4x &= 2400 \\ x &= 185 \end{aligned}$$

F=185 grams
P= 40 grams (1 gram per kilogram)
C=145 grams

The ratio is gradually changed from 1F:1C+P to 1.5:1 — 2:1 — 3:1 — 4:1 and sometimes as high as 5:1, changes usually being made once a week until the desired ratio is attained. The optimum ratio for maintaining an effective degree of acidosis is usually 4F:1C+P.

The same diet figured according to a 4:1 ratio would be estimated by similar equations as follows:

$$\begin{aligned} \text{Let } x &= C+P \\ F:x &= 4:1 \\ F &= 4x \\ 9F+4x &= 2400 \\ 9(4x)+4x &= 2400 \\ 36x+4x &= 2400 \\ x &= 60 \end{aligned}$$

F=240 grams
P= 40 grams
C= 20 grams

Acetone and diacetic acid usually appear in the urine after a 2:1 ratio is established and become progressively greater in amount as the higher ratios are attained. Frequent urinalyses should be performed as a check on the maintenance of acidosis. The patient or parents may be taught to perform these tests, which are sometimes a factor in encouraging their cooperation.

It is advisable to hospitalize patients for two or three weeks for instruction in the calculation of the diet and the use of food tables and scales. Patients should be weighed at frequent and regular intervals for a time to detect loss of weight or failure to gain; if this occurs a higher caloric content in the same ratio is indicated.

Some authorities advocate the administration of calcium lactate and brewer's yeast daily to avoid calcium and vitamin deficiencies (1, 3).

In some cases inert material such as washed bran wafers must be added to avoid hunger.

The importance of minor deviations must be impressed upon the patient and his parents. The tendency of children to eat sweets makes this doubly essential. Complete cooperation is vitally important and if it is not obtained no results can be expected.

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For list of officers of County Medical Societies, see August 1 issue, advertising page xxxii.

RECOGNITION OF POLIOMYELITIS

New York State is in the midst of an epidemic of poliomyelitis, whose prevention depends largely on an early diagnosis of every case. The Special Advisory Committee, appointed by the President of the Medical Society of the State of New York, (page 1048) desires to call the attention of doctors to the fact that poliomyelitis may be recognized and diagnosed *before paralysis appears.* The particular symptoms to be looked for in the pre-paralytic stage of the disease are as follows:

1. *Fever.* Never high, with an average of 102° F.

2. *Headache.* Is severe; most frequently general, but may be nuchal and sometimes may be absent, but then replaced by severe back pain.

3. *Rigidity of the Neck.* Distinct resistance to anterior flexion. Rarely is there retraction and never lateral limitation.

4. *Tremor.* Fine trembling of lips and hands, especially on movement as when taking a glass of water. There may be also coarse twitching in sleep.

5. *Apathy.* The patients are mildly indifferent and drowsy—never comatose, and are perfectly bright and alert when aroused, but then are sometimes irritable.

6. *Vomiting.* Once or twice on the first day, but rarely is it persistent or severe. It should be mentioned that vomiting is often severe as an initial symptom in the bulbar types.

7. *Retention of Urine.* When questioned, the mother often remarks a twelve to twenty-four hour period without urination; it never demands catheterization.

8. *Constipation.* It is almost uniformly present.

9. *Sweating.* This is usually seen as beading about the lips and neck, and is rarely profuse.

The pre-paralytic picture presents us a distinct clinical entity with symptoms definitely those of a mild meningitis; headache, tremor, and stiff neck constituting an outstanding triad.

This clinical picture is confirmed by an examination of the spinal fluid.

Every one of these nine symptoms is important, and a determination of its presence or absence in any particular case is extremely desirable. However, a doctor who sees a very few cases is likely to overlook some of the symptoms. An editorial suggestion is that each doctor copy these nine diagnostic points on his prescription pad, and refer to the list when he is confronted with a suspicious case.

CHOOSING A DOCTOR

How to choose a doctor is discussed in the July number of *Minnesota Medicine*, the official organ of the Minnesota State Medical Society.

The discussion was inspired by recent articles in the *Literary Digest* and other popular journals which had asked the question: "If you found yourself ill in a strange town, of whom would you inquire for a good doctor?" Those who answered the question seemed to think of the following groups as the most likely to give wise answers:

1. The semi-religious organizations, such as the Y.M.C.A., the Y.W.C.A. and the Young Men's Hebrew Society.
2. A dinner club, such as the Rotary.
3. A hospital.
4. A welfare organization.

Those who discussed the problem seemed to think that the inquirer might be poorly informed and be referred to a quack; and in that case some of the signs of his recognition are given as follows:

1. He demands pay in advance.
2. He uses only one special system for all complaints.
3. He dispenses only secret remedies.

The Minnesota editor is not satisfied with these signs; and besides the patient cannot apply them until he has called the quack and cannot back out of at least one call.

The question is then asked: "How can a stranger recognize a competent doctor?" The question is very properly left unanswered.

The Minnesota editor then suggests that no one of the newspaper men who tried to give advice on how to choose a doctor had thought of the County Medical Society, insinuating that that organization should be well known, and that it should maintain a central office where inquiries may be made and be given prompt attention. As a matter of fact very few persons could direct an inquirer to an officer of the County Medical Society. Only those societies in large cities maintain offices, and their bureaus of information are very poorly patronized.

If a person is taken sick in a strange town, he will probably be directed to a competent doctor, for anybody to whom he would be likely to apply —a hotel attendant, a clerk in a store, a street-car conductor, a policeman or a druggist—would know a reputable doctor. Practically everybody is honestly desirous of giving aid to a sick person. Certainly one who is sick is not going to go through any extensive mental process to determine whether or not the medical attendant is the best doctor in town.

There is a phase of the question which is practical. Many persons making a home in a strange town soon begin to make inquiries regarding a good doctor to call if sickness should occur. A stranger who is inclined to a particular school, or cult, or method of treatment will seek a practitioner of that persuasion regardless of advice. Strangers in town seem to choose their doctors with wisdom, for the best doctors seem to get the most patients.

THE PUBLIC RELATIONS OF DOCTORS

The methods of treating sickness are the same the world over, for man's physical nature is everywhere the same, and the records of science are free to all who will consult them.

The problems of administrative medicine are also universally the same, for the principles of economics, social influences, and education are as uniform and universal as human nature.

One who reads the journals of the State Medical Societies will find the same problems discussed in all; and prominent among them is the relation of the medical profession to other groups which deal with human health, particularly the State Departments of Health and the voluntary health organizations. This relationship has been assigned by the Medical Society of the State of New York to a standing committee, that on Public Relations, and to a similar committee in every County Society. These committees have been extremely active and have developed working agreements with other health organizations to such an extent that it may be said that the medical profession and the other health organizations have formed a habit of consulting together and of developing unified programs of action. New York State has probably gone farther than any other state in the development of working agreements among the organizations engaged in the promotion of health. Wide publicity has also been given to the activities of the committees on Public Relations, so that every member of the Medical Society of the State of New York is informed of the activities of not only the medical societies, but also of the other health organizations.

The physicians of Michigan have also considered the relations of the physicians to other health organizations, and invited the leaders of the principal official and voluntary health organizations to address the councilors of the State Society at a special meeting, in order to inform the councilors of the activities and aims of the organizations. The medical leaders confessed the need of broader information regarding the other health bodies in order that medical societies should vote their cooperation in all health measures.

A stenographic account of the meeting filled over twenty pages of the July issue of the Journal of the Michigan State Medical Society; and the abstract which is published in this Journal, beginning on page 1056, will be of interest to every practising physician in New York State.

LOOKING BACKWARD

THIS JOURNAL TWENTY-FIVE YEARS AGO.

Fresh Air Treatment of Tuberculosis:—The value of fresh air in the treatment of tuberculosis and other lung diseases was formerly emphasized to such an extent that purity was confused with quantity, as the patients were exposed to extremely cold air in window tents and on open roofs. Concerning the cold air treatment of pneumonia, this Journal of August, 1906, says editorially:

"The desirability of admitting fresh air to patients suffering with pneumonia has been placed upon a scientific footing. It remains for the general practitioner to apply its principles. Its benefits rest not only in the peculiar virtues of fresh air, but in acute pneumonia the breathing of cold air seems of especial value. Northrup, who has studied much and practiced this method of treatment, says, in speaking of branchopneumonia, 'nothing stimulates the heart better than a current of fresh, cool air upon the face. Fresh air stimulates the heart, reddens the blood, quiets restlessness, favors sleep, improves secretions and digestion; in short, meets most of the indications for the treatment of pneumonia in infants.'"

MEDICAL PROGRESS

The Development of the Science of Nutrition in Relation to Disease.—After reviewing the history of nutrition in reference to the proteins, fats, and carbohydrates, and the shifting of interest to the vitamins, J. B. Orr discusses the results of the newer methods of investigation, pointing to the spectacular effects obtained in diseases arising from vitamin deficiency. The work on diseases due to mineral deficiency, which has been done on the large domestic animals, is not so well known to the medical profession. In this work it has been shown that rickets and osteoporosis can be produced by a deficiency of calcium or phosphorus, that a condition characterized by incoordination of movement and later paralysis can be caused by phosphorus deficiency, that goiter can be prevented by the administration of iodine, and anemia by giving iron. A point of practical importance is that when deficiency diseases occur under ordinary conditions the number of animals suffering from minor degrees of deficiency usually far exceeds the number showing gross signs of disease. It has been shown that dietary deficiency increases the susceptibility to infections, that the mineral elements in the diet affect the composition of the blood, the immunological reactions, and the flora of the body. With further work along these lines we shall be able, by dietary measures, to keep animals in such a state of health that when invasion by micro-organisms takes place the *vis medicatrix naturae*—the only therapeutic agent of real value—will be able to exert its full influence, unhampered by abnormal conditions of body fluids due to faulty diet. Recently observations have been made on two tribes in Africa, living under conditions favorable for study. The diet of one tribe consisted chiefly of cereals and was deficient in calcium and vitamins A and D. The diet of the other tribe consisted of meat, milk, and raw blood. In the tribe on the cereal diet pulmonary conditions, bronchitis and pneumonia, accounted for 31 per cent of all cases of sickness, tropical ulcers 36 per cent, and phthisis 6 per cent, compared with a percentage of 4, 3 and 1, respectively, in the tribe on the meat, milk, and raw blood diet. A recent survey in Scotland showed that in a large proportion of families the diet did not supply enough minerals to maintain the maximum rate of growth. The position was worse in the case of iron. We need more information dealing with the amounts of different nutrients required for optimum growth in children and as to the amounts required in dietaries in common use. It has been suggested that diseases such as gastric ulcer, constipation and its sequelæ, rheumatism, anemias, high blood pressure, and cardiac and nephritic disorders, may originate in dietetic errors. Here comprehensive studies are required. — *British Medical Journal*, May 23, 1931, ii, 3672.

Treatment of Gangrene of the Lungs by Emetine.—On the basis of two illustrative cases L. Bouchut shows the remarkable results that can be obtained in gangrene of the lungs by the administration of large doses of emetine from the very beginning and over a long period of time, with no other treatment. He has been giving at the outset large doses frequently repeated, amounting sometimes to as much as 1½ grains, without interruption, and it is to this fact that he attributes the rapidity of cure. Already by the third or fourth day of treatment the patients were considerably improved from both a general and a functional point of view. The first case reported was in a man of 28, ill for a week with fever, cough and fetid expectoration, in whom fluoroscopy revealed a large focus of condensation at the base of the right lung. With a diagnosis of gangrenous pneumonia injections of emetine 0.04 gm. per day were at once begun, and were continued for 12 days, after which the patient had no further symptoms, though a small cavity remained. Two fresh attacks occurred, however, after intervals of a few weeks each. On each occasion injections of 0.08 gm. (1.2 grains) per day overcame the fever in 3 days, and in a few weeks the patient was again symptom free, but still carrying a cavity, though now very small. Should this be slow to close, a phrenicectomy or pneumothorax will be proposed to prevent further recurrence. The second case was in a man of 42 admitted in a state of great prostration after vomiting half a liter of extremely fetid blackish pus, of which he was expectorating an equal amount every day. Fluoroscopy revealed an encysted collection, the size of a mandarin orange, in the right interlobar region, with a fluid surface. Under treatment with emetine 0.08 gm. (1.2 grains) per day improvement at once set in, which continued without interruption. After 1.20 gm. (18 grains) had been given, dosage was reduced to 0.04 gm. (⅔ grain) per day. At the end of a month the patient went to the country for a month. On his return there was perfect anatomic cure and splendid general condition. Here it must be assumed that the cavity was not in the parenchyma but in the interlobar space; hence the case was one of juxta-scissural pulmonary gangrene with encysted interlobar pyopneumothorax, emptied by vomiting and cured by emetine.—*Journal de médecine de Lyon*, June 5, 1931.

Ether as a Cause of Death after Prostate Operations.—The mortality rate in prostate operations has impressed R. J. Minnitt as far too high. For many years he has noticed that patients for whom the prognosis seemed favorable have died from uremic conditions some five or six days after operation, although the preoperative blood urea has been within what are called normal limits. Statistical evidence demonstrates these facts. A hospital report for two separate years shows a death rate of over 50 per cent in two-stage prostatectomies, and almost 50 per cent in one-stage. In all operations undertaken for bladder conditions connected with the prostate the death rate is over 50 per cent. Since it is well known that the effect of ether anesthesia on renal function is considerable, the author has tabulated urea estimations before and after anesthesia, and 24 and 48 hours later. The figures show that no change takes place in the urea during the time of anesthesia, but they suggest two things: (1) the higher the urea content of the patient, the greater is the rise in the day or two following operation; (2) there was no change in the blood urea on the days following the administration of gas and oxygen (one case). The following conclusions are drawn from the investigation: (1) The higher limits of what is called normal blood urea are abnormal. Patients in whom it is high will develop a far higher blood urea after anesthesia. (2) The increase is due to the effect of ether on the renal cells. (3) In any case of enlarged prostate, with a blood urea approaching 40 mg., the operation should be performed in two stages. (4) When there is an abnormal blood urea and any renal damage, gas and oxygen anesthesia only should be used.—*The Lancet,* July 13, 1931, ccxx; 5424.

Influence of Ultraviolet Sunlight and Daylight upon the Thyroid Glands of Rabbits and Cattle.—Gerhard Rosenkranz reports in the *Klinische Wochenschrift* of May 30, 1931, the results of his experiments on rabbits and cattle to determine the effect of ultraviolet light upon the thyroid gland. Three rabbits (referred to for convenience as "light animals") were kept for 8 hours daily for 4 weeks in wire cages on the open balcony of the Davos Institute in full mountain sunlight, returning to their pen at night, while 5 others of the same litter ("dark animals") were kept day and night in the relative darkness of the animal pen lighted only by a small window whose glass was impermeable to ultraviolet rays. All other conditions, such as temperature, moisture, and nutriment were the same for the two lots of animals. At the end of the period all the animals were thyroidectomized and the glands examined. In the "dark" animals changes were found such as are observed in human Basedow's disease: marked hyperemia, both large and small vessels being greatly engorged; follicles very few and very small, with little or no colloid content; conspicuous zones of parenchymatous proliferation were present. The "light" animals exhibited an essentially normal structure of the thyroid gland: follicles of medium size, always very numerous, with little variation in size, always containing colloid; epithelium flat to cubical always one-layered. Even more striking were the results in the cattle experiments, the 10 "dark" animals showing a very high grade increase of thyroid parenchyma, inversely proportional to their age, and very conspicuous in young animals, while the 3 "light" animals which had grazed all day in the pasture exhibited large follicles engorged with colloid, without any suggestion of parenchyma. Sex and sexual maturity played no part, the results being the same in castrated animals. In the cattle the finer details could not be checked up, since it was impossible to obtain specimens in a perfectly fresh condition, but the gross changes were so great that this was of little importance. It must be assumed that the cause of the changes was the lack of ultraviolet rays. This agrees with the extraordinarily important observation that cows which graze on the sunny side of a valley give milk with a higher content of fat than those grazing on the shady side. It also supports Bernhard's finding that goiter is more frequent in villages situated on the shady side of high mountain valleys.

Deformities of the Shoulder in Myopathies.—Henry Meige calls attention in the *Bulletin de l'Académie de Médecine* of June 2, 1931, to a series of deformities of the shoulder which are observable in myopathies when examined from in front. Profile views serve to sharpen or confirm the diagnosis. To recognize these deformities one must recall the normal conformation of the shoulder. The most prominent part of the contour of the deltoid muscle in profile in a person of good muscular development is not at the head of the humerus but much lower down above the deltoid V where the fleshy fibers of the 3 parts of the muscle come together and are superimposed before becoming fixed to their inferior tendon of insertion. But in a subject with a deltoid of mediocre or poor size the point of greatest projection may correspond to the head of the humerus, and frequently a second prominence may be outlined above the insertion into the humerus. This conformation is exaggerated in myopathics. When the arm hangs at the side, the two inflections of the contour are

plainly seen. The upper is rendered the more evident by the fact that the aponeurotic attachments of the deltoid to the clavicle, normally very short, descend much lower; the atrophied fleshy fibers are replaced by thin fibrous tissue, moulded upon the bony head directly under the skin. When the patient is asked to raise his arm, the lower projection becomes exaggerated. The impotence of the elevator muscles of the shoulder, especially the upper third of the trapezius, results in the lowering of the stump. If the atrophy affects the rest of the trapezius as well, and the rhomboid, the shoulder is also carried forward. The chest is then sunken in, especially if the pectoralis major is also atrophied, as is frequently the case. The deltopectoral furrow is scarcely visible in myopathics, being replaced by a rather large flat area. When all the muscles that hold the scapula to the thorax, and especially the serratus magnus, have lost their contractility, the weight of the arm causes the scapula to mount so that even from the front view the latter is outlined by a projection at the base of the neck near the external angle of the supraclavicular triangle. When muscular weakness causes the outer end of the clavicle and the stump of the shoulder to be depressed, the upper margin of the trapezius becomes distended and leaves the midline. As a result the base of the neck appears enlarged and the line to the clavicle droops much more. The supraclavicular triangle becomes a large fossa of which the clavicular margin alone is well demarcated. The mechanism of these deformities is seen clearly if the arms are held forcibly to the sides of the body and the shoulders raised and carried backward simultaneously.

An Analysis of One Hundred Examples of Cardiac Pain in Private Practice.—Louis Faugères Bishop and Louis Faugères Bishop, Jr., state that the chief complaint with which the cardiologist is concerned in private practice is cardiac pain. In order to obtain 100 cases with pain as the presenting symptom 401 cases had to be reviewed, that is, practically 25 per cent of their office patients had this as a primary complaint. The patients were grouped arbitrarily as hypertensive, arteriosclerotic, rheumatic, syphilitic, thyroid, angina pectoris, obesity, effort syndrome. Exertion appeared most frequently as the exciting cause in all groups. Of the entire series 50 per cent gave a family history of cardiovascular disease, nephritis, or diabetes. Of the patients in the angina pectoris and coronary groups 5 per cent were physicians. The incidence of cardiac pain in various occupational groups gives confirmatory evidence of its high frequency among brain workers. There is a slightly higher rate of occurrence among males in the hypertensive group, and a striking predominance of the male sex in the coronary and angina pectoris groups. Exertion appeared most frequently as an exciting cause in all groups. The hypertensive cases showed the highest mortality with no patient symptom-free, and very few classed as improved. While no coronary patient could be classed as symptom-free, the living patients could be grouped as unchanged or improved. Nearly 50 per cent of the angina patients were improved and in addition 4 reported as being symptom-free. In reviewing the electrocardiographic findings it was found that 40 per cent of the angina pectoris groups showed no abnormality. There was a relatively high incidence of ectopic ventricular contractions among the arteriosclerotic patients. More than 33 per cent of the coronary cases showed a negative T wave in the first lead, and none in the group could be classified as showing "normal mechanism." In the fatal cases serious changes in the graphic records were observed in all groups, with the exception of the angina pectoris class, where 2 out of 4 patients showed no abnormality of a grave nature.—*American Journal of the Medical Sciences*, July, 1931, clxxxii, 1.

Cure of Intracranial Hypertension in a Case of Cerebral Tumor.—Intracranial hypertension, says Egaz Moniz, writing in the *Journal de Médecine de Lyon* of May 5, 1931, is not a direct consequence of the cerebral tumor. There are large tumors which continue to develop until the patient dies, without provoking hypertension. On the other hand, small tumors may be accompanied at a given moment by the syndrome of hypertension. Moniz thinks that under certain conditions the tumors cause circulatory troubles that are followed by cerebral edema, the initial phase of an inflammatory condition of the leptomeninges, which is always the pathologic-anatomic base of intracranial hypertension. Thus the pathogenesis would be the same in serous meningitis and in cerebral tumors. If the hypertension were due only to increase in size of the neoplastic mass, it would never disappear without the latter having disappeared. But it is known that intracarotid injections of 25 per cent sodium iodide cause the syndrome of hypertension to disappear even in cases of cerebral tumor. While such results do not often last more than a few weeks, there are some cases, such as the one here reported, in which the patient's improvement has persisted despite the fatal progress of the tumor. The author's case, verified at autopsy, was one of a tumor of the septum lucidum, the third ven-

tricle and the lateral ventricle in a girl of 17. Within a single month severe headaches in the frontal region, vomiting, diplopia and partial loss of visual acuity had all supervened. Right and left encephalograms were made at an interval of 11 days, the patient having been prepared by luminal. Two days after the second injection the headaches disappeared, vision improved and was nearly normal two months later. The patient considered herself cured and resumed her work. A single crisis of headache 6 months later and one more on the day of her death, again 6 months later, were the sole indications of any further disturbance. Yet the autopsy revealed the presence of a large, inoperable cerebral tumor—a small-cell glioma. The improvement in the patient seemed to justify the diagnosis of serous meningitis, although the arteriogram might have been interpreted as a tumor of the third ventricle. The case is of interest because the cure of the intracranial hypertension was as complete, at least for 8 months, as if a decompressive operation had been done. Yet all this time the tumor was gaining extraordinarily in size, without neurological or focal symptoms.

The Common Causes of Earache.—The causes of earache are classified by G. Edward Tremble as intrinsic and extrinsic. By intrinsic causes are meant organic lesions within the external auditory canal, middle ear, or mastoid cells, giving rise to pain. These causes include foreign bodies, cerumen, furuncle, herpes zoster, otomycosis, acute otitis media, chronic otitis media, and mastoiditis. The condition can usually be seen at once by means of the aural speculum or otoscope. A mistake is often made in distinguishing between furuncle in the posterior segment of the canal and mastoiditis; this error may lead to an unnecessary operation. In differentiating these conditions, it is well to remember that pressure over the mastoid does not increase the pain due to furuncle, but if there is inflammation in the mastoid process marked tenderness is present. If the cartilaginous portion is affected by boils, movement of the mandible, as in chewing or yawning, usually accentuates the pain, and passive movement of the auricle also aggravates it. In children an annoying type of earache occurs, in which very often little or nothing can be seen by means of the aural speculum. Almost invariably it signifies a mild infection at the entrance and along the Eustachian tube. Examination frequently reveals an enlarged adenoid or slight inflammation of the nasopharynx. Extrinsic causes of earache are those which produce pain in the ear reflexly by lesions remote from the ear itself. The drum in these cases shows little or nothing, often a normal picture. In order to understand the mechanism and interpret the significance of referred pain, it is not only necessary to know the nerve supply of the ear, but also to what other organs the same or very closely related nerves are distributed. Tremble gives a description of the innervation of the ear and an interesting diagram showing these nerve connections. The most frequent cause of reflex otalgia is of dental origin. Other causes are affections of the pharynx, larynx, tonsils, side of the tongue, particularly the anterior two-thirds, inflammatory conditions of the salivary glands, upper part of the trachea, and rarely the lymph glands of the neck, goiter, and caries of the cervical vertebrae.—*Canadian Medical Association Journal,* June, 1931, xxiv, 6.

Ethyl-Iodide in Ear, Nose, and Throat.—Joseph Prenn bases the treatment he describes on the well-known predilection of iodine for inflammatory exudate and diseased cells. Its action is due not to antisepsis, but "to its ability to destroy the antitryptic power in the blood and allow the proteolytic ferments to dissolve any degeneraed or necrotic tissue." It stimulates leucocytosis, both local and general. It would appear that there is a broad field for iodine in certain diseases of the ear, nose, throat, and bronchial tree. But iodine, as such, is an irritant to the mucous membrane, and even in its dilute form it cannot be applied to some of the inaccessible parts without instrumentation. In the volatile ethyl-iodide, the apparatus and method for the use of which have been described in the *New England Journal of Medicine,* 202:1156, June 12, 1930, we have an iodine preparation in evanescent state which can be used to good advantage. Breathing the ethyl-iodide through the mouth and exhaling it through the nostrils effects a general diffused application of iodine to the mucosa of the entire tract through which the air courses. The air ordinarily passes through the Eustachian tube with each inspiration and expiration. After the patient has received one or more treatments in the office, he can employ the method at home. The author cities cases showing the apparently beneficial action of ethyl-iodide and the changes in the pathology of the mucous membrane that follow its use. Several patients who, in addition to catheterization of the eustachian tubes and mobilization of the drum membranes, received these inhalations, followed by the Valsavian method, have reported improvement. The results have also been satisfactory in a case of tracheitis.—*New England Journal of Medicine,* May 21, 1931, cciv, 21.

LEGAL

CORPORATE DIRECTORS

II

By LORENZ BROSNAN, ESQ.
Counsel, Medical Society of the State of New York

In a previous article appearing in these columns we outlined a few of the legal consequences of inactivity on the part of men chosen to serve as corporate directors, and attempted to show that "the duty of a director is to direct." In this editorial we shall consider some of the affirmative acts on the part of a director for which he may be held legally accountable.

It is fundamental that the general rules by which a director must govern his conduct are the rules of fair and honest dealing. A directorship is a position of trust, and the duty of a director is to look after the interests of minority stockholders as well as the interest of those in control of the majority of voting power. Some years ago in a case where it was charged that directors were attempting to dissolve a prosperous corporation so as to injure the minority stockholders, our Court of Appeals was asked to rule as to what charges would be sufficient to warrant the intervention of a court of equity. In its opinion the Court stated:

"The prerogatives and functions of the directors of a private business corporation are sufficiently defined and established. The affairs of the corporation shall be managed by its board of directors. The relation of the directors to the stockholders is essentially that of trustee and cestui que trust. The directors are bound by all those rules of conscientious fairness, morality and honesty in purpose, which the law imposes as the guides for those who are under the fiduciary obligations and responsibilities. They are held, in official action, to the extreme measure of candor, unselfishness and good faith. Those principles are rigid, essential and salutary. * * *

"The directors, generally speaking, are the exclusive executive representatives of the corporation and are charged with the administration of its internal affairs and the management and use of its assets. The ordinary trust relation of the directors to the corporation and stockholders is not a matter of statutory law, or of technical law. It springs from the fact that the directors have the control and guidance of the corporate business, affairs and property, and, hence, of the property interests of the stockholders. Equity, at least, recognizes the truth that the stockholders are the proprietors of the corporate interests and are ultimately the only beneficiaries thereof. Those interests are, in virtue of the law, intrusted, through the corporation, to the directors and from that condition arises the trusteeship of the directors with the concommitant fiduciary obligations. * * *

"A court of equity will protect a minority stockholder against the acts or threatened acts of the board of directors or of the managing stockholders of the corporation, which violate the fiduciary relation and are directly injurious to the stockholders."

On many occasions a director will find himself able, by reason of his advantageous position and peculiar insight into the corporate affairs, to use the power so acquired to make financial gain for himself, but upon such conduct our Courts have placed unqualified disapproval. For instance, the directors cannot validly vote themselves bonuses, increases in salary or special allowances. If a director renders a service to the corporation apart from his duties as such, he cannot take part in a vote awarding himself an excessive compensation for those services. The directors may not issue stock to themselves where they do not pay full value for it, or even for full value paid if it appears that by so doing they are changing themselves from minority to majority stockholders. If a corporation is insolvent, a director may not vote the payment of a debt owed him so as to prefer his claim to the claims of other creditors. An excellent general statement of the controlling principle here involved was set forth recently as follows by our Court of Appeals:

"The individual defendants, as directors, occupied the relation of trustees to the corporation and its stockholders, and the obligations of this trusteeship are the basis of ascertaining whether or not their acts, as alleged, were fraudulent. They were the exclusive executive representatives of the corporation and were charged with the administration of its internal affairs and the management and use of its assets. Their corporate acts, within the powers of the corporation, in the lawful and legitimate furtherance of its purposes, in good faith and the exercise of an honest judgment, are valid and conclude the corporation and the stockholders. Questions of policy of management, expediency of contracts or action, adequacy of consideration, lawful appropriation of corporate funds to advance corporate interests, are left solely to their honest and unselfish decision, for

their powers therein are without limitation and free from restraint, and the exercise of them for the common and general interests of the corporation may not be questioned, although the results show that what they did was unwise or inexpedient. It is, however, the inflexible rule that they cannot exercise the corporate powers for their private or personal advantage or gain. The law stringently and rigorously forbids to them the use or disposition of the funds or assets of the corporation for their individual enterprises or acquisition, and for any misfeasance or breach of duty or trust resulting in damage to the corporation they are subject to be called to account by the corporation in the appropriate action. These principles, based upon a sound public policy and morality, are so firmly fixed in our jurisprudence that they are not open to discussion and so familiar that authorities declaring them need not be cited."

Likewise the Courts have often intervened and compelled directors to surrender to the corporation secret gains obtained by them as commissions received from persons with whom the company is dealing, or to account where the conduct of the director is influenced by the payment of a gratuity or personal consideration. It is similarly improper for a director, upon learning that the company intends to acquire certain property, to buy the property in question himself and then to sell or lease it to the company at a profit.

Another possible source of liability on the part of directors is found where they take action resulting in a dividend being improperly paid. Directors have been found to have backed the declaration of dividends that impaired the capital of the company. Such action, of course, is improper and may give rise to a suit to recover the amount so paid from the directors.

In addition to civil liability for affirmative acts of misconduct, a director is also open to criminal prosecution for violation of our penal statutes. Of course the general penal statutes governing misconduct apply to them in the same degree as to other individuals. Frequently we find directors charged with embezzlement, larceny and the like. But, in addition, certain crimes grow out of their wrongful action in office for which the law makes special provision. A corporation is a creation dependent for its very existence upon the grant of a privilege by the State, and the State in turn demands compliance with many statutory standards. For example, the statutes make it a crime for a director to make false book entries or to refuse to permit lawful inspection of the corporate books or to fail to make reports required by law. The law is very specific in listing various fraudulent acts which are punishable criminally, such as the improper issuance of stocks and bonds and the improper use of the corporate assets. To illustrate to what extent these criminal statutes go, it may be noted that in this State it has been made a crime for a director to sell or agree to sell stock of the corporation of which he is a director, unless at the time of such sale or agreement he is the actual owner of the stock; that is, he may not sell stock in his own corporation "short."

In conclusion it should be stated that no attempt has been made to make this article or the preceding one a complete and comprehensive treatment of the law governing corporate directors, for to do so would of necessity require a discussion that would fill a large volume. Our purpose has merely been to set out a few of the factors which a man should bear in mind when he considers accepting the duties of a place of the board of directors of a corporation. In the final analysis, honesty, diligence, good faith and fair dealing are the standards of conduct imposed by law upon directors. The statutes and rules of law are designed for the purpose of enforcing these standards of conduct.

CLAIMED NEGLIGENT PRESCRIPTION OF ERGOAPIOL

The doctor in this case was called to the home of a patient whom he found in bed complaining of vaginal bleeding and pain. He examined her and found her to be suffering from a uterine fibroid about the size of a fist, which was accompanied by bleeding. He prescribed ergot and hydrastis by mouth and gave instructions about taking it. He called the following day and found the woman about the same. The doctor then decided to change the medicine and prescribed ergoapiol, to be taken one teaspoonful three times a day. The next day he observed that the bleeding had not completely subsided and gave her a hypodermic injection of pituitrin. The bleeding stopped promptly in response to that treatment. The doctor did not call to attend her further but suggested *x*-ray treatment to dissipate the fibroid tumor and referred her to another doctor, who specialized in *x*-ray therapy, for the purpose of such teatment. The doctor was informed that the woman never consulted the *x*-ray specialist for treatments.

Shortly thereafter a malpractice action was started against the defendant doctor by the patient. The plaintiff's complaint alleged that the bleeding with respect to which the doctor treated her was due to menopause, and that the doctor was negligent in failing to ascertain that her condition

was caused by menopause, and in prescribing excessive and injurious doses of ergoapiol.

The complaint further charged that as a result of said negligence the plaintiff's health was greatly injured and she was caused to suffer great pain.

The action was duly brought on and when the case was called on the calendar for trial the plaintiff and her attorney failed to appear. On motion of the attorney for the doctor the plaintiff's complaint was dismissed. Judgment entered for the defendant and the case was concluded in his favor.

CLAIMED NEGLIGENT TREATMENT OF CUT

In this case the plaintiff consulted the defendant doctor, giving a history of having received an injury caused by being hit with a milk bottle which had been hurled through the winlow of a railroad car on which he was riding.

Upon examination the doctor found multiple small wounds on the man's neck and a deep one-half-inch incised wound on the dorsal surface of the right thumb. The extensor tendon was exposed but while the cut affected the tendon it was not completely severed. The doctor placed mercurochrome on the wound and approximated the edges with a strip of adhesive tape and applied a dry sterile dressing. On four subsequent occasions the man returned and the doctor dressed the hand. On one of said subsequent days the doctor discovered that the remaining fibres of the extensor tendon had become separated and that the patient had lost the power of extending the distal phalanx. The doctor advised the patient that in order to properly effect a cure, he would have to suture the tendon. The plaintiff informed the doctor that he intended leaving for Europe in a short time and would prefer not to have the tendon sutured at that time. The doctor advised the patient that there was no occasion for haste and that it could be done later. This satisfied the patient and when the doctor last examined him the wound was almost completely healed and the thumb normal except for the divided tendon which made itself evident by the loss of the power of extension.

The doctor heard no more of the case until a summons was served upon him in an attempt to recover large damages for alleged malpractice. The action was duly noticed for trial but before the same was reached in its order on the Calendar, the defendant died and the action was abated.

FAILURE TO DETECT FRACTURE AND DISLOCATION

The plaintiff in this case while being attended in the Turkish baths of a hotel apparently was taken with some sort of an epileptic fit. The employees of the hotel attempted to remove the plaintiff from the room in order that he be revived, and in so doing permitted him to fall on the floor, injuring his right shoulder. He was taken upstairs to his room in the hotel and a doctor was called in promptly to attend him.

When the doctor arrived the man had regained his senses and stated that while he had been sitting on a chair in the Turkish baths he was taken with a sudden pain in the shoulder and had no recollection from that time on. The doctor examined him and prescribed salicylate tablets and left instructions that the patient should call him if he needed a doctor again. The following afternoon the patient attempted to call the said doctor, but by reason of the fact that he was operating at a hospital a second doctor was sent to make the call in his place. The second doctor found the patient in bed complaining of a pain in the right shoulder. He examined the patient's general condition but not for a fracture or dislocation. Upon being informed that the patient was taking salicylate tablets he directed the patient to continue taking such medicine.

This second doctor returned the following day and found the patient still in bed with marked ecchymosis on the right shoulder. The doctor then became suspicious of dislocation and directed the patient to dress and go to a hospital for an *x*-ray picture. The patient had *x*-ray pictures taken which disclosed a dislocation of the shoulder and a fracture of the tuberosity of the right humerus. A surgeon was then called in who reduced and cared for the dislocation and fracture.

An action was instituted against the hotel and the first two doctors who attended the patient, in which the plaintiff alleged that the hotel was negligent in permitting the plaintiff to sustain injuries, and that the defendant doctors were guilty of malpractice in their wrongful diagnoses of the said injuries, and that as a result of the improper treatment rendered to the patient by the said doctors great injuries and much disability were caused.

When the action was about to be reached for trial, the hotel company settled the action insofar as it was concerned. Through the efforts of your counsel the action was discontinued against the two doctors, thereby terminating the matter in their favor without trial and the prolonged annoyance of litigation.

NEWS NOTES

INFANTILE PARALYSIS COMMITTEE

A sub-committee on Infantile Paralysis was appointed by the President of the Medical Society of the State of New York, to cooperate with Dr. T. P. Farmer, chairman of the Committee on Public Health, in devising ways by which family doctors may do their part in the prevention and control of the epidemic which is now prevalent. The new committee consists of the following physicians: Dr. Charles Hendee Smith, New York City; Dr. Walter D. Ludlum, Brooklyn; Dr. John A. Card, Poughkeepsie; Dr. Henry L. K. Shaw, Albany; Dr. Wardner D. Ayer, Syracuse; Dr. Stanhope Bayne-Jones, Rochester; and Dr. Clayton W. Greene, Buffalo.

The committee met with State Commissioner of Health, Dr. Thomas Parran, on Friday, August 7, in the Albany offices of the State Medical Society. The number of poliomyelitis up-State cases reported from July first up to the time of the meeting was 104, distributed as follows:

Nassau County	21	Orange, Schenectady,
Westchester	20	Rensselaer and Wash-
Columbia	10	ington, 12 each.
Albany	8	Rockland, Cattaragus,
Suffolk	8	Niagara, Broome,
Sullivan	4	Delaware, Oneida,
Ulster	4	Otsego, Essex,
Erie	3	Dutchess, Putnam and Onandaga, 1 each.

The number of poliomyelitis cases reported in Greater New York since July first is 1212.

While these figures are small compared with those of the great epidemic of 1916, yet they indicate a grave menace which the physicians of the State are preparing to meet.

The sub-committee made the following recommendations regarding the use of immune serum:

"That the use of serum of recovered cases in the treatment of pre-paralytic cases is highly desirable; that all possible aid should be given to the State Department of Health in the collection of an adequate amount of such serum; that to make the most efficient use of serum to the largest number of cases, control of the use of the serum is highly desirable."

The sub-committee also approved the attitude of the State Department of Health and appealed to the County Medical Societies to take organized means to combat the epidemic in their own counties. The statement authorized by the sub-committee was as follows:

"The committee commends the efforts of the State Health Department to make available to the physicians assistance in laboratory diagnosis at the bedside of suspected cases in the pre-paralytic stage, and urges all physicians to avail themselves of these facilities.

"The committee believes that such diagnostic service should be organized in all sections of the State; and that the State should appoint qualified local representatives in any community in which the disease appears, and, where necessary, should assign its own staff members to assist in making the diagnosis and to be responsible for the distribution of serum; and that cities with a population of 50,000 or over be requested to organize diagnostic service for their own localities.

"The committee urged that in counties where an outbreak of the disease seems impending, county medical societies immediately arrange a meeting for the discussion of the disease, and that all physicians, whether members of the county society or not, be invited to these meetings." (See page 1038.)

NASSAU COUNTY POLIOMYELITIS

The Medical Society of Nassau County held a special meeting on August fifth for the purpose of hearing the subject of poliomyelitis presented by Dr. Lloyd Aycock of Boston, Director of the Harvard Infantile Paralysis Commission, who had been secured as speaker through the cooperation of the Medical Society of the State of New York and the Health Department. About 125 members were present.

Dr. Aycock reviewed the development of our present knowledge concerning the epidemiology of the disease, and stressed the importance of the discovery that we can transmit the virus of poliomyelitis to monkeys. It has been shown

definitely that one attack of poliomyelitis in such monkeys confers a permanent immunity; and serum from them will neutralize the virus in a test tube. After testing the serum of human adults, it was found that ninety per cent of them could neutralize the virus in vitro even as that of the inoculated monkeys. It leads to the conclusion that ninety per cent of the populace has at some time been infected with the virus of poliomyelitis. It must be relatively frequent to find exposure resulting in sub-clinical immunization, and so the problem of checking the organism is almost futile.

Dr. Aycock stated that inasmuch as the chance of exposure during the epidemic is manifold and one can not determine in whom or where the danger lies, he advised parents to confine their children's activities to playing in very small groups of carefully chosen playmates.

One can vaccinate with the virus and secure an active immunity; but since a very small fraction of the children are destined to become paralyzed, it is impossible to determine whom to vaccinate. Passive immunity may be secured through the administration of serum from a convalescent case, but again objections are strong. Since such immunity lasts but 10 days, and the quarantine period of poliomyelitis is 21 days, one could not choose the exactly proper time to give the serum prophylactically.

Dr. Aycock advocated immunization of the remainder of a family in cases where poliomyelitis is discovered in a member early; but he was not willing to sponsor promiscuous vaccination.

One point which he stressed was the importance of history, in the light of present day knowledge. Unlike the old text-book description which said that the child went to bed well and woke up in the morning paralyzed, one is now able to dig out a history of milk fever, headache, and vomiting about five days before. This is the advice which one can tell to anxious mother: "In the presence of this epidemic, don't delay calling a doctor when the child presents a headache, or fever or vomiting whether there be apparent reasons for these symptoms or not."

A typical history would be that of a well-developed boy of 5 years who is exposed to poliomyelitis. He goes blithely along for about ten days (7 to 14 days) without complaining. On the tenth day he eats a smaller breakfast than usual but attends school. He is excused from school in the middle of the morning because of a headache, and chooses to remain on a bed when he arrives home. Attempts to eat lunch result in vomiting. Perhaps he is given a physic and promptly vomits this, causing the comment to be made that the physic is the probable cause of the vomiting. Then if he belongs to the eighty-five per cent of the cases who have a staggering course of mild fever and restlessness, he drags on till the fifth day when he has any or all of the following symptoms and signs: Course tremors, shudders, stiff neck (which can be demonstrated to be voluntary), apprehensiveness which is possibly due to some effect on the thalamus as in rabies. When the patient is asked to sit up, he climbs up with the aid of his arms; and when asked to flex the chin on the chest, he bends forward from the hips and drops his chin by opening his mouth, and it is obvious that he is favoring his back and neck. The symptom of "tenderness along the spine" which is described in old texts is an error of observation.

If the patient belongs to the fifteen per cent who have a mild upset on about the tenth day after exposure, but then have five days of apparent freedom from any complaints, he will probably have headache, fever, and vomiting again on the fifteenth day after exposure, plus some nervous symptoms as described before. He then fits Draper's so-called "Dromedary Type," due to the two humps in his symptomatic course. The paralysis will follow within about three days.

Spinal puncture clinches the diagnosis if the cell count is elevated, generally running between 100 and 200; and if the globulin is increased. Draining away spinal fluid is a beneficial procedure. The intraspinal administration of 15 cc. of immune serum from a convalescent case is good practice in pre-paralytic cases; and the intravenous injection of 30 to 45 cc. is recommended.

Dr. Benjamin R. Allison, President of the Society, announced that the Society had taken steps to cooperate with the State Department of Health in whatever measures might be necessary to prevent or control the epidemic.

Dr. M. D. Dickinson, District State Health officer, described the cases that had been reported, and announced the formation of a field laboratory unit to function in the homes where the diagnosis is obscure. The personnel at this date consists of Dr. Dickinson himself and Dr. D. Edward Overton. The unit is ready to do lumbar punctures, spinal fluid cell counts, and globulin tests, and to administer immune serum both intraspinally and intravenously in the homes. Dr. Overton is also collecting immune serum from recent poliomyelitis cases throughout Nassau County under the direction of Dr. Dickinson, for use by the New York State Department of Health.

After the meeting Dr. Allison issued a news release story giving popular advice regarding the nature and prevention of poliomyelitis, and urging the prompt calling of a doctor.

MEDICAL WARES

VITAMIN D BREAD

The story of vitamin D bread begins with the four principal vitamins whose sources of action are well known. An abundance of the vitamins A, B, and C are contained in common foods, and will usually be taken in sufficient amounts when one's bill of fare is as varied as that of ordinary menus of homes and restaurants; but vitamin D, the antirachitic, is found in only a few natural foods; and in them it exists in only small amounts. It is abundant in cod liver oil, but no one uses that as a food. Some vitamin D is found in egg yolk, a lesser amount in butter, and still less in whole milk. These are almost the only common foods that have vitamin D, and they do not usually contain enough to maintain the body in the best condition of health.

The body under natural living conditions does not take its main supply of vitamin D ready-made in its food; but in the form of ergosterol which is a normal constituent of yeast and other foods. When the ergosterol is absorbed and is carried to the skin, it is activated by sunlight so that it becomes vitamin D. Ergosterol does not become vitamin D in the absence of sunlight, nor does sunlight cure rickets if the body does not contain ergosterol on which the rays can act.

Ergosterol can be isolated in a chemically pure state in the form of short needle-like crystals. When it is irradiated with ultraviolet light, it becomes vitamin D in a stable form. The irradiated ergosterol, when dissolved in corn oil, is known by the trade name *Viosterol,* and is adjusted to a standard strength measured in vitamin D units.

The most evident effect of vitamin D is to promote the utilization of calcium by the body. If vitamin D is absent from the food of a growing child, calcium is not deposited in the bones, and rickets develops. Young white rats are the principal animals used in experimental rickets because of the rapidity and certainty of the results, and the ease of recognizing the condition. When a growing white rat is placed on a diet which contains no vitamin D for 21 days, the epiphysis of the distal end of the radius consists of uncalcified cartilage, as shown by the *x*-ray; but when vitamin D is added to the food, calcium is quickly deposited, and the first evident effect is the appearance of a line of calcification in the cartilage.

One unit of vitamin D is the total amount which, when fed to a rachitic white rat, will induce the formation of a continuous line of calcification within ten days.

Standard cod liver oil contains 47 units of vitamin D in each teaspoonful.

Standard viosterol contains 3,333 units in each gram.

The amount of vitamin D required to prevent rickets in the average growing baby is 140 units daily.

A leader of research in vitamin D is Professor Henry Steenbock, of the University of Wisconsin, who was granted a patent, number 1,680,818, for the manufacture of irradiated ergosterol. Professor Steenbock immediately assigned the patent to the Wisconsin Alumni Research Foundation.

The University of Toronto also promoted researches into vitamin D and other biological products through its Pediatric Research Foundation under the direction of Dr. Frederick F. Tisdall. Since the two universities were working along the same lines, they cooperated in developing the means of supplying vitamin D to people generally, and decided that the most practical method was by means of bread. The two universities therefore made a contract with the General Baking Company that the Company should have the exclusive right to add vitamin D to its bread, subject to the tests and control of the University of Toronto, in the same manner that the University controls the standardization of insulin. All the royalties under the contract are devoted to making tests of the bread bought in the open market and in further research. Moreover, a provision of the contract obligates the General Baking Company to issue permits to other companies to use the process, in the expectation that in the near future all baking companies will adopt the plan of adding vitamin D to their products so that everybody can get a normal supply of vitamin D anywhere in the United States, and at no extra cost.

The amount of vitamin D which is added to the bread was set at 140 units in each loaf of twenty-four ounces. This is equivalent to three teaspoonfuls of standard cod liver oil,—an amount which would give an unpleasant taste to the loaf if it were used.

The General Baking Company is not permitted to charge an extra price for its vitamin D bread; it profits by the satisfaction and reputation of supplying the people with a food element which is of great importance to their health and vigor.

THE DAILY PRESS

HE DIDN'T KNOW IT WAS LOADED

The plate for this cartoon was made a year ago, but we have delayed using it because of an inferiority complex induced by a critic's remark that he did not believe in pictures or stories that had a moral attached to them. We first thought we would use the cartoon to call attention to Fourth of July dangers, and then we thought of the warning issued by the Commissioner of Health against bathing in polluted water. Then, too, there is the ever-present menace of the reckless drivers of automobiles, and in the Fall there will be a toll of lives of careless hunters. We will not attach any moral at all to the cartoon, for its lesson is plain and can be adapted to any subject under the heavens. It may be a source of inspiration to physicians who will become engaged in popular medical publicity when the plans of the Medical Society of the State of New York are developed to the extent that they are in Indiana, Illinois, and some other Western States.

We wonder how many of the readers of this JOURNAL take its cartoons as seriously as do the editors, whose intention is to tell a health story with a simple picture, and in a kindly way. But after all nothing can take the place of close application of the mind to a problem. A child learns the multiplication table by hard work, unrelieved by pleasant pictures and experiences. An adult learns the rules of health because of his hard experience after he has broken them.



From the New York Herald Tribune, August 1, 1930.

MAIL ORDER EYE GLASSES

The Department of Health of New York City has issued public warnings against vendors of eye glasses and dealers who pretend to fit persons by mail. The New York *Herald Tribune* of July 20, says:

"The National Better Business Bureau investigated the mail order eye-glass business, and speaking of its report Dr. Shirley W. Wynne, Health Commissioner, hits at the fakers who send various devices for the individual to test his own sight, and adds that because of the cheapness of the manufacture of such devices 'they cannot be mathematically correct.'

"About the persons involved in the mail order eye-glass business, Dr. Wynne said: 'In the course of our investigation we found that several of the fakers who were using the title "doctor" in their advertising and literature, were not doctors at all; that the majority of them knew little or nothing regarding refraction, and that none of them had the slightest knowledge of the human eye or its ailments. Some of this gentry have branched out into the spectacle trade after failing in the jewelry line, others have gone into the eye-glass business because of the money they saw in it'."

ANNALS OF THE PICKETT-THOMSON RESEARCH LABORATORY. Vol. VI, The Pathogenic Streptococci: the role of the streptococci in scarlet fever. Quarto of 470 pages. Baltimore, The Williams and Wilkins Company, 1930.

This large volume contains a very excellent and much needed compilation of the literature on the subject of scarlet fever, particularly as to the part played by the streptococcus in the causation of the disease.

The increase in the research work on the etiology of scarlet fever has been tremendous in recent years, due, in large part no doubt, to the discovery of the Dicks. This volume, so far as we know, is the most complete summary of the literature bearing on the subject and its correlated topics which has appeared up to this time. To place within the covers of one volume reference to and often detailed abstracts from some 1400 research papers, is no small task, and the authors deserve an abundance of praise for the careful and painstaking manner in which the entire book has been prepared. The publication provides a medium which will no doubt greatly assist in disseminating more generally among the profession the information accumulated to date as to the specific relation of the streptococcus scarlatenæ to scarlet fever.

JOSEPH C. REGAN.

A TEXT-BOOK OF THE SURGICAL DYSPEPSIAS. By A. J. WALTON, M.S., M.B. Second Edition. Octavo of 720 pages, illustrated. New York, Longmans, Green & Company, 1930. Cloth, $15.00.

The first edition of this book appeared in 1923. In the seven years elapsing since then so much work has been done in upper abdominal surgery that the Author's task has not been an easy one. New sections devoted to inflammatory lesions of the stomach other than ulcers, to congenital cysts of the bile ducts and to cholecystography have been added. The chapters dealing with the causes of ulceration of the stomach, the choice of treatment of gastric ulceration, duodenal diverticula, ileus and fistulæ, gastro-jejunal ulceration and the operative technic of gastric lesions have been almost entirely rewritten. The author has, however, curtailed several portions, particularly that devoted to the surgical methods of treating visceroptosis so that the work as a whole is not enlarged. The statistics throughout have been revised, the number of illustrations have been increased. Several of the older diagrams have been revised.

The author has brought the book up-to-date and has made a rather complete and compact résumé of the subject, particularly when one considers that the volume deals with such a large number of lesions, including gastric ulcers; inflammatory lesions of the stomach other than ulcer; duodenal ulcers and diverticula; pyloric and duodenal obstructions; gastric neoplasms; foreign bodies and injuries of the stomach and duodenum; acute dilatation; volvulus and intussusception; gall stones and their complications; the diseases of the pancreas, visceroptosis and appendix dyspepsia, with the etiology, pathology, symptomatology, treatment, operative technic and choice of operation. It really is a great deal to cover in a book of this size. However, the author has made interesting reading of it. His own large experience makes his conclusions particularly valuable, and there is appended to each chapter a number of references particularly to English and American authors.

RUSSELL S. FOWLER.

HANDBOOK OF DISEASES OF INFANTS AND CHILDREN for students and practitioners. By F. M. B. ALLEN, M.D., M.R.C.P. Octavo of 595 pages. New York, William Wood & Company, 1930. Cloth, $5.00.

In his preface the author says: "I have avoided theories as far as is compatible with an intelligent understanding of the subject."

He has very ably carried out the intention so expressed, and given us a brief outline of each subject which is well expressed, definite and to the point.

He stresses the importance of breast feeding in accordance with the modern American trend, and covers briefly and well the vast domain of artificial feeding, and this part of the book is unusually free from individual bias.

A useful list of prescriptions for infants and children is part of the appendix.

This book is a sound, reliable guide, giving the foundations for further study. It deserves a place on the library shelves of the physician interested in infants and children, and is well adapted to quick reference.

ARCHIBALD D. SMITH.

PYE'S SURGICAL HANDICRAFT: A Manual of surgical manipulations, minor surgery, and other matters connected with the work of house surgeons and surgical dressers. Edited by H. W. CARSON, F.R.C.S. Tenth edition. Octavo of 641 pages, illustrated. New York, William Wood & Company, 1931. Cloth, $7.00.

This edition is a revision of a popular English work on Minor Surgery, which first appeared over the name of Walter Pye in September, 1884. The present volume of 640 pages, with 343 illustrations and 22 plates is of convenient size for ready reference and easy reading.

In this book, it has been the aim of the author to describe the details of surgical work as it appears from the point of view of house surgeons and dressers in surgical wards. With the constant revisions and additions of the various editions, the work has an added appeal even to those who have finished their interneships and have continued their interest in the problems of so-called, minor surgery. If one includes the chapter on Splints, over 110 pages are devoted to a consideration of the treatment of Fractures, Dislocations and Sprains. Even so considerable a portion of a book, we do not feel, however, is used unwisely in the discussion of so important a subject as the treatment of fractures.

J. RAPHAEL.

INTRODUCTION TO MEDICAL BIOMETRY AND STATISTICS. By RAYMOND PEARL. 2nd rev. edition. Octavo of 459 pages, illustrated. Philadelphia & London, W. B. Saunders Company, 1930. Cloth, $5.50.

The authors are unduly modest in describing this work as an "introduction." The book contains an extensive study of the elements of statistical methods useful in the biostatistical and medical fields. All that should be done to figures between their first selection for statistical treatment and their final presentation in sppport of the argument or theory for which they are required is treated in a very complete manner.

All points dealt with are well illustrated by numerous tables, charts and graphs, and a satisfactory index is provided.

G. HOLBROOK BARBER.

LOVETT'S LATERAL CURVATURE OF THE SPINE AND ROUND SHOULDERS. Fifth edition revised and edited by FRANK R. OBER, M.D., and A. H. BREWSTER, M.D. Octavo of 240 pages, illustrated. Philadelphia, P. Blakiston's Son & Co., Inc., 1931. Cloth, $3.50.

We are indebted to Dr. Ober and Dr. Brewster for carrying on the popular work of the late Dr. Lovett on curvature of the spine. Through the efforts of these gentlemen we now have the fifth edition of this concise and definite work. Little need be said of the original work but in this edition the work of Galeazzi is given in detail and furthermore the chapter on corrective exercises has been rewritten.

We trust that the editors will continue to carry on this contribution of Dr. Lovett to scoliosis.

JA. C. R.

A Handbook for Senior Nurses and Midwives. By J. K. Watson, M.D. Second edition. 12mo of 676 pages, illustrated. New York and London, Oxford University Press, 1931. Cloth, $4.00. (Oxford Medical Publications.)

As the title indicates, the author intends his book for the use of senior nurses and midwives, and he expects it to be used in conjunction with his volume, Handbook for Nurses. In this second edition, the text has been carefully revised, and several new chapters have been added. The book is not, by any means, a system of medicine and surgery for nurses, for there are many diseases and surgical conditions which are not even mentioned. The author, however, divides the volume into five parts; Medical, Surgical, Children, Obstetrical and Gynecological.

It would be impossible to cover all of these subjects thoroughly in any one volume, but the author has succeeded in giving a great deal of valuable, and practical information concerning them.

The book is written in simple language, and it is very practical and up-to-date, even though some of the treatment recommended is somewhat different from that practiced in this country. Certainly, the volume is valuable for the group for whom is has been written.

W. S. S.

Facts and Figures About Tuberculosis. By Jessamine S. Whitney. Quarto of 63 pages, illustrated. New York, National Tuberculosis Association, 1931. Paper, 75c; Fabrikoid, $1.00.

Tuberculosis because of its chronicity, its comparative simplicity in diagnosis, and also because it produces a less unfavorable psychic response than many other diseases, peculiarly lends itself to reliable statistical study.

This summary presentation reiterates facts well known to the profession but the statistical data will no doubt make it especially appealing to the public health worker.

And even though we are not fortunate in possessing indisputable statistics for other diseases, it is fairly reasonable to suppose that many of them should keep pace in their more hopeful outlook with this blight on civilization.

Emanuel Krimsky.

Deep X-Ray Therapy in Malignant Disease: A report of an investigation carried out from 1924-1929 under the direction of the St. Bartholomew's Hospital Cancer Research Committee. By Walter M. Levitt, M.B., D.M.R.E. Octavo of 128 pages, illustrated London, John Murray (c. 1930). Cloth, 10/6.

A statistical report of work under the auspices of the St. Bartholomew's Hospital Cancer Research Committee. An interesting review covering 327 cases of malignancy over a period of five years; 1924-1929.

The types treated were:—

50	Carcinoma of	Breast
60	"	" Uterus, 48 of which were of cervix
170	"	" upper air passages
26	"	Rectal
21	"	Miscellaneous

A chapter is given to technic—method of approach and quality and intensity of ray. The report is interesting and well worth reading for comparison with results at other clinics.

The conclusions drawn are:—

1. Malignant growths are at times remedial to radiation, at others palliative.
2. Best results are obtained in the following order of frequency:—upper air passages; uterus and breast; rectal and œsophagus groups poor.
3. When not curative, often marked reduction in size, with alleviation of symptoms.
4. No risk involved—negligible discomfort.
5. In certain cases radium in combination with X-ray is probably superior to either alone.

Milton G. Wasch.

The Diagnosis and Treatment of Brain Tumors. By Ernest Sachs, A.B., M.D. Quarto of 396 pages, illustrated. St. Louis, The C. V. Mosby Company, 1931. Cloth, $10.00.

Brain tumors have long puzzled the profession. Their diagnosis generally implied a fatal prognosis. During the last decade, much light has been thrown on the subject. American physicians, particularly the neuropathologists and neurosurgeons, have contributed the major portion of knowledge that led to a better understanding of the subject. The literature is full of articles on the various phases of the problem. A systematic presentation of the subject, in an easily accessible form, was a crying need. Dr. Sachs has supplied this want. His book is a masterly one, logically written, clearly presented, in a style that is excellent. The bibliography is well chosen and is a means for consulting the original works on the various phases of the brain tumors problem. The book is published in a manner that reflects most favorably on its publishers. One cannot possibly praise the book too much, for it is a work of art. No physician should fail to read it, and no one interested in neurology or surgery should be without it.

Irving J. Sands.

The Science and Practice of Surgery. By W. H. C. Romanis, M.A., M.B., and Philip H. Mitchiner, M.D., M.S. Third edition. Two octavo volumes totaling 1868 pages, illustrated. New York, William Wood & Company, 1930. Cloth, $12.00.

These two volumes are the third edition of this work which have been thoroughly revised. They have been arranged so as to be of great value to the medical student and to the general surgeon.

There are seven hundred and sixteen illustrations, some of which are new, specially selected to present classical reproduction of the various surgical conditions commonly met with.

The first volume begins with general surgical procedures and contains twenty-three other chapters relating to general surgery.

The second volume of twenty-two chapters is devoted to regional surgery.

The authors have been painstaking in making these volumes complete, as one would readily learn from reference to the index.

Ralph F. Harloe.

Clinical Diagnosis by Laboratory Methods. A Working Manual of Clinical Pathology. By James Campbell Todd, Ph.B., M.D., & Arthur Hawley Sanford, A.M., M.D. Seventh edition. Octavo of 765 pages, illustrated. Philadelphia and London, W. B. Saunders Company, 1931. Cloth, $6.00.

The seventh edition of Clinical diagnosis by Laboratory Methods preserves all the excellent qualities of the previous editions. Generally acknowledged as an indispensable book in the laboratory library, its value has long been universally acknowledged. A number of minor revisions have been made. New methods which have proven their usefulness are included in this new edition; such as Corper and Uyei's method for the culture of the tubercle bacillus, the Ascheim-Zondek test for pregnancy and many more. The usual recommendation that the clinical pathologist can ill do without this book is emphatically repeated.

Max Lederer.

OUR NEIGHBORS

PUBLIC RELATIONS IN MICHIGAN

The July issue of the Journal of the Michigan State Society contains twenty-two pages of a stenographic report of the proceedings of a special meeting of the Council of the State Society held on May 19, in order to give the public health organizations of Michigan an opportunity to explain their activities and policies. The Chairman, Dr. B. R. Corbus of Grand Rapids, stated that the object of the meeting was to consider state-wide activities for the improvement of the health and social conditions of the people. Since the physicians of Michigan are vitally interested in these matters and must make a decision regarding their relation to them, the Council had been called together in order to hear representatives of the public health organizations explain the purpose and scope of their work. Dr. Corbus said in his introductory remarks:

"The end of the first hundred years of the Michigan State Medical Society came some little time before the war. During this period its activities were quite self centered. They were directed towards better fellowship, ironing out local differences, of which there were many, scientific improvement such as might be obtained by the reading of papers, and the discussion of cases in get-together meetings. All in all the activities were quite largely for the benefit of the individuals composing the society.

"With the ending of the first hundred years of the society, we, for the first time as an organization, engaged in an activity which indicated that we felt that we had a true obligation to the community. This first activity was promoted by Dr. Victor Vaughan, who induced the Society to combine with other agencies to make a survey of the cases of tuberculosis in the state—the first social work, so far as I know, that had been undertaken. Since this time, and most particularly in the last eight or ten years, the Society has become more and more conscious that it has a distinct obligation to the public to do its part in what may be termed 'social work.' Particularly did we feel that we had a duty to the public to instruct them along both public health and personal health subjects.

"Conditions are changing rapidly, and a situation which is interesting to students of social welfare throughout the country, is the availability of money set aside by philanthropic individuals for the improvement of the health of the public through definite health and educational activities. The activities of these splendid philanthropies are directed, in most instances, through Foundations, of which there are several in Michigan."

Dr. Corbus referred to the extensive opportunities offered to the medical profession by the Foundations, and also to the necessity of coming to a working agreement with them. He introduced representatives of five public health organizations, as follows:

1. The State Department of Health.
2. The Couzen's Foundations.
3. The Kellogg Foundation.
4. The Michigan Tuberculosis Association.
5. The State Sanatorium Commission.

State Department of Health: The activities of the Michigan State Department of Health were described by the Commissioner, Dr. C. C. Slemons. He said that the Department consisted of 10 bureaus and 180 employees, and had a budget of $500,000, of which one-half was spent on the bureau of laboratories and biologics. The Commissioner outlined the routine work of the bureaus, and then described the policy of the bureau of rural hygiene which has charge of the establishment of county health departments. The Michigan law is broad and permits counties to establish health departments either singly or in cooperation with adjoining ones. It also gives state aid to county departments of health up to one quarter of their annual appropriations, but with a maximum of $3,000 to any one county.

Doctor Slemons described a training school for county health officers conducted in Lansing with a director supplied by the Rockefeller Foundation; but the doctor adds that the school may be discontinued because of the few county departments that have been organized owing to the meagerness and uncertainty of state help.

A commendable decision announced by the Commissioner was that no county department of health would be established unless the county medical society of that county asked for it.

As to the minimum expense of a county department of health, Doctor Slemons said:

"We have not approved a unit that showed a budget of less than $12,000. We have figured out that the minimum budget that the sparsely settled counties can get along with is at least $12,000, which gives

(*Continued on page* 1058—*Adv. xiv*)

The *standard* Infant-Diet Modifier

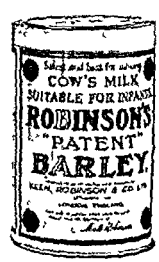


THE addition of Robinson's "Patent" Barley to the diet of the normal, healthy infant breaks down the large clots that result from the curdling of cow's milk and makes the mixture curdle in a manner similar to human milk. Thus the feeding is more easily assimilated.

Its slightly starchy content gradually acclimatizes the baby to the starchy foods which will later form the major part of his diet.

IT IS VALUABLE as a diluent instead of water, because of its soothing, demulcent effect on the stomach and intestines of the baby.

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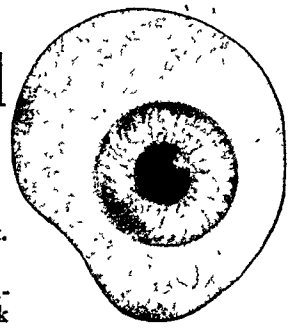
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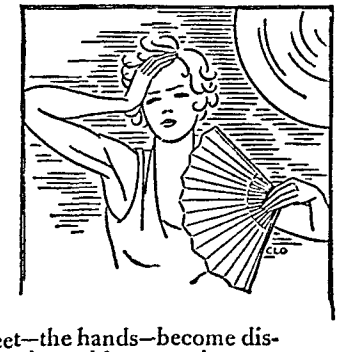
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(*Continued from page* 1056)

them a county health officer, a couple of nurses, and nurses' expense, and in some instances a sanitary officer. Of that $12,000, the State has paid $3,000. The first year, the Rockefeller people give them $2,500, the second year $1,500, and the third year $750. The fourth year they drop out of the picture. Up to the present time we have had $5,000 a year from the United States Public Health Service that we have been able to distribute among the counties of the State."

There was considerable discussion over the practice of sending patients, especially children with diseased tonsils, to hospitals in Ann Arbor and other centers, instead of to local physicians.

Couzen's Foundation: The second public health organization described to the Council was the Couzen's Foundation, whose program was set forth by Dr. W. B. Carey, who said:

"Some two years ago, Senator Couzens came to the City of Detroit, and called together six men and said that he wanted to set aside some money that could be expended for the children of Michigan. In his own words, he said, 'This ten million dollars is to be expended for the health, welfare, happiness and development of the children of Michigan, and elsewhere in the world, if you reach the point where you think you ought to go outside of Michigan.'

"The objective of our health program is to correlate the local resources which are available, for the betterment of public health, especially for mothers and children. So, in the Division of Child Health, I divided the program up into administration, nursing care (we have 32 counties with nurses in them today); a dental program of some 22 dentists, and 4 oral hygienists, as well as a summer dental program, operating in counties where there are not adequate dental services now available; and a health education program."

Doctor Carey described the work in the Northern Peninsula in which he said:

"You find areas utterly lacking in medical service, unless you say that a doctor who resides forty miles away is available. You find counties without any dental service whatsoever, and, of course, no public health nursing service."

Doctor Carey also described the formation of four consolidated county health departments in sixteen counties, and the aid given by the Foundation, especially in supplying health officers, nurses, and dentists. A local public health committee is established in each department and the help of the local doctors is sought.

The Foundation spent $1,166,000 last year,

(*Continued on page* 1059 *adv. xvi*)

(*Continued from page 1058—adv. xiv*)

including grants to the University of Michigan and Yale for research, and grants for the study of dependent children.

Dr. J. D. Bruce, Ann Arbor, gave the following additional information regarding the rural work in the upper peninsula:

"The Children's Fund of Michigan has erected a building at Marquette, equipped with laboratories, examination rooms, accommodations for twelve children, administration rooms, etc., and an amphitheatre for teaching purposes which will accommodate about seventy-five. The Foundation has given us a sum of money to employ a full-time pediatrician, and we have been very fortunate in securing an extremely well-trained man, who, I am sure, will be very satisfactory to the profession from a teaching standpoint and extremely helpful in the diagnosis and care of pediatric conditions. The plan is to hold, at regular intervals, clinics at Marquette and in the various centers of northern Michigan. There the children that come in will be investigated, and diagnosed, and, when of teaching interest, will be used for demonstration purposes."

Several councillors cited instances of patients who could pay medical fees, being treated free by the staff of the Foundation; and also cases of nurses assuming the prerogatives of the doctor.

The Kellogg Foundation: Doctor Corbus, in introducing Dr. Stuart Pritchard, Medical Director of the W. K. Kellogg Foundation, said:

"I must admit, though, even though I have had several discussions with Dr. Pritchard regarding the Kellogg Foundation, that I am very much in the dark as to what their ultimate purposes will be. Their work thus far has been largely, almost entirely, confined to school work, and building up adequate schools with definite health programs, in the rural communities."

"Their work will always be only in cooperation with the medical profession. In counties where they are working now, he is cooperating with them."

Doctor Pritchard said:

"The purposes of the W. K. Kellogg Foundation are to directly or indirectly become actively engaged in child welfare; to consider ways and means of helping in matters of child health, child education, child recreation, child character building; and to influence school children so that health education may, in turn, penetrate the school, the home, and the community.

(*Continued on page 1060—adv. xvi*)

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. . . and requires no modification

Breast milk is simple for the physician to prescribe, yet no physician ever refuses to prescribe it on account of its simplicity, its simplicity, on the contrary is one of the many advantages of breast milk. S.M.A., an adaptation to breast milk is likewise simple to prescribe and prepare and requires no modification for normal full term infants.

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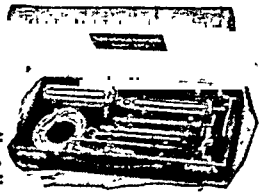
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(*Continued from page* 1059—*adv. xv*)

"The Foundation supplies the health supervision of the consolidated school for an indefinite period of years with the hope that in the years to come the community will see fit to continue most, if not all, of these activities, so that the work of the Foundation may be transferred to some new field to 'further carry on.'

"The Foundation has no thought of coming in as a competitor in the field of curative medicine. Its chief concern is in the prevention of illness and the maintenance of a high health standard.

"During the entire health supervision program the school boards, the children, parents, and the community are constantly reminded of the importance of the family physician. He is made a part of all programs and is paid for the work he does. The Foundation makes it a rule that no territory is entered without the consent, approval, and promised cooperation of the local medical society, and all matters of procedure are discussed with its executives."

The Michigan Tuberculosis Association: The work of the Michigan Tuberculosis Association was described by Dr. Werle, Secretary, who said:

"The leading social working agency is the medical profession. It antedates by centuries the specialist who calls himself a social worker. Anything we do in tuberculosis work today has behind it the inspiration and the vision of medical men. Many years ago it was made very clear to me in my training that the tuberculosis problem can never be solved by the social worker or the social working profession. It can be solved only by the medical men."

"When the tuberculosis movement was organized, it was organized by medical men, and it has always been under the complete control of medical men. There have been times when laymen have held high executive offices, but there have always been in the Michigan Tuberculosis Association a preponderance of medical opinion and medical men in the handling of its affairs. These medical men, who do work in this field, pointed out to us that the tuberculosis campaign divides itself easily and naturally into two heads. One is in immediate combat with the disease itself wherever it is apparent; and that, of course, is the medical side of the campaign. Then there is the other side, which deals with the disease where it has not yet manifested itself; or before it should manifest itself; in other words, education.

"In an educational campaign against tuberculosis, the tuberculosis association has two purposes in view. One is the education of

(*Continued on page* 1061—*adv. xvii*)

(*Continued from page* 1060—*adv. xvi*)

individual children in personal hygiene, with the ultimate goal of an understanding of community hygiene, arousing a demand for an understanding and appreciation of scientific medicine.

"The second point is the education of adults for an immedite effect in community consciousness in health. The immediate effect of that campaign with adults is the provision of money for public health purposes out of public funds."

State Sanatorium Commission: The subject "The Michigan State Sanatoria" was discussed by Dr. E. J. O'Brien of Detroit, who emphasized some of the scientific phases of tuberculosis.

The last speaker was Dr. J. Milton Robb, President of the State Medical Society, who summed up the discussion as follows:

"I do not know any of the problems that you have discussed. As far as I am personally concerned, I only have this one feeling, that the public hygiene gospel should be presented mostly by the men in medicine, providing it is going to stay as a permanent factor in the state. I see no way that a continuous service is going to be maintained. And I think that the feeling of those organizations who are coming in to do the work is that they are laying the foundation for the future, so that the man in medicine is going to be sufficiently trained, so that after they have withdrawn then he will continue; the medical men will continue, with what basic education they have obtained or gotten from this effort, to care for these people in the state. I cannot see, as far as I know, any objection to any of the efforts that I know of. I have this one feeling always, that whatever effort there is developed in the way of teaching, the post-graduate effort, rather than any effort to do otherwise, is found to run a state into a good deal of trouble. If you destroy the individualism of the people of the state, you have destroyed the state. And I know that those who are behind these funds must know better than we do that that is the basic principle from which they cannot deviate."

THE NEW ENGLAND MEDICAL CENTER

Tufts Medical School in Boston is building a group of buildings to be known as the New England Medical Center, for the special purpose of training physicians for practicing in the rural sections of New England. The February fifth number of the *New England Journal of Medicine*, describing the ceremonies of laying the cornerstone, says:

"The ceremony of laying the cornerstone for

(*Continued on page* 1062—*adv. xviii*)



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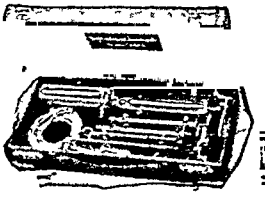
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MANAGEMENT OF OCULAR INJURIES*

By NELSON S WEINBERGER, M D, SAYRE, PA

From the Robert Packer Hospital, Guthrie Clinic.

IT IS with a deep sense of appreciation of the honor that I come here to address your society on the management of eye injuries I trust that what this paper has to offer may be of some interest and will invite free discussion Although this subject may appear rather academic for such a gathering as this is—nevertheless where so important a social and economic function as that of sight is in question—the utmost effort and most meticulous care should be exercised in the management of injury to the eyes Too often an apparently trivial injury develops into a serious state of affairs The preservation of the eye ball often taxes the skill of the ophthalmologist Attempted treatment by inexpert and untrained hands scarcely deserves the stamp of disapproval We have all seen the avoidable bad results and the economic losses therefrom The examination should be made with an open mind and should be routine It should be preceded or accompanied by a careful and painstaking history especially when injury may have been due to a foreign body, flying with sufficient momentum to penetrate the tissues A careful history and examination are often valuable from a legal as well as from a medical standpoint

The steps in examination of the patient for eye injuries are as follows

1 Face and skin for evidence of injury

2 The lid margins, the opening of the glands, the condition of the puncta followed by compression of sac to show presence or absence of chronic inflammation

3 Conjunctival sac—that is, the portion covering the under sides of the eyelids, the globe and in the fornices

4 Cornea—examine for smoothness of surface and clearness of evidence of past or/and present injury The condensing lens—binocular loupe—magnifying glass or/and slit lamp should be used

5 The anterior chamber should be inspected through the cornea by both daylight and artificial illumination The character of the aqueous, the integrity and activity of the iris, the lens, the inner contents and fundus should be examined Finger tension should be taken Fields should be tested

6 If there is no visible injury of the eye the muscle excursions should be tested In the diagnosis of foreign body the symptoms of pseudo-foreign body must be considered—such as Interstitial Keratitis—Acute Iritis—Pigment Deposits—Old Synechia, etc

Sensation of foreign body may be the only symptom of eye strain—Intra ocular studies are made through the ophthalmoscope, the slit lamp, and by roentgenograms

When injury of the cornea is suspected or one wishes to outline its extent—2% Fluorescin should be used Any recent break in the epithelium retains a bright green stain and should a foreign body be present its position is indicated by a dark spot A perforating injury shows no dark spot

Foreign Bodies—If a penetrating foreign body is suspected from examination or history a roentgenogram should be taken If positive —its position and size should be determined by some method of localization We use the Sweet method A careful history will sometimes lead to the discovery of an intra ocular foreign body in cases where examination of the eye revealed nothing Whenever there is any doubt x-ray should always be resorted to An innocent bystander is sometimes the victim X-ray seldom fails to show radiopaque objects In deep foreign bodies where objective examination, x rays and magnetic and sideroscope examination fail Manole uses the chemical reaction of the aqueous to metals as a means of diagnosis The aqueous is aspi-

* Read at the Annual Meeting of the Medical Society of the State of New York at Syracuse N Y June 2 1931

rated and a second extraction is tested with nitric acid for iron or with hydrosulphuric acid for brass and copper. There are numerous methods of localization. The procedures, modifications and contributions of Grundzinski, Gasteiger and Grauer, Speziole-Picaiche, Mcgrigor, MacKenzie Davidson, Stöffel, Patton, Sweet, Snook and Bowen, Holth, Pirie, Comberg, Liebermann, and Gifford only emphasize what Patton remarks—viz., "A variation of a millimeter may determine enucleation." The most generally used geometric method is that of Sweet and the later modification by Snook and Bowen.

Greene emphasizes the importance of extraction of an intra-ocular foreign body as early as possible. Early removal offers better chances of saving the eye—provided infection has not been introduced into the interior of the globe. Fortunately most of the foreign material is hot upon entering and this tends to reduce the risk of infection. There is a great variation in the technique for removal of magnetizable intra-ocular foreign bodies. The avenues of approach vary. Probably the wisest procedure is to manage each case on its individual merits—taking into consideration the point of entrance, structures penetrated, time in situ and location. Any foreign body should be removed with the least traumatism and in the most natural and easiest way. Selection of the so-called anterior or posterior route should be subversive to individual requirements. Most foreign bodies can be removed with the hand magnet such as the Sweet or the Parker. There are times however when the Haab magnet enjoys superior advantages and will remove a foreign body which the hand magnet has failed to extract. Time will not permit me to discuss the details of extraction, owing to the many dissimilar situations and the problems involved.

The removal of non-magnetizable foreign bodies is a different problem. Brass, copper, lead, glass, wood and hair present a far more difficult proposition to handle than the magnetizable foreign bodies.

Cross has devised a method and has successfully extracted lead shot from the vitreous. He uses a specially constructed forceps in conjunction with the double plane fluoroscope.

The eye is very intolerant to all foreign bodies. Polished glass is the least irritating and can be tolerated. Brass and copper are especially offensive. All penetrating metallic foreign bodies will cause low grade inflammation and eventually destroy function in case the eye is not destroyed early by acute infection. The only exception is where a small metallic body is imbedded in the sclera posteriorly. A cilium can be carried in the anterior chamber. So that, in all other instances where an eye harbors an irremovable intra-ocular foreign body safety demands enucleation for social and economic reasons. In every instance where enucleation is not performed for some reason (such as a piece of steel caught in the sclera with good vision or where enucleation is declined) the patient should be made acquainted with the possible dangers and be kept under supervision.

The question of panophthalmitis or plastic uveitis secondary to penetrating foreign body which has been removed comes to us. In this case the eye is destroyed for visual purposes —sometimes the process is very protracted and disheartening. An economic problem is involved. Should it become evident that an eye which has harbored a foreign body is thus affected, its immediate removal serves the indication for the best management of a problem which involves the economic phase regarding employer, employee and employee's family as well as the ultimate cosmetic result. Enucleation of an eye in the presence of infection is condemned by many operators. We would not recommend its general adoption nor should it be done unless one uses no local injections—employs effective antisepsis and does not implant a ball. We have yet to see any untoward results after having enucleated many such eyes and recovery has been just as good as under ordinary conditions. Convalescence is greatly shortened. Protracted illness and incapacity are avoided. Expense to society is lessened. Where enucleation is dangerous simple incision should be made.

Penetrating wounds and contusions—The dangers involved are prolapse of the iris or ciliary body, traumatic cataract, detachment, low grade plastic inflammation, panophthalmitis, secondary optic atrophy, sympathetic inflammation. Prolapses must not be allowed to remain. They should be either replaced or excised depending upon size and location. The iris or ciliary body must not be permanently included in the wound because of distortion of the pupil and the irritation from dragging and low grade infection of the uvea leading in some cases to sympathetic disease. The free edge of the iris must not remain caught near or at the limbus. Should the antero-lateral surface of the iris become glued to the posterior surface of the corneal wound no harm ensues. Traumatic cataract should be treated conservatively. Operation should be reserved for the demands of increasing tension and no more lens matter should be removed than can be easily done to relieve this exigency and conserve vitreous. Prolapse of vitreous and infection must be carefully avoided. Some of the dense secondary traumatic membranous

cataracts should be respected and attacked with trepidation. They are often tough and too much instrumentation may cause undue pull on the ciliary body—a thing to be zealously avoided for a period of a year to two since such irritation might produce low grade plastic inflammation and sympathetic trouble. Traumatic cataract with intact capsule should be needled at the opportune time under thirty, or extracted after thirty.

Dislocation of the lens into the anterior chamber always causes glaucoma and the lens must be removed. In rupture of the eyeball which usually occurs at the angle of the anterior chamber the lens may be forced out under the conjunctiva. A superficial mattress suture should be inserted in the cornea and sclera and the conjunctiva sutured separately. Injuries of this nature are always serious.

Berens and Losey remind us of the remarkable amount of vitreous which may be lost with retention of useful vision. Enucleation in this type of injury (rupture) should not be considered until after a most earnest attempt at saving vision has proved useless and a blind, soft and dangerous eyeball is inevitable. Needless to say a useless and dangerous eyeball should be removed. In all penetrating wounds of the eyeball, tetanus antitoxin should be injected—especially if the surrounding soft parts are also injured. The protein will also serve to produce non-specific resistance to infection. Sub-conjunctival hemorrhage or hemorrhage into the anterior chamber or both may occur. Paracentesis of the anterior chamber is seldom necessary to relieve tension. Intraocular hemorrhage usually offers a fair prognosis if not too extensive and so situated as to cause detachment of the retina.

Extensive breaks in the cornea are best covered by conjunctival flaps. Some of the lesser effects of injury are keratitis, rupture of Descemet's membrane, rupture of the iris sphincter, traumatic dilatation of the pupil, iridodialysis and weakness of accommodation. Partial dislocation of the lens sometimes occurs. Rupture of the retina and choroid demands rest.

Detachment of the retina need not by any means follow when healthy vitreous is lost, either anteriorly or through a wound in the sclera. Practically all writers agree that Gonin's method of treating retinal detachment constitutes a great step in advance. His method of thermo puncture is most successful in recent cases and should never be delayed for other measures which are generally useless. Arruga obtained 50% cures by Gonin's method. In 300 cases Gonin had 12 cases of intra-ocular hemorrhage complicating, six or seven days after operation. Cases over three months duration are unfavorable. While realizing the untoward results and complications reported in some cases yet retinal detachment presents a desperate situation as to sight and requires prompt and efficient measures. Gonin's method was uniformly approved at the Congresses at Amsterdam and at Heidelberg, the percentage of cures by this method being much greater than by any other.

One cannot discuss the management of eye injuries without making some observation on sympathetic inflammation. We now know that this disease is not as frequent as was formerly supposed. Theobald's statistics show that the greatest frequency of sympathetic ophthalmia cases occurs during the first decade. The statistics show that sympathetic ophthalmia is acutally much less frequent than the enucleations done for it or for fear of it. However these enucleations may be justified since we have no means of knowing whether sympathetic ophthalmia or a less harmful infiltrating inflammation will ensue. The best "Cure" for the disease is its prevention. Enucleation prevents it excepting as shown by a review of both domestic and foreign literature made in 1921 by the author. He gathered the reported details of nine cases occurring after enucleation and added one of his own. These were cases reported by such men as Nettleship, Nagel, Müller, Stephenson, Colsmann, Pagenstecher, Genth, Schmidt and McHardy. Questionable ones were excluded. Villard and others have added several since then. In view of this we can say that enucleation practically always prevents sympathetic disease but does not cure it. The exciting eye may ultimately be the better eye. Enucleate for prevention when a potentially exciting eye is useless or will become so. The vision of the injured or exciting eye must be taken into consideration. We are not so quick to enucleate as formerly—yet we must not be too conservative. It is far easier to enucleate than to save some of these eyeballs. We can show real skill by saving useful vision in a badly injured eye. The strictest antisepsis must be exercised.

Foreign bodies of the cornea—Removal of a foreign body from the cornea is not without danger. Infection and unnecessary traumatism should be guarded against. The [illegible] pointed spud is ideal and it should be augmented by the use of a loupe or magnifying glasses under good illumination. The brown ring of iron oxide stain must be removed but it should be done with great care not to produce more loss of corneal substance than is absolutely necessary. The reason for this is the danger of [illegible] ulceration of sharp [illegible]

cornea may cause them to penetrate into the anterior chamber. The importance of the care of foreign bodies of the cornea is regarded too lightly. This is attested by the disasters of preventable corneal ulcers we all see only too often. Corneal injuries from coal, stone, wood, cereal grains, fodder leaves, awns of grains, etc., are dangerous from their inception. Although injuries from metallic foreign bodies seldom develop into serious ulceration—those from the substances just enumerated are very prone to infection and are potential serpiginous ulcers unless immediately treated by antiseptics. The importance of an unclean lacrymal sac as an agent or factor for infection need scarcely be emphasized. An unbandaged eye is cleaner than a bandaged one. Glass splinters usually adhere flatly to the conjunctiva. Tiny objects such as beetle wings, soot, plant particles, etc. usually lodge either in the lower fornix or in the ring-shaped groove over the palpebral margin of the upper lid in the conjunctiva tarsi. Caterpillar hairs have hooked ends and migrate to the cornea or iris. They may cause conjunctivitis or nodule formation resembling tubercle. These have to be removed with a corneal microscope. The depth of a glass splinter can be determined only by the use of the corneal microscope. Traumatic conjunctivitis and erosions of the cornea from burns resulting in ulcer and adhesions may terminate in symblepharon. This should be prevented by the use of oils or ointments and manipulation.

Just a few words on the subject of protein therapy as a means of prevention and treatment of infections. It is good practice to administer tetanus antitoxin in eye injuries especially when the soft parts surrounding the eyeball are involved. Specific therapy is obtained from the antitoxin and at the same time non-specific treatment from the protein. The value of this prophylaxsis was well shown in the late war and it was probably a great factor in the remarkable scarcity of sympathetic disease as compared with the great number and the serious nature of eye injuries. Foreign proteins seem distinctly effective against the staphylococcus and the pneumococcus. There are numerous forms of protein used to increase resistance. Rather than name them all it is better to briefly discuss only a few. Milk has enjoyed wide popularity but it is variable in its potential and toxic action. Its preparation is so delicate in order to be at all effective, that it is probably more often inert and of no therapeutic value whatever. Aolan gives a noticeable reaction and is thought by many to be superior for this reason. Horse serum has many friends because it is a more definite form of foreign protein. As pointed out by Key after thorough experimentation—there seem to be superior advantages in the employment of diphtheria antitoxin. He feels there is some added virtue in the non-specific diphtheric elements (colloids ?) in the serum. Our experience substantiates the claim for diphtheria antitoxin. We use 5,000 units as the adult dose. Contraindications to protein treatment such as asthma, hayfever and also in case of the use of diphtheria antitoxin—previous diphtheria should be kept in mind. Naturally no one relies upon protein alone to prevent or combat infection. The importance of caring for endogenous foci of infection and of blood and urine studies must not be overlooked in combating post-traumatic ocular inflammations and infections. Time does not permit me to go into the details of local therapy nor has space allowed the consideration of injuries other than those to the eyeball itself.

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THE ROLE OF THE TONSILS AND THE NASAL ACCESSORY SINUSES IN NEPHRITIS*

By ARTHUR PALMER, M.D., NEW YORK, N. Y.

MENTION of focal infection at once focuses thought on the teeth, tonsils, sinuses and gastro-intestinal tract. Foci elsewhere are less common; indeed the estimate that 75% of all primary foci are to be found above the larynx appears justified if not even conservative.

Acute tonsillitis may precipitate an attack of acute glomerular nephritis. Following exposure and exhaustion, an adult male suffered an attack of acute follicular tonsillitis. In spite of a fever of 103° he drove his car 50 miles to his home. Within 48 hours he showed evidence of acute nephritis with edema of the eyelids and lower extremities. The urine contained albumin, pus cells and granular casts. Clearing up of these signs followed the subsiding of the tonsillitis. Tonsillectomy was performed several months later and no similar attack has occurred during a period of ten years.

Glogau (1) reports the following case: After being operated on for the removal of nasal polyps and the partial resection of a turbinate, a patient carelessly exposed himself to inclement weather and developed an abscess in the left ear. Culture of the pus showed the presence of streptococcus capsulatis. Eight days later a severe follicular tonsillitis developed and the same organism was present in the throat. Five days from this time marked the onset of headache and extreme lassitude, general anasarca and pain in the right thorax. Examination showed the presence of marked edema of the face and legs, with pitting on pressure and the presence of a serous fluid in the right pleural cavity, up to the level of the 6th intercostal space. The urinary examination showed albumin; specific gravity 1022; blood; granular and hyaline casts, with diminished out-put. The tonsillitis disappeared in 10 days, the acute purulent otitis media in 3 weeks and the nephritis in 6 weeks.

Dean (2) states that the relation between glomerulo-nephritis and tonsillitis is startling. Blood colored urine, seen before the removal of tonsils, is often clear as soon as 48 hours after removal. The tonsils are by far the most common harbor of hemolytic streptococci. Rarely, after the removal of faucial and pharyngeal tonsils, has the lingual tonsil to be removed. Occasionally the organism is in a sinus or a discharging ear. Then a satisfactory result can only be secured by the eradication of the infectious process in the sinus or ear.

After a thorough study of 26 cases of nephritis in children, Boyd (3) classifies the source of infection as follows:

	No. of cases	Per cent
Tonsillitis	11	42.3
Scarlet Fever	4	15.4
Otitis Media	3	11.6
Nasopharyngitis	3	11.6
Mercuric chloride	1	3.9
Umbilical infection	1	3.9
Unknown	3	11.6

The usual history of these cases was that of an acute upper respiratory tract infection or a tonsil infection followed in a day or two by partial suppression of urine and hematuria. Slight edema of the eyelids and lower extremities was common. Increase in blood pressure was not marked except in 2 cases. Hematuria lasted from 2 to 4 weeks and tended to recur on the administration of sodium chloride. The average stay in hospital was 2 months. There was fatal termination in 7 of these cases. The series was grouped as follows:

23 Acute glomerular nephritis.
2 Chronic glomerular nephritis.
1 Nephrosis.

The presence of tonsillitis was frequently revealed only by examination of the tonsils. Blood cultures were made in 5 cases and 3 of these showed hemolytic streptococcus. These cases were carefully checked by repeated laboratory examinations of the urine, blood and kidney function. Eye ground examination was negative.

Billings (4) reporting on a series of cases of nephritis studied at the Presbyterian Hospital in Chicago, stated that in more than thirty cases under observation the original focus of infection appeared to be in the tonsillar tissue. He cited numerous case histories illustrating improvement or cure following tonsillectomy. Most of these cases showed blood, albumin and casts.

Bumpus and Meisser (5) pointed out that the increasing evidence that bacteria are carried by the blood to the kidneys and excreted, as demonstrated by the presence of tubercle bacilli in the urine of patients suffering from pulmonary T. B. but with no renal lesions, and the well-known fact that typhoid patients excrete typhoid bacilli in their urine, indicate that renal infection may arise from the bloodstream.

The fact that the tonsils are not enlarged and that pus is not expressed from them does not exclude them as possible foci and it is

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their custom to have tonsillectomies performed in all cases in which a urinary infection may reasonably be believed to be of focal origin. They stated that since the adoption of this procedure a surprisingly large number of apparently negative tonsils have been found to hide deep seated virulent infections. On experimenting with rabbits the authors found that the infected material from diseased tonsils and teeth, when properly cultured and injected into the animals, produced definite lesions in the kidneys as well as other organs and the bacteria injected were removed in pure culture from the kidney lesions. A summary of the results showed that lesions occurred in the kidneys in 63 of 82 rabbits injected. They concluded that pyelonephritis may often be due to focal infections harboring streptococcus which have a selective affinity for the urinary tract. Immediately following the extraction of the suspected foci, acute exacerbations of urinary symptoms occurred accompanied by a marked rise in temperature. Such reactions were regarded as clinical manifestations of the specific nature of the bacteria released from the removed focus and such an increase in the severity of the disease was considered favorable and an indication that the right focus had been eliminated.

Generally speaking the study of patients at Cornell, with infection of the tonsils and associated nephritis, corroborates the findings described above: 523 of 989 consecutive patients, who had had tonsillectomies performed at least 6 months previously, responded to a questionnaire relative to results of operation. Of 19 patients suffering from nephritis 11 or 58% were improved or free from symptoms relative to their kidney condition. Not many of the severe or acute cases of nephritis are seen in the Nose and Throat Clinic because such patients require hospitalization.

Mr. A. H. Age 21. Gave a history of passing bloody urine for one month. Medical examination showed tenderness over left kidney. Catherization of ureters showed blood coming from both sides. X-ray of kidneys negative as to size, shape and position. No calculi found. Consensus of opinion was that patient had acute nephritis which was subsiding. Urine examination showed specific gravity 1:015; pus and albumin. Wasserman negative. Several months later patient complained of sore throat and at this time left tonsil was found to be enlarged and diseased. Blood pressure 150/100. About 5 months later tonsillectomy was performed and one year later patient reported having shown no blood in urine and said he had gained weight. Last examination was made in December 1930, 6 years after original visit to Clinic. No complaints were reported and the urine was negative.

Mr. A. B. Age 35. Admitted to Medical Clinic September 3, 1921, complaining of kidney trouble of one year duration, following an attack of influenza. There developed edema of the face and legs accompanied by fever. Patient was in bed from November 1929 to January 1930 and was then treated at the U. S. Naval Hospital. Urinary examination on admission showed the presence of albumin, hyaline casts, occasional red blood cells, few white blood cells. Wassermann negative. Examination in the Nose and Throat Clinic showed the presence of a chronic tonsillitis, pharyngitis sicca, purulent rhinitis. The tonsils were considered the chief focus of infection and a tonsillectomy was performed on January 12, 1930. On August 12, 1930 the patient stated that he felt well and had very little swelling of the legs and ankles except when on his feet for a considerable period.

D. S. Girl 5 years of age. Suffering from secondary anemia, pyelitis and chronic tonsillitis was referred from the Pediatric Clinic to the Department of Laryngology on June 2, 1924. Examination showed this child to be a mouth breather, appearing anemic and below par generally. During the previous 6 months 5 or 6 attacks of vomiting had occurred without an apparent cause. These attacks lasted one day and were accompanied by slight fever. Burning sensation on urination had occurred at intervals for 8 months. The child suffered from headaches. General glandular enlargement was present. On June 20, 1924 a tonsillectomy was performed under general anesthesia and the patient made an uneventful recovery. On January 12, 1925 the mother reported that the child had been free from sore throats and kidney trouble but still suffered from head colds. She was eating and sleeping well; was active and had gained weight. May 13, 1925 this child had continued to improve except for frequency in urination. A few white blood cells were present in the urine. In August 1928 there was some recurrence of the vomiting attacks with irritation of the external genitalia. Vaginal smear showed the presence of pus and gram positive diplococci.

E. G. Adult. Admitted to the Medical Clinic September 12, 1922. High blood pressure for 4 years. Urine showed a faint trace of albumin; no sugar; blood pressure 176/110. Occipital headache in the morning for past 5 months. Chronic rhinitis 6 months. Hoarseness. No pregnancies. Venereal disease denied. Shortness of breath for past year. Aortic second sound accentuated.

Diagnosis: Essential hypertension; pyorrhea alveolaris. Referred to Nose and Throat Clinic for opinion and treatment. Examination

here showed chronic hypertrophic tonsillitis; hypertrophic pharyngitis; pyorrhea. Tonsillectomy was advised and operation performed under local anesthesia November 3, 1922.

Nov. 27, 1922 blood pressure 172/106
Dec. 7, 1922 160/110
Jan. 25, 1922 194/128

Followup January 12, 1925 patient stated that she had less head colds and hoarseness but that kidney trouble appeared to be about the same. Tonsillectomy apparently had no permanent effect on the kidney trouble.

Followup January 25, 1925 patient reported less head colds and hoarseness. Urine clearer. No dyspnea. No swelling of the ankles, hands or face. On diet for obesity.

We now come to quite another chapter where the sinuses are concerned. These structures are above, behind, beside, all but under our very nose, yet how often they baffle us! I wonder if the internist knows how he flatters our curative powers when he nonchalantly remarks "here is a good case of sinusitis for you. Clean up these sinuses and then send the patient back to me." The patient is cleaned up and cleaned out, perhaps of everything but his sinusitis, until among the laity the slogan seems to be "once a sinus, always a sinus." Certainly the sinuses are not above reproach in respect to many things, nephritis included. Yet a search of the literature reveals the fact that articles on the sinuses in relation to nephritis are conspicuous by their absence. Only occasionally in the course of articles on allied subjects is reference made to this relationship. Too long have sinuses been a dark continent where the physician feared to tread or where he carried out experimental treatment with the feeling that he was walking on uncertain ground. A considerable mass of data regarding them has been accumulated but not well correlated as yet. Much about sinuses still demands explanation. For example: (1) The disproportion between symptoms and signs. Many people suffer intensely from sinus infection while clinically little pathology is found, or on the contrary a quantity of pus may be present in the nose and nasal accessory sinuses and the patient complain of little except discharge. (2) Rapid relief of eye conditions, as neuroretinitis with central scotoma and sudden impairment or loss of vision, may follow the opening of the ethmoid-sphenoid labyrinth when little demonstrable pus or pathology is present. (3) Not infrequently also, curetting of diseased tissue in chronic sinusitis fails to cure the condition, in fact may aggravate it. (4) The role of allergies, diet, glandular imbalance and bacterial invasion as etiological factors in sinusitis. As one observer, Proetz (6) so well expressed the situation "what we need is less action and more thought. The mere mention of red swollen membranes is a red rag to some of us. Swollen ankles get only passing attention. Pus encountered in the nose is a sign that nature is at work successfully expelling noxious agents from our confines and while I do not view it as a signal for jubilation I see no occasion for hysteria in regard to it."

Many of the above remarks may seem to be aside from the question, "The Role of the Sinus in Nephritis" but they may explain to a degree some of the diffculties in the way of establishing a correct relationship.

Theoretically at least the sinus may be a focus in respect to a kidney lesion due to some focal infection, just as is the tonsil and associated lymphoid tissue in the pharynx.

Byfield (7) states "In our long series of cases we found certain disorders brought into more or less close association with sinus infection. Chief among these were chronic cough and nephritis, (and there is some evidence to suggest that the chronicity of the renal process may be due to sinus infection) pyelitis and diphtheria.

Dean (8) cites two cases where the elimination of sinus disease seemed to be responsible for the elimination of pyelitis. Certainly the rhinologist urgently needs the cooperation of the internist if the solution to many of these problems is to be found. The internist, after all, is the commanding officer, the specialist, but one of his aides.

An interesting case from Cornell Clinic follows: An adult male was admitted to the Eye Clinic November 1, 1930, with a history of sudden loss of vision for past 2 weeks.

Diagnosis: Acute neuro-retinitis. Ophthalmoscopic examination revealed swelling and edema of the nerve heads, retinal hemorrhage and exudate, sclerosis of the retinal vessels and increase in blind spots. X-ray of the sinuses, Wassermann examination and general medical examination were ordered. The case was referred to the Nose and Throat Department for further examination of the sinuses as a possible etiological factor. On the same day examination in the Nose and Throat Clinic showed the presence of a deflection of the nasal septum and the presence of sinusitis. X-ray of the sinuses showed a clouding of the antra, sphenoids and frontals, especially the right frontal. Wassermann negative. Coagulation time 5 minutes. In consultation with the Eye Department an immediate drainage of the sinuses was considered advisable. Contrary to the usual custom this operation was performed before any general medical examination had been made. A submucous resection

of the septum was done as a preliminary step to the drainage of the sinuses. In the midst of the operation on the right ethmoid cells a profuse hemorrhage occurred necessitating packing the nose and discontinuing further operative procedure. The unusual amount of bleeding suggested to the operator that high blood pressure might be a factor. On April 3rd, the following day, the packing was removed and hemorrhage from the right side followed. Systolic blood pressure was 190. Medical consultation was arranged and the internist reported that the patient was unable to distinguish faces but could see a person. The patient was muscular, robust but appeared anemic and weak because of loss of blood. The heart was slightly enlarged to the left, sounds were loud and ringing, pulse rate normal, under tension.

Diagnosis: Chronic nephritis; hypertension. Patient was transferred to the New York Hospital for further care. The report at the New York Hospital showed red blood cells 1, 730,000; hemoglobin 32%; white blood cells 10,500; polys 87%. Repeated urine examinations were made which showed albumin, occasional white blood cells. Wassermann was negative. Urea nitrogen 110 milligrams. Uric acid 20 milligrams. Urine reduced, 312 c.c. passed in 4 hours after digestion of 1500 c.c. Red test too light to read. Examination of the eye grounds showed evidences of old and fresh hemorrhage, outlines indistinct. Blood pressure ranging from 170 to 180 systolic; 102 to 130 diastolic. Patient ran a febrile course and was in bed two weeks, around the ward for two weeks and then allowed to go home with instructions to return to the out-patient department.

In the words of Pawlow, "It is only when the full etiology of disease is known that the medicine of our day can become the medicine of the future. That is to say, hygiene in its widest sense."

Conclusions

(1) Experimental and clinical evidence establishes the fact that the faucial tonsils are a definite focus in certain cases of infectious nephritis.

(2) The sinuses are a probable focus in certain cases.

(3) Wholehearted cooperation of the internist and the laryngologist is essential to the best results in handling cases of nephritis where a focus of infection is considered the *etiological factor.*

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HERPES ZOSTER AND VARICELLA*

By EUGENE F. TRAUB, M.D., AND JESSE A. TOLMACH, M.D., NEW YORK, N. Y.

In recent years much has been written concerning the relation of Herpes Zoster to Varicella. Since Bokay,[1] in 1888, first called attention to the association of the two diseases, numerous similar reports have been made. Varicella and Herpes Zoster are both vesicular eruptions in which the individual lesions are frequently clinically and histologically similar. This fact was recognized by Darier.[2] According to Delmas,[3] the clinical test between generalized Zoster and Varicella is the radicular topography of the former, and only in the absence of this radicular topography can Varicella be diagnosed. This is a rather extreme view and we do not believe that such difficulty in diagnosis exists except in unusual cases. To claim a relationship between the two diseases, two factors must be proved. In the first place, the diseases considered separately and also in association with each other must show similar variations in incidence. In the second place, a common etiologic agent must be demonstrated. We shall attempt to show that neither of these points is satisfactorily proved. Two cases in which both diseases existed in the same patient were encountered by us and are being reported here.

Case Reports

Case I.—P. L. M., male, aged 56, appeared at the New York Skin and Cancer Hospital on June 25, 1930, complaining of a generalized rash. The

* Read before the Clinical Society of the Stuyvesant Square Hospital, April 24, 1931.

patient stated that, to the best of his knowledge, there had been no exposure to chicken-pox either at home or at his place of business. He had never had chicken-pox, and the only previous illness he had suffered from was the "flu."

Present Illness: Seven days before his admission to the hospital, he noted the appearance of a "blister-like" eruption on the right side of his face, extending up to his scalp. This eruption gradually became more marked, and one day previous to this examination, a general eruption made its appearance on the body.

Examination: The eruption of the right side of the face and forehead was made up of grouped vesicular lesions on an erythematous base. There was a marked necrosis of the lesions together with a swelling of the entire right side of the face. Scattered over the rest of the body were numerous small vesicular lesions, some of which were umbilicated and some hemorrhagic. The temperature of the patient was 99.4 F.



FIGURE 1
Profile showing Herpes Zoster of the right side of the forehead of the patient referred to in Case I.

Case II.—J. H., male, aged 56, was seen by Dr. Traub in his private practice on October 10, 1928.

Past History: The patient stated that he had never had chicken-pox and denied any exposure to it. His past history was otherwise irrelevant.

Present History: Sometime during the first week of October, the lymph glands behind the left ear and at the back of the neck became swollen. Massage and "opening" medicine failed to relieve the swelling which, although not very painful, gradually became more marked. The patient claimed he felt a tingling sensation in his left ear and in his left arm. On October 7th, the patient noticed a blister on the back of the left ear and on the following day, a bright red spot on the left shoulder.

Examination: When seen by Dr. Traub on October 10th, a diagnosis of Herpes Zoster was made. The patient returned to his home and during that night he complained of "feverishness" and profuse perspiration. On the following morning, the face and body were covered with a vesicular eruption typical of Varicella.

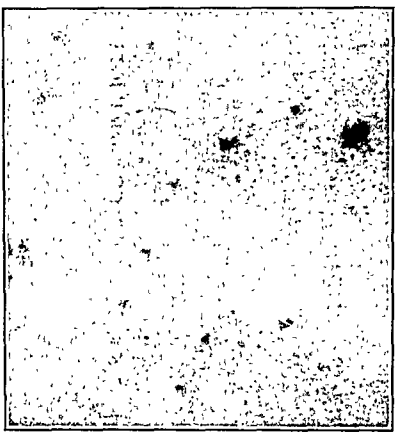


FIGURE 2
Same patient as Figure 1 *showing varicella of the trunk.*

In both of these cases, a typical attack of Herpes Zoster was followed, in the same patient, and within four to six days, by chicken-pox.

REVIEW OF THE LITERATURE

Instances of the coincidental appearance of Herpes Zoster and Varicella were reported by Le Feuvre[4] in 1917 and by McEwen[5] in 1920. The former encountered seven cases in his own practice in four years. The latter collected thirteen cases in which the two diseases were associated. Examples of concurrent Zoster and Varicella were reported in more or less detail by Aviragnet, Huber and Dayras,[6] Gautier and Peyrot,[7] Roxburgh and Martin,[8] and Seymour.[9]

According to Roxburgh and Martin, cases of concurrent Varicella and Herpes Zoster may be regarded as due to dissemination of a virus which, in the first instance, attacks certain posterior nerve roots only, the virus being that which causes Varicella. Bokay,[10] too, advanced the theory that under certain unknown conditions, the infective agent of Varicella can produce a local Zosteriform eruption instead of a generalized exanthem; the Zoster is thus an expression of Varicella, and contagion is readily passed to others. This may explain cases such as that reported by Dainville and Reyn[11] in which two weeks follow-

ing the occurrence of Herpes Zoster in the mother of a nursing child, the latter contracted chicken-pox. The child was confined, at that time, to a creche and she was immediately isolated. Two days later, 15 other cases appeared and no transmittors other than the mother with the Zoster could be found.

J. Shelmire and B. Shelmire[12] described a case in which, during the course of Herpes Zoster of the right 5th nerve distribution, a patient developed a generalized, extensive vesicular exanthem, closely resembling Varicella. Singularities of the Zoster eruption in this case were the involvement of the right half of the tongue, buccal mucous membrane of the right cheek and motor paralysis of the right half of the face, infranuclear in type. The generalized eruption following the Zoster was extensive, involving the glaborous skin of almost the entire body, the oral mucous membrane not already the seat or Zoster lesions, and the scalp. Fourteen days after the appearance of the Zoster in the father, a daughter who had not been previously exposed to chicken-pox, developed a clinically typical Varicella eruption with lesions of the scalp and mouth. The disease could not be transmitted to rabbits by inoculation of vesicular fluid into their scarified corneas.

The negative results observed after the inoculation of the Zoster material into the scarified corneas of rabbits in the above case, are in accordance with similar negative findings of Cole and Kuttner.[13] Many more cases of the association of the two diseases are on record, and a report of all of these would only be superfluous.

Interesting experiments conducted by Kundratitz[14] seem to point to a closely related or identical virus in Zoster and Varicella. He produced a varicellous eruption in 17 out of 28 children whom he gave intra-cutaneous inoculations of fluid from typical Zoster lesions. None of these children had ever previously had chicken-pox or Zoster. Lipschütz[15] found in several of these provoked varicella-like eruptions, nuclear inclusions described by him as characteristic of virus disease. Glaubersohn and Willfand[16] reported findings similar to those of Kundratitz. Kundratitz and Lipschütz[17] also claimed that injections of convalescent Herpes Zoster serum will protect exposed children against Varicella.

On the other hand, Lauda and Stöhr[18] inoculated 54 children with material from 17 cases of Zoster, and in none of them did they observe a local reaction at the site of inoculation. These workers were unable to demonstrate that convalescent Zoster serum protects against Varicella and concluded from their work that the majority of cases of Zoster are not caused by virus of chicken-pox.

Complement fixation tests done by A. Netter,[19] Netter and Urbain,[20] de Lange[21] and others, seem to indicate that the virus in both these conditions is frequently identical. These observations were not, however, confirmed by Lauda and Silberstein.[22] Results of experiments conducted by Eldridge and Rivers[23] on monkeys, indicated that the etiological agents concerned with these two diseases were not identical.

Very interesting and pertinent figures were gathered by Rivers and Eldridge who found that in New York City during the years 1914 to 1926, 95,994 cases of chicken-pox were reported. At the Bellevue Clinic, 425 cases of Herpes Zoster were observed in the same period of 13 years, and 159 cases were seen at Vanderbilt Clinic during the years 1922-1926. Examination of the tables and figures dealing with the incidence of Varicella and Zoster reveals the fact that a remarkably constant seasonal variation occurs in the number of chicken-pox cases reported, while such variation in the prevalence of Zoster is not very obvious. Here we might note the report of Cantor[24] who stated that on Christmas Island, Straits Settlement, chicken-pox is unknown, while the usual amount of Herpes Zoster is observed.

Conclusions

Two cases are reported in which Herpes Zoster is associated in the same patient with Varicella. The mass of reports and the experimental work to date do not prove beyond question any relationship between the diseases. Some of the cases may simply be pure coincidences, just as any other two or more diseases may occur in one patient at the same time. Another point is that it is quite possible that the same agent that causes Varicella may in some cases produce local manifestations similar to Zoster. Highman[25] stated that true Herpes Zoster has no connection with any other disease. The Zoster may be due to some micro-organism that causes Varicella. In other words, they may be different clinical expressions of the same agency; but Zoster-like eruptions are not true Zoster. Further investigations may prove a relationship between the two diseases, but at the present time, there is not sufficient evidence to prove that the association of true Herpes Zoster and Varicella is other than a chance coincidence.

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THE SO-CALLED ACUTE ABDOMEN FROM THE STANDPOINT OF THE GENERAL PRACTITIONER AND THE INTERNIST*

By CLAYTON W. GREENE, M.D., BUFFALO, N. Y.

A FRIEND of mine, as a McGill medical student in 1883, watched Osler autopsy a case of appendicitis and Osler remarked—"If this man had been operated upon he would have got well." That was years before McBurney's classic paper. Similar observations had been made by others. Extraordinary progress in our knowledge of the surgical lesions in the abdomen, and in our capacity to treat them, has been made since that time. Yet, today, the literature abounds in references to the appalling present death-rate in appendicitis. Something is wrong with our present collective handling of the problem. Other acute abdominal lesions as well help to swell the mortality. Other and wiser heads may clarify the situation for us, but I shall attempt to discuss only one phase—the part played by the family physician. Outstanding and clearly cut signs and symptoms make the diagnosis of acute abdominal lesions comparatively easy in many cases. Others, however, tax the keenest minds, even when supported by all the diagnostic aids available to modern medicine. Fortunately, these "mystery" cases are not frequent.

It is not desirable at this time to attempt to discuss all, or even many, of the lesions producing abdominal emergencies. The textbooks of today cover the ground thoroughly. But it may be well to examine a bit into the general problem and to discuss general principles which should underlie our conduct. Such knowledge as we possess perhaps has not been used at all times to the best advantage of patient and physician.

It is probable that more than 90 per cent of the cases of the so-called acute abdomen are seen first by the medical men. Consequently, it were better that a symposium on the acute abdomen be given in a medical section rather than a surgical one. Most of you will agree that the majority, but by no means all, of the mistakes made in the acute abdomen are made by the man first on the case—the medical man. It has long been a belief of mine that the best possible training for a surgeon is to be a medical man first for at least a year or two. Likewise, it would be a great asset to a family physician to have some experience in surgery under well-trained teachers, in order to have a first-hand experience in surgical diagnosis.

Upon the physician who is the first to see the acute abdominal case rests the greatest responsibility. He must recognize the urgency of the situation and determine the proper course to pursue. If he is lax or dilatory the patient may experience unnecessary weeks of suffering, irreparable damage to his physique, and may even lose his life. When the doctor is called, it is evident that an emergency is at hand. He is confronted at once with two problems. First—is the lesion causing this emergency located within the abdomen? Second—if it is in the abdomen, is surgical interference warranted? His decision should be prompt, but it should be based only upon careful investigation. Correct treatment can rest only upon correct diag-

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nosis. Snap diagnosis may be impressive but it is unsafe.

A short history of the present attack is essential. Pain is usually an outstanding feature and its character, location and radiation should all be noted. Its association with bodily functions is important. Inquiry should be made as to vomiting, and particularly its relationship to pain. In many cases vomiting does not occur but is replaced by nausea or anorexia. The anorexia is produced by the same cause as the vomiting and is just as important in making a diagnosis. Note should be taken also of other disease present—pneumonia, typhoid fever, cardiac disease.

The physician should proceed promptly with the examination of the patient. The first glance may suffice. The anxious, perspiring face may point to the shock of perforation or pancreatitis; or a death-like pallor with air hunger may be the evidence of a ruptured ectopic gestation. Examination of the abdomen should come first. Distension is rare at the onset but may appear soon afterward. If present, it may indicate intestinal obstruction, peritonitis, or hemorrhagic or other free fluid in the abdominal cavity. A scaphoid, rigid abdomen occurs almost alone in perforation of a peptic ulcer. Rigidity of the muscular wall is present in most emergencies. It is marked in perforation, but may be slight in hemorrhage and absent in the early stages of appendicitis. The most important physical sign is tenderness on pressure, which tenderness is increased as the pressure is increased. It is the one blue chip, the outstanding sign of all.

Temperature and pulse rate are often of little value. It should be remembered that many acute conditions are afebrile until late or throughout their course, while occasionally—particularly in children—a temperature of 103° F. or more may be found early in appendicitis. It is unwise and sometimes fatal to wait for the appearance of fever in a case of suspected abdominal lesion. Likewise, marked changes in the pulse may be of assistance in diagnosis, but a so-called normal pulse should not alter one's judgment of a serious condition. The full, low tension pulse may be considered characteristic of peritonitis.

Lesions outside the abdomen which may simulate the acute abdomen are chiefly in two groups—pulmonary and cardiac. Pain of a diaphragmatic pleurisy or of a pneumonia near the diaphragm may be referred to the abdomen, and muscular rigidity may be present. There is no tenderness, however, unless it be close to the diaphragm, and usually there are distinctive changes in the rate and character of the respirations and physical signs in the chest. In pericarditis much the same picture may be present, except that respiratory changes are usually slight. In coronary occlusion pain referred to the abdomen may be very severe, rigidity and distension may be present, but there is no tenderness. The accompanying restlessness forms a contrast to the enforced quiet of peritonitis. Other signs of pulmonary or of cardiac disease may be elicited by careful examination. Pain in the abdomen with nausea and vomiting may be evidence of a gastric crisis in tabes dorsalis. Careful examination should establish its identity without much trouble.

Another group of cases may be classed as acute abdominal, namely—lesions of the urinary tract. Pain and rigidity may be present and even slight tenderness along a ureter, if it be involved. Tenderness usually is found over one or other kidney, pain is referred to the groin, there is frequently a tender spot at the symphysis on the corresponding side, and nearly always there are significant urinary findings.

In the stage of reaction from shock, the appearance may be quite deceptive. Color may be good, respiration normal, pain lessened. It is here that many mistakes are made. The semblance of comfort presented by his patient misleads the physician into believing that he cannot be very ill.

With his prompt recognition of the fact that an acute abdominal lesion is present, excluding the renal ones, there is but one course for the physician to pursue. He must at once have his patient treated surgically by a competent surgeon. In all but a few cases this means early operation. If he is in doubt as to the exact nature of the intra-abdominal lesion, the physician had best postpone differential diagnosis until he can attempt it in company with the surgeon. Delay in obtaining surgical care is absolutely inexcusable.

Many cases are not so outspoken as has been indicated. Here again many lives are lost while the physician awaits more definite signs. Our commonest abdominal lesion, appendicitis, often is ushered in with mild symptoms and very few signs. The physician who suspects that his patient may have appendicitis should see him again in not more than six hours. To do otherwise is gross neglect. Meanwhile that patient should be kept as quiet as possible, with absolutely no cathartic or enema and no opiate. Opium relieves pain and gives the patient comfort, but it masks symptoms. The false sense of security it affords both patient and physician may be but the precursor of tragic progress of the lesion and subsequent death. A leucocyte count should be done and the urine examined as soon as possible. There can be little excuse for

neglecting these two, and there is none for the physician who plans his next visit on the morrow As soon as the diagnosis of appendicitis is made, operation should be done I am skeptical of those who claim they can tell the progress of the changes in appendicitis by signs and tests I beg to differ also with those who deny the value of leucocyte counts Often they are the one aid to differentiate indefinite cases A small, inexpensive but efficient microscope can be carried in the bag or in the coat pocket, and a leucocyte count with at least a chamber differential count can be done in ten minutes A rectal examination should always be done Often it gives no added information or even none at all, but on occasion it may be of service in saving a life In all, but particularly in children, an inspection of the nose and throat should not be omitted

It is cause for sadness that the rising mortality in the acute abdomen is due not alone to mistakes in diagnosis, but to neglect upon the part of the medical attendants Let me cite two flagrant cases A young physician saw a woman patient and told her he thought she had a tubal pregnancy which was beginning to leak He said, "Now you come to my office tomorrow at two and I will be there to see you ' The patient did so, but the physician was not in She went on to a nearby city and consulted a surgeon who found the lesion as suspected by the younger man and removed it Another recent graduate told a mother that her child had intussusception but that he would watch the child carefully, which he did for four days Surgery when offered at last was unavailing The laity sometimes put us to shame To a medical friend of mine an excited mother's voice called over the telephone—'O Dr Blank, hurry right over—the baby has intussusception!" She was correct, for she had lost another child with a similar attack one year previous

A man somewhat older than these two, who boasts that he always operates upon his own cases of appendicitis, told a mother "Your child has an appendix but we'll watch it" After he had watched it for a week the case was transferred to another town where a surgeon at immediate operation drained a large appendicular abscess Mistakes occur of course It is probable that there may be for generations a small irreducible minimum of mortality in appendicitis, due to the rare cases, gangrenous from the onset, which exhibit absolutely no pain until perforation has occurred But what excuse has the physician who makes a definite diagnosis of a serious surgical lesion and then neglects to offer the proper remedy?

I have spoken of the competent surgeon A kid was shot in the right hip one evening He complained of pain anteriorly in the abdomen In the morning a surgeon was consulted Finding the bullet in the front of the abdomen outside the peritoneum the surgeon felt he should investigate it to see if any damage had been done within the peritoneum Directly beneath the bullet was found a gangrenous appendix—a coincidence Any but an able surgeon would have been content to withdraw, having found the bullet, and the boy's life would have been lost Yet promptness in surgical interference is usually of prime importance One is reminded of Dr Deaver's statement that in perforation early operation by a mediocre surgeon is better than a too late operation by a master And better a needless operation than a needless death

Another duty of the family physician is a proper attitude of hands off in the surgical postoperative care The ingestion of fluids and food, the use of opiates, the employment of laxatives or enemata, are all best handled by the surgeon for the first few days at least The physician may assist greatly with moral support and co operation and particularly in the handling of complications of a medical nature

To summarize, we may say The part of the family physician is to recognize at once that the acute abdomen is present in the patient and that prompt surgical care is imperative His next duty of prime importance is to eliminate medical conditions which may simulate the acute abdomen He should employ no laxatives He should give no opiate until after the diagnosis has been made When such a part is played by the men first to see the cases, our mortality in the acute abdomen will subside remarkably Its present height has been due to causes which have been aptly epitomized by my friend Dr John J Morton of the University of Rochester—"laxity and laxatives" Laxity on the part of the patients, yes—but laxity on the part of the physicians also Laxity and mistakes "For our blunders, O in shame before the eyes of Heaven we fall" Ignorance and indifference—both phases of the greatest curse of mankind—selfishness The patient's needs should always come first No physician should lay down his head at night until such an emergent case has had proper care or is in other competent hands

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PHYSICAL THERAPY IN INFANTILE PARALYSIS*

By RICHARD KOVACS, M.D., NEW YORK

PHYSICAL therapy properly correlated to orthopedic measures has produced valuable results in convalescent and chronic cases of the last epidemic of infantile paralysis. These results should be generally known so that this knowledge will not have to be acquired again by costly experience. In addition, reports have come in recent years from France and Italy about the successful use of diathermy and roentgen therapy in the acute stage of anterior poliomyelitis.

1. *Treatment of the Acute Stage*

The acute stage begins with the onset of the disease and lasts until the tenderness and pain have entirely disappeared from the paralyzed muscles. It is now generally agreed that its pathology is not only an affection of the anterior horns of the spinal cord, but also a polio-myelio-encephalitis with meningeal complications. There is exudation, hemorrhage and edema in the anterior horns, along the nutrient vessels entering from the meninges and along the spinal nerve roots and the pia. The circulatory interference and mechanical pressure upon the sensitive ganglion cells and the possible specific effect of the virus are responsible for the suspension of the conduction of motor impulses to the periphery and result in flaccid paralysis and atrophy in scattered muscle groups. The acute stage usually lasts several weeks. The routine treatment of the active stage consists in keeping the patient recumbent and the paralyzed muscles at rest. Plaster cases are being used and joints are immobilized in a position in which the affected muscles are relaxed. This procedure hastens the disappearance of pain and is essential for the prevention of deformities, and also prevents the overstretching of the paralyzed muscles by the healthy antagonists. However, it does not keep the muscles in the best possible condition and does not influence the pathological changes in the cord.

It would seem rational that the earlier the mechanical pressure on the cord is relieved, the quicker and the more complete might be the recovery. The fact that many cases show full recovery with rest and expectant treatment alone should not lead to therapeutic nihilism. Bordier[1] states that the average results are better following early treatment by spinal roentgen therapy. The beneficial action is due to the prevention of the sclerosis and the atrophy which tend to destroy the nerve cells near the seat of the myelitis; the improvement is brought about mainly by an indirect action on the peripheral edema and on the pericellular infiltration. In conjunction with radiotherapy, Bordier advocates diathermy along the affected extremities, in order to overcome the circulatory disturbance and to facilitate muscle response by its heating effects.

French and Italian observers have practiced Bordier's method and found that the extension and intensity of paralysis were appreciably and constantly diminished by early radiation. As to the use of diathermy, two French observers, Delherm and Mathieu,[2] state that it is especially indicated in older children with vasomotor and trophic disturbances, but that in younger children it should be avoided on account of their inability to discern the sensation of burning. On account of this danger, they prefer the galvanic current for its mild and safe heating effect.

Competent observers in this country, like Granger,[3] have employed direct spinal diathermy to extensively paralyzed cases with apparently good result. In the average case luminous heat was applied over the spine and the paralyzed musculature for an hour or more at a time. Granger emphasizes the pain-relieving properties of this treatment. The little sufferers usually sleep right through the treatment. The author prefers thermal radiation from an infra-red generator because of the absence of possible irritation from the visible rays. Such treatment can be applied with the patient in bed and does in no way interfere with immobilization. It is recommended that during the acute phase every child should receive heat radiation for the relief of pain and the improvement of circulation and nutrition of the affected parts.

2. *Treatment of Convalescent and Chronic Stage*

The greatest field of usefulness of physical therapy exists in the convalescent and chronic stage of infantile paralysis. The convalescent stage may last from one to three years and is characterized by the tendency of the paralyzed muscles to recover their tone and power. On account of this tendency it is somewhat difficult to evaluate the effects of treatment unless there is a method by which one can determine beforehand which muscles are apt to recover spontaneously, which ones need physical therapy and which ones are going to remain permanently paralyzed.

Electrodiagnosis through testing for the reaction of degeneration by the faradic-galvanic current or, still better, by the modern condenser method enables the skilled physician (1) to express quantitatively the extent to which the muscles are affected, (2) to make a prognosis of the improvement to be expected, (3) to select the most appropriate form of therapy. Muscles without RD will recover spontaneously or the re-

* From a paper, "Physical Therapy in Pediatrics," read before the Pediatric Section of the New York Academy of Medicine, November 13, 1930.

covery will be sped up by appropriate therapy; those with RD may show varying degrees of affection and should receive treatment as early as possible. A careful electrical test of the affected areas is, therefore essential for the survey of a patient with poliomyelitis in the convalescent stage and for planning the treatment. It can be performed in a simple and satisfactory manner even in small children by testing a whole limb at one time, for instance, placing one electrode under the buttock and another under the sole of the foot. In older children careful individual motor point testing can be done, which is practically painless if milder condenser discharges are used.

A less accurate method of examination and grading the existing muscular power is that of testing muscle action against gravity and outside resistance. A person having had intensive training in muscle action is needed to carry out this testing. McMillan's[4] classification recognizes four degrees of normal action, from full normal to ¼ normal (N to ¼ N) in which the muscle is still capable of limited action if gravity is eliminated; Q—where the muscle shows a quiver but is capable of no movement and T.P.—where the muscle shows no sign of movement, being totally paralyzed. This corresponds with full RD found on electrical testing.

It is fortunate that the greater majority of muscles are weakened rather than paralyzed and precise, effective and intelligent treatment enlarges greatly the field of possible complete recovery. The object of treatment is to prevent the trophic changes which take place when muscles are deprived from normal nerve stimulation and to facilitate the return of normal function. Splinting for the protection of the weakened muscles against the pull of the powerful antagonists must be continued.

Heat in the form of radiation from an infra-red or luminous heat generator or from a hot (105 to 110°) whirlpool bath serves as the main standby to improve circulation and nutrition and to prepare the parts for subsequent exercise or electrical treatment. In cases where internal heating seems desirable, diathermy shall be carefully applied along the length of an extremity or through the spine.

"The well being and efficacy of a muscle is largely dependent on the performance by it of a certain number of active contractions. When a muscle is inactive for any length of time, it atrophies. It is an accepted physiological principle that the exercise of the normal functions of a muscle is the best means of increasing its size and strength. The same rule applies to the partially paralyzed muscle" (Lovett[5]). Tilney[6] says: "Muscle prevented from performing its natural function of contraction tends to revert to non-contractile connective tissue type. It remains for us to supply the deficient function of contraction by whatever means we possess. Electricity is one of these means."

Massage and muscle training are the two universally recommended means of restoring muscles affected by infantile paralysis. Do they preserve the function of contraction? Of massage, Lovett[5] says: "It can only be expected of proper massage that it will improve locally muscular tone and nutrition and antagonize muscular atrophy and nothing more. It will not restore muscular power." Stookey[7] says: "Modern experimental evidence proves that massage is only of slight benefit in preventing atrophy of paralyzed muscles." In paralysis, according to Mennell[8] only the slightest form of massage is indicated because, owing to the atrophy of the paralyzed muscle, pressure may be transmitted to the blood vessels, causing paralytic dilatation; thus, heavy massage will defeat the end sought. In our own cases of paralysis, we use massage only as an adjunct for the further improvement of local circulation; very light massage for from five to ten minutes at a time to one extremity is all that is indicated.

Active exercise as accomplished by muscle training is undoubtedly the most natural form of reeducation of weak muscles. Its disadvantage is, first, that only older children can be trained. Lovett recommends their beginning at the age of 3, and Ogilvy[9] at 6. Tilney[6] says: "Muscle reeducation to be most efficient requires an elaborate system of accessories and a well trained staff of instructors. With one conspicuous exception, no such efficiency has yet been attained." If the muscles are without any power, the passive performance of the motion, as recommended, is undoubtedly inferior to active contraction by electricity. Muscle training can and should be applied systematically alongside the electrical treatment, and the latter should be abandoned in its favor as soon as there is a return of active muscular power.

The rationale of electrical stimulation is based upon the following considerations: If the muscle is not fully paralyzed, but only weak, the causing of contractions not only prevents the atrophy of the paralyzed muscle bundles but also exercises and strengthens the non-paralyzed part and thus enables it to do compensating work. In fully paralyzed muscles electrical stimulation can cause movement similar to the normal ones and thus tends to preserve the functional properties of the muscle until normal nerve impulse returns to carry on the work. Every case of infantile paralysis, no matter of how long standing, which has not received proper physical therapy is a good subject for electro-therapy (Kovacs[10]). The sudden improvement in some old cases soon after efficient treatment has been instituted can be explained by the fact that there are a number of unimpaired ganglion cells present in the anterior

horns and they in turn are connected with intact nerve tracts and muscle fibers. By suitable electrical and reeducative treatment these non-paralyzed muscle fibers redevelop and are transformed from an inactive minority into an active majority.

Electrical stimulation to be effective must be carefully planned and skilfully applied for a sufficiently long period. According to the electrodiagnostic findings, the slow or interrupted sinusoidal is used in cases with RD and the surging faradic in cases with absence of full RD. Treatment does not consist of simply slapping on two wet pad electrodes somewhere along an extremity and by turning on some form of current as powerful as possible. Badly directed and badly applied treatments of the past were mainly responsible for the indifferent if not decidedly antagonistic attitude of some medical men towards electrotherapy in infantile paralysis.

Technic of Electrical Stimulation

The most effective method of electrical treatment is that of *unipolar* muscular stimulation. A large dispersive electrode is placed under the cervical or lumbar spine or at any place central to the lesion, and a small active electrode over the individual muscles. In case of RD the normal motor point is displaced distally (towards the tendon) and to save time at subsequent treatments it is advisable to mark with indelible pencil the most effective point of stimulation for each muscle.

In fully paralyzed muscles one must be well aware of the danger of over exercising a muscle by electricity. I do not believe that more than a flicker of the tendon is necessary to prove a successful contraction in a paralyzed muscle. This flicker may not even be visible; it is enough when it is palpable to the trained finger at the insertion of the tendon. From three to ten contractions of each muscle are ample at the start with an increase to the maximum number effected gradually. A careful operator will very quickly notice that a larger amount of current is needed in case of a muscle that has been overtired previously.

Preceding and during electrical treatment, the affected extremity should be placed so that the paralyzed muscles are relaxed and not kept on a stretch by their healthy antagonists.

According to the response elicited in turn, each muscle is made to contract from half a dozen to a dozen times, the number of contractions being increased until from thirty to forty a minute is reached and a maximum treatment of from two to three minutes to an individual muscle or fifteen minutes to an entire extremity is given.

Treatment with a *bipolar* technic or "en masse" consists of placing two electrodes of suitable size at the opposite ends of an extremity; for instance, one electrode may be applied to the sole of the foot, the other under the buttocks or under the sole of the other foot. The surging current passing along the entire extremity results in a fairly even contraction of all muscles provided that their response is about equal. It is almost uncanny to see how different muscle groups first on the flexor then on the extensor surface of an extremity contract gently without any electrode touching them. Another method in bipolar technic consists of using the galvanic bath method. One may place the two hands separately or one hand and one foot or each foot separately in a basin of water connected to the source of suitable low tension current.

The bipolar technic is a lazy operator's method because after placing the electrodes in position and turning on a sufficient amount of current, he can stand by and let the current do the rest. It is advisable only if the muscles of the extremity are all nearly evenly affected. It offers the advantage to treat for instance a whole extremity suspended in a cast. Treatment is started at ten minutes duration and this is gradually increased according to the response.

Electrical treatment applied with proper technic never needs to be painful; in nervous children it might be advisable on first sitting, following the preliminary heat treatment, to apply the electrodes without turning on any current. This will facilitate their getting used to the situation.

Underwater Exercises

The use of underwater exercises (submarine pools) in subacute and chronic cases has been introduced in recent years by Lowman[11] and others. They are carried out in a heated indoor swimming pool so constructed that children or adults with paralyzed limbs can be easily placed into it and while there be suspended in a harness fastened to an overhead trolley. The sustained heat in the pool improves the circulation and nutrition of the parts and has a relaxing effect on spastic limbs; the buoyancy of the water takes weight off the body and allows an easy movement of weakened or paralyzed limbs. The patients float about comfortably in the water and a technician puts through exercises suitable to their condition. Muscles too weak to act against gravity will thus have a chance to work freely, provided they are capable of active voluntary contraction. This method offers an excellent combination for the treatment of spastic and paralytic conditions but requires facilities that are only available in a few institutions. It does not offer the possibility of individual stimulation of paralyzed muscles, as electricity does. Its general tonic and stimulative effects are unexcelled.

As combined orthopedic support and physical therapy is systematically carried out, the atrophy of muscle groups in which recovery was to be ex-

pected gradually disappears and muscle response improves. Long persistent treatment is the keynote of success, skilfully utilizing all therapeutic measures and avoiding overtiring of muscles at any one time. It takes a long time for the regeneration of muscles to become complete after the original attack and therefore much can be accomplished even at a later stage in aiding the regenerative process in the muscles. It is an interesting experience to note the sudden improvement of some of the old cases soon after proper treatment has been instituted. "It is almost as though there were some latent recovery lurking in the muscle, needing only the electrical stimulus to reveal its presence" (Turrell[12]).

Electrical testing repeated from time to time demonstrates the progress made and enables its charting; it also demonstrates the total lack of response in some of the muscles; in case of doubt, careful observation and treatment of these may be carried on for a while; if the lack of response persists, the replacement of these muscles becomes a problem for the orthopedic surgeon.

Conclusions

1. Physical therapy is indispensable for the restoring of power of paralyzed muscles following poliomyelitis. Heat, muscle training combined with electrical currents of low tension and low frequency are the most effective measures.

2. Cooperation of the pediatrician, the orthopedic surgeon and the physical therapist are imperative for the best interest of the patient.

3. The earlier proper physical measures are employed, the more satisfactory will be the results. Definite technic and persistency in the measures instituted will bring acceptable results even in late and neglected cases.

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TINNITUS*

By EDWIN S. INGERSOLL, M.D., ROCHESTER, N. Y.

TINNITUS is a subject which has been a matter of interest and concern to Otologists since the earliest writings in the field of Otology, and rightfully so since there is no other symptom of ear disease that causes more distress to the patient or more problems to the practitioner. While deafness in its different forms is the chief complaint with which we have to deal, it is, from the patient's point of view, by no means as aggravating and harrowing an affliction to live with as is a loud and ever present "ringing in the ears."

Deafness, unless it be practically complete, is often improved by treatment and even though treatment fails, the use of artificial aids so frequently brings function up to a practcial level that these patients are able to enjoy a more or less normal existence.

The patient suffering from tinnitus, however, has no escape, and unless he be of the most phlegmatic temperament, the psychological effect of this continuous noise often leads to the most serious consequences. Insanity and suicide are not infrequently the direct result.

In view of the widely recognized seriousness and prevalence of this condition it is somewhat surprising that modern otology has not made more progress toward its alleviation. The literature of the last fifteen years has not added a great deal to our knowledge. The writings of Woakes as early as 1884 give a remarkably complete exposition of the subject and while new theories have been advanced since his time due to later developments in the knowledge of anatomy and physiology, it is safe to say that any improvement in treatment has been almost negligible. Many new things have been tried with varying results, but on the whole the sum total of advancement has been disappointing.

This is a field wide open for research, the

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successful results of which would rank, in terms of human happiness, at least equally with anything that may be accomplished in the studies of Otosclerosis or Progressive Deafness.

True tinnitus aurium is subjective and there should be a distinct separation made in the classification of sounds reported by the patient. The so-called entotic noises, clicking and snapping sounds, such as are produced often voluntarily by the contraction of the muscles of deglutition on the eustachian tube or by the contraction of the stapidius or tensor tympani are not sounds with which we are particularly concerned, certainly it is only in the most nervous of individuals that such phenomena assumes any importance and an explanation as to their cause, even in the case of a highly neurotic patient, is sufficient to allay any concern he may have.

It is a frequent occurrence to have this type of sound make its appearance during the course of treatment for chronic catarrhal deafness when the tight eustachian tube begins to lose its congestion following the use of the bougie and inflation. This sound can usually be heard through an auscultation tube. Another kind of noise that is often objective is that produced by some defect in the circulatory system outside of the inner ear such as an anurism of the carotid, and which can often be stopped temporarily by pressure.

Sounds of this kind, while disturbing to the patient in proportion to their intensity and to the nervous stability of the individual are not of peculiar importance to the Otologist, nor do they often reach the point of becoming a major menace in the life of the possessor as is all too often the case with true tinnitus aurium.

By true tinnitus is meant the sounds interpreted as singing, buzzing, ringing and roaring, simulating bells, running water, peanut stand whistles, etc. The sounds may be low or high pitched, the latter probably most often associated with otosclerosis, and they may be intermittent or continuous, in many cases being noticeable only in the most quiet places or following fatigue. At times the sound takes the form of a tune as in the case of a woman music teacher who complained that a noise which had previously been a rather innocuous buzzing had developed into a well pronounced reproduction of "Nearer My God to Thee."

An analysis of 163 cases complaining of tinnitus has not been very productive in information of a positive nature, but of some importance in its negative aspects. In this series the ages ranged from 8 to 78 years with only four under 23 years, the average at the time of examination being 43, and the average age of the onset of tinnitus was 26. Thirty-eight of these patients presented the phenomenon of Paracusis, and in several the onset of tinnitus antedated any appreciable degree of deafness.

There appears to be no relationship between the percentage loss of hearing and the severity of tinnitus and in several cases there was no demonstrable hearing loss and a disturbing noise was the only complaint. Several authors, notably Politzer, say that tinnitus is often noticed before deafness and that tinnitus accompanies 66% of deaf cases. This figure seems to me to be high. It is sometimes astonishing, however, to find how deaf a person may be, especially in one ear, before he himself is conscious of the fact, but there are certainly some cases in which tinnitus has become a troublesome factor before any hearing loss is demonstrable by audiometer or other tests.

The functional activity of the auditory nerve as shown by bone conduction, also seems to play no part in the production of tinnitus. In the cases studied in this series some had a bone conduction almost negligible while others ran to over 30 seconds on the basis of a normal of 12 seconds. So it would seem that the study of deafness by the commonly used clinical methods will not lead far in the solving of what is a more rare condition, but one which, when it reaches a certain point, becomes a far more disturbing factor in the life of the patient. Deafness, while it often does produce morose changes in the character of an individual and may sour his attitude toward life, does not often lead to melancholia or a true psychosis as is not infrequent in severe cases of tinnitus.

It has generally been assumed that anything that varies the normal endolymph pressure, whether upward or downward, may produce tinnitus. If this is accepted as the necessary physical condition required to produce the symptom, it opens a wide field of investigation regarding the various mechanisms which bring about this pressure change and because of the many known contributing causes, it makes the investigation of any individual case a tedious, and unfortunately in the majority of cases, a futile procedure.

The fact that children very rarely have tinnitus is well recognized. Sturm of Edinborough ascribes this to the fact that in children the vestibular aqueduct is relatively very wide allowing an uninterrupted flow of endolymph into the saccus endolymphaticus, and a wide cochlear aqueduct permitting free passage into the sub-archenoid space, thus providing a situation which tends to maintain an even pressure on the endolymph.

Congested eustachian tubes, impacted cerumen, furunculosis, diffuse external otitis, acute and subacute otitis media, or adhesions in the

middle ear following suppurative processes or chronic catarrhal changes, the fixation of the stapes in otosclerosis, are among the commonly accepted causes.

In those cases where there are adhesions from the cushion of the eustachian across the fossa of Rosenmueller, relief of symptoms sometimes follows the breaking up of these adhesions, but it has been temporary in my experience. Further experimentation in this connection may lead to more permanent results.

There have been many remedial measures tried both on physiologic and empiric grounds. Mallison of London has recommended Dilute Hydrochloric Acid drams 1 t.i.d. F. P. Sturm of Edinborough reports successful results from the use of atropine sulphate instilled in the ear through a perforation of the drum or introduced through the tube by means of a catheter using grains 5 in alcohol to oz. 1 aniline oil. He accounts for the results on the theory that the paralyzing effect on the secretory fibers of afferent nerves from peripheral sources such as the tympanum controls the reflex lymph secretion of endolymph.

H. Mortimer Wherry of London stresses the bilateral tinnitus of high or low blood pressure and advises treatment by the Internist rather than by the Otologist advising the use of nitrates in the high blood pressure cases.

Bruhl and Albrect in Berlin, and also Sobotsky, reported on the use of Radium. Bruhl's report was rather optimistic. Sobotsky reported one cured, ten improved, twelve not improved, and two worse.

The "reflex" conditions, many of them proven causes of tinnitus, offer an interesting field for conjecture as to just what pathological processes are involved. McBride of Edinborough cites cases cured by cocanization of the sphenopalatine ganglion. I have tried this several times without result.

There are, however, two sources of reflex irritation to which I would like to call your attention because I have satisfied myself that they are the determining causative factor of a few cases of distressing tinnitus. They may be widely known, but I have been unable to find any reference to the first one while the second was mentioned but once in the literature I was able to find.

The first is a relaxed condition of the temporo mandibular joint of one or both sides such as rather frequently occurs when there has been a disturbance of the normal closure of the teeth. This joint has become accustomed to a certain bite for a long period of years and has been splinted in a certain closed position. With the wearing down or loss of teeth, notably the grinders, this closure has become altered with a consequent strain on the temporo mandibular joint, resulting in a greater or less degree of subluxation with stretching of the joint capsule. I have referred these cases to a dentist who has for several years been interested in this type of thing; his interest having been aroused by the case of his own father who had a subluxation which caused some inconvenience in eating. On correction of the condition he found that he had stopped tinnitus and also greatly reduced his hearing loss. Whether the hearing was actually benefited or whether the relief of an overriding tinnitus resulted in a relative improvement, I do not know.

By the use of appropriate plates and checking the joint position by x-ray examination, the strain is relieved and the cases where this is the only cause of tinnitus, are quickly improved. The condition is easy to diagnose by palpation of the joint in motion.

The second, and probably much more widely recognized cause of tinnitus which can be remedied is found in the impaction of molar teeth. This is a condition which should always be looked for and corrected if present. I have had several very satisfactory results following the removal of impacted molars.

As to the mechanism of the cause of tinnitus in the two foregoing conditions, I have no explanation, but there have been enough cases resulting in improvement following their correction that there is in my mind, no question of the relationship. Unfortunately there is but a small percentage of cases falling into this classification.

It is difficult to foresee what may be the future methods of treatment of tinnitus cases where the cause would appear to be some organic pathological change such as fixation of the stapes or the presence of dense adhesions where such drastic measures as the cutting of the acoustic nerve had given disappointing results. But there is undoubtedly a certain percentage of cases where the cause, while it cannot properly be called functional, is of a reflex character and can be relieved. If this type of cause be carefully searched for and corrected as is often possible, we will at least have made some progress.

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CLINICAL ASPECTS OF PHOSPHATURIA*

By LOUIS H. BARETZ, M.D., BROOKLYN, N. Y.

THIS paper was prompted by three cases of phosphaturia of distinct clinical interest.

The condition known as Phosphaturia cannot in itself be considered a pathological entity, but for purposes of study, such a nomenclature may be generally employed for the not uncommon condition of cloudy urine due to a precipitation of phosphates.

The literature on the clinical aspects of phosphaturia has been particularly meager. Phosphaturia is of interest to the Urologist and the Gastro-enterologist as well as the general practitioner; yet, comparatively little knowledge has been brought to light, altho of recent years, increased interest has been manifest.

Types of Phosphaturia: The "transient phosphaturia," frequently seen, is considered metabolically normal, and this condition will not be discussed at any length.

Neither shall we include at this time the phosphaturia with marked infection, familiar to the Urologist, which occurs with a chronic alkaline cystitis, producing the so-called "contracted bladder" and incrustation of the mucosa with phosphatic deposits.

Of interest here, is what may be termed the "persistent phosphaturia," producing a cloudy, alkaline urine (1) without infection, or (2) with a low grade infection as evidenced by a moderate number of white blood cells.

Laidley[1], in an excellent survey of the subject with special emphasis on the experimental side, terms this type—"permanent phosphaturia." I would prefer the term—"persistent," since many of these cases are cleared up by treatment.

Etiology: The two types of phosphates in which we are mainly interested are (1) the inorganic phosphates of Sodium and Potassium, i.e. the "alkaline" phosphates (so-called, because of the alkaline metals, Sodium and Potassium;) and (2) the inorganic phosphates of Calcium and Magnesium, i.e., the "earthy" phosphates. With the organic compounds we are not concerned.

Laidley shows that the earthy phosphates, occurring in the ratio of 1:4 as compared to the alkaline phosphates, are much less soluble. Therefore, any change in the solution which renders it more alkaline, causes a precipitation of the earthy phosphates. Experimentally, this is done by the addition of NH_3; or in the bladder, by the NH_3 formation of urea-splitting bacteria. Here, the NH_3 forms Ca and Mg Ammonium phosphates which are insoluble.

The great bulk of phosphates, as shown by Leffman[2], are derived from food, or indirectly from the phosphoric acid derivatives of the same. The old theory of phosphaturia, connected with degenerative changes in brain and nervous system, because phosphorus compounds are notable constituents of such tissue, is no longer tenable.

Baehr[3] says: An excessive loss of hydrochloric acid in the gastric juice disturbs the acid-base regulating mechanism of the body; and normally there is a diminution of the acidity of the urine corresponding to the secretion of acid in the stomach after meals. Therefore, he adds, *phosphaturia is caused by an exaggeration of the normal alkaline tide.* This is further increased by the excretion of salts derived from vegetables and most fruits with a predominantly alkaline ash. The normal diet provides a considerable amount of Ca and Mg so that the more easily precipitable form of earthy phosphates is present.

Experimental increase of phosphorus in the diet, as shown by Baehr and Laidley, does not increase phosphaturia, and in the transient form of phosphaturia, there is no increase in phosphatic excretion.

It is unlikely, but not impossible, that earthy phosphates can be secreted thru the renal tubules in the precipitated condition. Yet, on many occasions, earthy phosphates are precipitated in the renal pelvis or in the bladder, or not until the urine has been voided.

What keeps these salts in solution when the reaction is alkaline? Laidley believes in the existence of a "protective colloid property." Remove this and the salts precipitate. Young[4] feels that this phenomenon is bound up with surface tension. A foreign body in the bladder which lowers the surface tension, will be rapidly encrusted with phosphates.

Beer[5], in an interesting preliminary report, believes that phosphaturia is not a metabolic condition, but rather a peripheral and local disturbance. Further studies have not been published by him, nor have his impressions been corroborated elsewhere.

Many observers believe that the cause of a persistent non-infected phosphaturia is due to (1) neurasthenia, or (2) inability of the bowel to excrete earthy phosphates.

Laidley points out the interesting fact, that the cases of neurasthenia with phosphaturia, are often associated with a chronic prostatitis or seminal vesiculitis, and that the urine or

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prostatic smears contain organisms capable of culture and these are of the urea-splitting type, and thus ammoniacal urine and subsequent phosphaturia result.

He further demonstrated, that in a series of transient phosphaturia cases, in no case were the earthy phosphates in greater quantities than normal. The total phosphates were within normal limits, and the alkaline and earthy phosphates bore a normal relation to each other. However, in a series of 33 cases of persistent phosphaturia, the interesting fact was brought out that there was an absolute increase in the earthy phosphates.

Renner[6] also believes that non-infected persistent phosphaturia is due to an increase in urinary calcium which has been brought about by partial or complete inability on the part of the bowel to excrete its share of the body's calcium. Experiments of Domarus and Tobler, he states, also favor this theory.

In persistent phosphaturia Laidley feels some constant factor must be introduced: (1) a constant decrease in the alkaline phosphates; or (2) a constant increase in the earthy phosphates; or (3) inhibition of the protective colloid.

To sum up: The persistent non-infected phosphaturia is either associated with neurasthenia or intestinal derangement. Why neurasthenia causes phosphaturia is obscure. Urologists feel that phosphaturia causes neurasthenia. The weight of evidence shows that persistent phosphaturia is caused by an absolute increase in the earthy phosphates due to an inability on the part of the large bowel to excrete its proper amount of earthy phosphate.

Symptomatology: The patient may present no symptom referable to the urinary tract, and a routine examination may reveal a persistent non-infected or mildly infected phosphaturia.

Such an individual, may however, at some time complain of burning during micturition; or at the end of the act (terminal dysuria); urgency; frequency; perineal discomfort. There may be a story suggestive of a typical renal colic, on one or both sides. Frequently there will be constipation, colitis, a history of taking large doses of bicarbonate by mouth to relieve "indigestion." Such symptomatology may be associated with hematuria, as described by Gray[7].

The urine examination will reveal a cloudy specimen, alkaline to litmus, and a sediment showing many crystals of triple phosphates. There may be actual slugs of phosphatic concretions, and at times, red and white blood cells. One of the cases noted below, complained of a whitish discharge after bowel movement or urination associated with "sharp pain and streaked with blood." In the presence of white cells, a smear will frequently reveal organisms.

Neurosis is a frequent associated condition. Phosphaturia is often present in individuals with hyperchlorhydria; in these cases, the gastric symptomatology may be stressed and the urinary symptoms overlooked.

The frequent association of renal colic and phosphaturia leads one to believe that the colic may be produced by a shower of phosphatic crystals passing down the ureter, similar in nature to the so-called "uric-acid shower." Frequency, urgency, dysuria etc. are similarly produced by vesical irritation. Cystoscopy in these individuals may reveal masses of crystals or phosphatic debris on the mucosa often in the neighborhood of the ureter orifices, while Urographic study is negative.

Treatment: If associated infection is present, such as a seminal vesiculitis or prostatitis, these foci should be eradicated by routine persistent massage.

In the event of a non-infected persistent phosphaturia, dietary treatment is fundamental.

The urine must be kept acid; the alkaline tide must be reduced. Much can be accomplished toward this end by omitting base forming foods by mouth. Food with an alkaline ash such as vegetables or fruits should be omitted or greatly minimized. To a lesser extent, those foods which stimulate gastric secretion, should be decreased. Administration of acids by mouth as acid sodium phosphate or other urinary acidifier, is indicated.

Attention to constipation, colitis, or other bowel disorders is of paramount importance, so that a more normal calcium excretion via the intestinal tract may be produced, thus tending to return to normal quantity the excretion of phosphates in the urine.

Removal of psychic factors has been stressed by some authors.

Cystoscopic treatment, is as a rule unessential, if the proper dietary regime is followed. In the event of persistent renal colic or vesical symptomatology, however, cystoscopy is indicated.

Case Reports

(1.) M. F. age 32, married, complained of a whitish discharge after urination or defecation, associated with sharp pain and occasionally streaked with blood. There was occasional left lumbar pain. Diurnal frequency q.2.h. and nocturia 2-3 times each night.

Examination revealed an apparently healthy male, of distinctly neurotic makeup. There was tenderness in the left lumbar region. The urine was hazy, alkaline, and examination of

the sediment revealed several wbc's, many rbc's, numerous crystals of triple phosphates, and large cocci in chains on direct smear. The second specimen of urine voided was more cloudy than the first, and at the end of micturition, there was a whitish discharge streaked with blood. Examination of this discharge showed slugs of phosphatic crystals and debris. The seminal vesicles were distinctly enlarged and smear after massage revealed several pus cells. Cystoscopy showed numerous crystals in clumps grouped about each ureter orifice and at the base. The orifices themselves were normal. A left catheterization yielded clear urine, free of wbc, or crystals. Flat X-Ray and lft. pyeloureterogram were negative.

The patient was put on a diet increasing meats and reducing vegetables and fruits, routine massage of the vesicles was instituted, and soon afterwards, for the first time in many months, his urine became crystal clear, and he was symptom free.

This case illustrates a phosphaturia, with associated renal colic, excess alkaline diet, and seminal vesiculitis.

Case II. L. G. age 49. Patient complained of pains in the prostate and in the shoulders for many years. There was a history of an old Nisserian infection. Additional complaints were perineal discomfort, and occasional severe attacks of right lumbar pain, without radiation and without associated urinary symptoms. There was marked constipation. His diet was mainly vegetarian.

His urine was always turbid, alkaline, loaded with phosphates, and a heavy sediment containing a moderate number of wbc, occasional rbc, and large cocci on direct smear.

X-Rays of the urinary tract, cystoscopy with right ureteral catheterization, and pyelography were always negative.

Massage of an irregular lumpy prostate yielded a smear containing many pus cells.

The right sided attacks were always associated with gaseous distension, and large quantities of gas were visualized in the X-Rays taken at the time.

Following colonic irrigation and almost a fasting diet, symptoms would disappear and the urine become almost clear.

Massages of the prostate associated with a reduction of vegetables from the diet, and attention to bowels, have rendered the patient symptom free, and the urine clear.

This case illustrates a phosphaturia, associated with infected prostate, renal colic, constipation, and excessive vegetable diet.

Case III. J. B. age 34. Patient had been troubled with "gas" for 1 year, for which he had been on a diet with a minimum of meats. He took Bicarbonate frequently for heartburn and resorted to colonic irrigations at intervals.

For past 3 weeks has had right sided colic with associated urgency and frequency of urination. There was radiation of the pain toward the pubis and no dysuria.

Present attack began 12 hrs. before coming to the office and was so severe that a hypo was given.

The urine was cloudy, alkaline with a large sediment of phosphates, and loaded with rbc. Abdomen was distended with gas. There was a positive right Murphy and tenderness in the right costo-vertebral angle.

X-Ray disclosed large quantities of gas and an apparently negative urinary tract.

The patient was put on a diet free from vegetables. Meats and cereals were increased. Bicarbonate was discontinued. Bowels were made to move freely. Two days later, his urine was clear for the first time in 3 weeks, and patient was free of symptoms.

A subsequent cystoscopic study was negative.

One month later, following an overindulgence in a Thanksgiving dinner, there was recurrent constipation, right sided pain, frequency and phosphaturia. Similar treatment cleared up the symptomatology, and there has been no recurrence to date.

Again, this case illustrates the syndrome of (1) phosphaturia, (2) vegetable diet, (3) renal colic, (4) and intestinal disorder.

CONCLUSIONS

1. "Transient" phosphaturia is caused by a number of metabolic factors, most of which cause an increase in the total alkalinity of the body fluids. The kidneys excrete the excess of alkali and the earthy phosphates are precipitated. There is no deviation of the phosphatic content from normal.

2. "Persistent" phosphaturia is frequently associated with (a) low grade infection of the prostate or seminal vesicles; (b) inability of the bowel to excrete its share of the earthy phosphates. There is absolute increase in the urinary phosphate content here.

3. The associated symptomatology is varied: there may be typical renal colic (crystal shower), urgency of urination, frequency, perineal discomfort, dysuria, constipation, gaseous distension, etc.

4. The urine examination shows a cloudy specimen, alkaline to litmus, and on sedimentation—heavy phosphatic deposits, triple phosphate crystals, frequently red and white cells.

5. Treatment:
   (a) Massage of prostate or vesicles if infection is present.
   (b) Eradicate constipation, colitis, or other intestinal disorder.
   (c) Keep the urine acid by reducing the alkaline tide. Omit or reduce base forming foods such as vegetables and fruits. Increase meats and cereals.
   (d) Urinary acidifier by mouth.
   (e) Remove psychic factors.
   (f) Cystoscopic treatment if indicated for renal lavage.

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LABORATORY AIDS IN THE DIAGNOSIS OF UNDULANT FEVER*

By RUTH GILBERT, M.D. and MARION B. COLEMAN, B.S., ALBANY, N. Y.

From the Division of Laboratories and Research, New York State Department of Health, Albany, N. Y.

EXPERIENCE with undulant fever demonstrates the great variation of clinical manifestations which different cases may present. The severity of the disease ranges from a transient malaise lasting for a week or two, and no doubt often subclinical, to a prostrating illness which may recur from time to time over a period of years. Acutely toxic cases may simulate typhoid fever, and the work of Amoss, Bull and others[1,2,3,4,5] has shown that, as in the latter infection, the incitant may at times localize in the gall bladder. A more chronic form of the disease may be mistaken for tuberculosis. The cough, night sweats, temperature fluctuations, and subjective symptoms may render the differential diagnosis particularly difficult. In some instances, it has been considered as a somewhat atypical form of malaria in regions where the latter is prevalent. Hardy and his co-workers[6] have suggested that the illnesses designated as "typho-malarial fever" during the Civil War were probable cases of undulant fever. Acute forms of the disease, with cough, bronchial symptoms, and malaise the outstanding features, are frequently diagnosed as influenza or "grippe," and more severe cases with the pulmonary symptoms intensified, as bronchopneumonia. Manifestations of arthritis, sciatica, and pain in the lumbar region or abdomen may complicate the diagnosis.

Infections with organisms of the abortus-melitensis group in cows, goats, and hogs result very frequently in localization in the genitourinary organs. The serious economic loss due to infectious abortion in cattle and hogs is generally appreciated. Physicians nevertheless have been somewhat loath to consider infection with organisms of this group when patients have presented symptoms indicating involvement of the genitourinary organs. A number of instances are mentioned in the literature, however, in which abortion in women has been associated with undulant fever. Kristensen and Holm[7] isolated *B. abortus* from a placenta in one case, from the vaginal discharge following abortion in another, and also from an ovarian cyst. Carpenter and Boak[8] have recently reported the isolation of *B. abortus* from a human foetus. Gaarde[9] and others[10,11] have commented on the frequency of nephritis in patients having undulant fever. Hardy[12] has noted manifestations of orchitis in five per cent of male patients with undulant fever, but in one-third of these cases the symptoms were not severe. Wainwright[13] has also reported orchitis as a frequent complication in this disease. Clinical histories accompanying specimens examined in the Division of Laboratories and Research in Albany for evidence of infection with organisms of the abortus-melitensis group have, in thirty-four instances, indicated the presence of lesions in the genitourinary organs. One case was of particular interest. The patient was acutely ill with clinical manifestations suggestive of typhoid fever. Her serum agglutinated *B. abortus* in a 1:1200 dilution and the microorganism was isolated from the blood. Five urine specimens were examined during and following her illness, but from only one of these was an organism isolated similar to that found in her blood. This specimen was collected about three months after recovery and six months after the onset of illness, and contained menstrual blood, which suggested that the bacteria had probably remained in the endometrium rather than in the kidneys.

In view of the extremely protean nature of the clinical manifestations of undulant fever, laboratory aids in its diagnosis have proved particularly helpful. The most generally used and readily applicable of these is the agglutination test. Preliminary determinations demonstrated that the reactions obtained with *B. abortus* and *B. melitensis* were so nearly identical that one antigen only needed to be employed. *B. abortus* was chosen for routine use since it seemed to give slightly more sensitive results and was considered somewhat less dangerous to handle than *B. melitensis*.

* Read at the annual meeting of the Medical Society of the State of New York, at Syracuse, N. Y., June 3, 1931.

In the examination of 106,879 specimens in the central laboratory in Albany and in the branch laboratory in New York City, 705 gave reactions with *B. abortus* antigen in a 1:80 or higher dilution of the serum. The percentage of those submitted for different types of examination which were found to agglutinate is of interest. A reaction was obtained with one in nine of those accompanied by information indicating that a diagnosis of undulant fever was considered; with one in eighteen of those from patients thought to have an enteric disease; and with only one in 248 of those submitted for the complement-fixation test for syphilis. Probably the percentage of patients presenting symptoms of a febrile disease in the latter series was small. Tables 1 to 4 show the degree of reaction obtained with the specimens which agglutinated *B. abortus*. The data available in regard to the agglutination test with sera from human patients correlated with the information derived from a study of the disease in cattle and other animals convinces one that a definite reaction indicates the presence of infection with a strain belonging to the abortus-melitensis group, provided tularemia can be excluded, or that the individual has had undulant fever in the past. Failure to obtain agglutination does not exclude undulant fever, as is illustrated by an interesting case studied by Miss Dacey* at the branch laboratory. An organism of the abortus-melitensis group was isolated from the blood of this patient received three weeks after the onset of symptoms. The serum, however, did not agglutinate *B. abortus* even in low dilutions and agglutinative properties could not be demonstrated in a second specimen received two weeks later. The history of the case indicated that the

* Gilbert, Ruth, M. D. and Dacey, H. G.
The Isolation of an Organism of the Abortus-Melitensis Group from a Blood Clot, the Serum of which failed to give Agglutination with *B. abortus*. To be published in the *Journal of Laboratory and Clinical Medicine*.

TABLE 1

CLASSIFICATION, ACCORDING TO CLINICAL MANIFESTATIONS, OF 705 SERA WHICH AGGLUTINATED B. ABORTUS IN A 1:80 OR HIGHER DILUTION, AMONG 106,879 SPECIMENS EXAMINED

		DEFINITE REACTION IN DILUTIONS OF			
	TOTAL	1:5000 to 1:10000	1:1200 to 1:2500	1:320 to 1:640	1:80 to 1:160
Sera giving reactions.....	705	20	75	229	381
Diagnosis of or symptoms suggesting undulant fever....	261	16	58	127	60
History of undulant fever not obtained or significant data not available.....	444	4	18	101	321

TABLE 2

CLASSIFICATION, ACCORDING TO CLINICAL MANIFESTATIONS, OF 199 SERA WHICH AGGLUTINATED B. ABORTUS IN A 1:80 OR HIGHER DILUTION AMONG 1,696 SPECIMENS SUBMITTED FOR THIS TEST

		DEFINITE REACTION IN DILUTIONS OF			
	TOTAL	1:5000 to 1:10000	1:1200 to 1:2500	1:320 to 1:640	1:80 to 1:160
Sera giving reactions.....	199	9	36	97	57
Diagnosis of or symptoms suggesting undulant fever....	146	7	32	80	27
History of undulant fever not obtained or significant data not available.....	53	2	5	16	30

TABLE 3

CLASSIFICATION, ACCORDING TO CLINICAL MANIFESTATIONS, OF 89 SERA WHICH AGGLUTINATED B. ABORTUS IN A 1:80 OR HIGHER DILUTION, AMONG 1,585 SPECIMENS SUBMITTED FOR THE AGGLUTINATION TEST WITH B. TYPHOSUS

		DEFINITE REACTION IN DILUTIONS OF			
	TOTAL	1:5000 to 1:10000	1:1200 to 1:2500	1:320 to 1:640	1:80 to 1:160
Sera giving reactions.....	89	7	23	42	17
Diagnosis of or symptoms suggesting undulant fever....	66	7	19	29	11
History of undulant fever not obtained or significant data not available.....	23	...	4	13	6

TABLE 4

CLASSIFICATION, ACCORDING TO CLINICAL MANIFESTATIONS, OF 417 SERA WHICH AGGLUTINATED B. ABORTUS IN A 1:80 OR HIGHER DILUTION, AMONG 103,598 SPECIMENS SUBMITTED FOR THE COMPLEMENT-FIXATION TEST FOR SYPHILIS

		DEFINITE REACTION IN DILUTIONS OF			
	TOTAL	1:5000 to 1:10000	1:1200 to 1:2500	1:320 to 1:640	1:80 to 1:160
Sera giving reactions.....	417	4	16	90	307
Diagnosis of or symptoms suggesting undulant fever....	49	2	7	18	22
History of undulant fever not obtained or significant data not available.....	368	2	9	72	285

patient had had clinical manifestations of undulant fever two years before, at which time she had been severely ill.

Isolation of the microorganism from the blood of a patient of course definitely confirms the diagnosis of undulant fever. Hardy and his associates[6] have emphasized the difficulty encountered in securing cultures from the blood in case the infection is due to a strain derived from cattle. Strains from goats and hogs apparently can be isolated in a much higher percentage of instances. A study made in the Division of Laboratories and Research of cultures secured from patients with undulant fever in New York State indicates that although some of them do not fulfill certain of the criteria for classification as bovine strains, a consideration of the data available indicates that all belong to this group. Epidemiological evidence suggests also that cattle or dairy products have been the source of the infection in most of the cases. No history of contact with goats has been reported and very rarely could hogs be considered. In the preparation of blood cultures, the inoculated medium should be incubated promptly Duplicate preparations should be made, one to be kept under the usual aerobic conditions and the other to be incubated in an atmosphere containing from 5 to 10 per cent of carbon dioxide. The blood should be secured when the patient has a febrile reaction and a series of specimens should be submitted. The desirability of having several specimens examined is emphasized by the experience of a physician who had undulant fever and wished to have the diagnosis definitely confirmed. The onset of illness was in August. Blood cultures were made from specimens collected on September 27, October 3, October 9, and December 8, but the inciting organism was isolated only from the specimen taken in December. Incidentally, the agglutinative activity of his serum increased from a reaction obtained in a 1:320 dilution to a reaction in a 1:2500 dilution. The best success in the isolation of the organism from the blood has been secured with material from persons who were severely ill. Probably the bacteria are relatively few in number in the blood of ambulant patients. Another difficulty in the isolation of organisms from the blood is that freshly isolated cultures develop slowly on artificial media, from one to three weeks being required for colonies to appear. Plates kept in closed jars for this length of time not infrequently become contaminated with molds, which of course renders them useless for further study.

Less success has attended efforts to isolate cultures from urine than from blood. A few authors[1, 4, 5, 14] have reported the isolation of *B. abortus* from the stools of several patients having undulant fever. From the reports of autopsy findings, however, one would not expect a large percentage of cases to have a very exter volvement of the intestines. Bruce[15] i after his wide experience with the di Malta, considered the finding of ulcers intestinal mucosa in one case, to be sul important to describe. He mentions in f the absence of such lesions in these patie used as a factor in differentiating Malt from enteric disease.

Skin tests corresponding to that of v quet for evidence of tuberculosis have b posed, but cannot at present be recom owing to the severity of the reactions obtained with preparations of *B. aborti* the patient has undulant fever. It is ho further study of the problem will per selection of extracts which will be entir able for this purpose.

A blood count usually indicates a se anemia and leucopenia with a relative inc the percentage of mononuclear cells. Thi mation is helpful when abdominal surgery sidered. The localization of pain and ter in the abdomen in some cases of undula has apparently led to appendectomies an operations. Such patients seem to be poo cal risks. You may be interested in an which has come to our attention. A wo 62, after an illness of about two weeks wi ache, edema, dyspnea, and vomiting after had a cholecystectomy performed and li two weeks. The gall bladder was repo have shown evidence of subacute chole Her hemoglobin was said to have been cent; the red blood count, 4,230,000; white blood count, 8,400, of which 58 were neutrophiles. A specimen of blo lected on the date of operation gave no in the complement-fixation test for syph the serum in a dilution of 1:5000 defini glutinated *B. abortus*. A reaction of such sity indicates quite conclusively that the had undulant fever. Whether the inflan of the gall bladder was due to *B. abortus* other species of bacteria could only hav determined by bacteriological study. A tioned previously, the literature indicates ganisms of the abortus-melitensis grou been isolated from the bile of patients with lant fever. Such cultures are frequently in the gall bladders of guinea pigs that h veloped the infection after intraperitoneal lation.

In conclusion, as long as milk and cre used without pasteurization, cases of u fever will probably continue to occur. I indicate that a fairly large percentage o in New York State have the disease, a much of the milk in rural districts is use Consumers, including people on vacation country, are thus exposed.

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STRAMONIUM IN CHRONIC EPIDEMIC ENCEPHALITIS

Report of its effects on sixteen Parkinson and four choreoathetoid cases.

By PATRICIA STEEN, M.D., KINGS PARK STATE HOSPITAL, KINGS PARK, N. Y.

ACCORDING to the U. S. Dispensatory,[1] stramonium is so similar to belladonna in dosage, toxicity and general action that the two drugs are practically identical, and the former has been employed in all the conditions for which the latter is more commonly used. Stramonium, however, acquired special repute in the treatment of asthma following the introduction into Great Britain of datura ferox from the East Indies, and up to the middle of the present decade the drug was chiefly used for this disorder. Its use in nervous and mental disease had been recognized as early as 1797 by Samuel Cooper,[2] who used the drug, datura strammonium, in the treatment of mania, epilepsy and certain fevers, but in our time, stramonium was apparently not used to any extent in the treatment of neurological conditions until recent years. In 1925, Juster[3] demonstrated the definite value of stramonium in the relief of Parkinson rigidity. Following Juster's communication, the same method of treatment (i.e., with datura stramonium) was successfully carried out by Laignal-Levastine and Valence[4] in 1926, and by Shapiro[5] in 1928. These writers reported improvement in all symptoms. They noted diminution or abolition of rigidity and tremor, and marked improvement in the mental attitude of the patients. Harris[6] appears to have been the first to have used the tincture of stramonium. In 1927 he treated a group of Parkinson cases with 25 minims of the tincture, three times a day. He did not feel that his results were encouraging, but more recent workers have expressed the opinion that Harris' dosage was too small to produce the desired reaction. In 1928, Carmichael and Green[7] found that large doses of the tincture (45-60 minims three times daily) decreased the Parkinson rigidity and produced improvement in the performance of fine movements, though the tremor was not affected. Jacobson and Epplen,[8] in 1929, checked the observation of the last named writers. In a series of 23 cases, six of which were reported in detail, they noted marked improvement in all symptoms of post-encephalitic Parkinsonism except the pareses, under tincture of stramonium in doses ranging from 20 to 70 minims three or four times a day. Muscular rigidity, often of high grade, was eliminated or lessened, so that the patients could dress, walk more loosely and swing their arms in doing so. Fatigability, myalgia, dysphagia, ptyalism and tremor were also lessened or eliminated, and bradykinesia was always strikingly improved.

Hoedemaker and Burns[9], in a series of thirty-one cases, twenty-seven of whom showed the paralysis agitans syndrome following epidemic encephalitis, found that the maximum dosage necessary to obtain the best results varied between 60-90 minims three times a day. With these amounts striking improvements were noted. Four patients previously completely bedridden became able to get out of bed unaided, to walk easily without falling, to feed and dress themselves. One patient who had been bedridden for at least a year was able to sew and to play a selection on the piano. Three patients were discharged and

returned to work. All patients showed complete relief from excessive salivation. Sixteen patients showed varying degrees of diminution of rigidity, and increase in ability to perform fine movements. Five patients did not show definite improvement in physical signs, but felt more comfortable. In six patients no definite change, except relief from excessive salivation, could be noted. These writers point out that the toxic effects from large doses of stramonium are rarely severe, and can be readily combated. This point had previously been emphasized by others.[7,8]

Report of Series

From a large group of post-encephalitic Parkinson patients six men, six women, four girls and four boys were chosen as those most in need of relief of symptoms. In searching the literature we could find no record of the use of stramonium on post-encephalitis cases other than Parkinson types. As hyoscyamine, the chief constituent of stramonium, has been described as a sedative to the central nervous system and a paralysant of nerve endings, it was felt that it might benefit three boys and one girl whose constant restlessness, tics and choreoathetotic movements made life very uncomfortable, and these four were added to the list, making a total of twenty who received the medication. The ages of the patients ranged from 9 to 28 years and the duration of the symptoms varied from 5 to 12 years. The U.S.P. tincture of stramonium was used. Each case was started in a dose of 20 minims three times daily. This was daily increased by one minim per dose. If symptoms appeared the drug was discontinued and one day later was re-instituted at the previous dose, and increased as before up to the limit of tolerance. The lowest dose tolerated was 35 minims three times a day, the highest was 110 minims four times a day and the average lay between 75 and 85 minims three times a day.

Results on Symptoms and Physical Signs

The non-Parkinson patients failed to show any improvement, and one indeed seemed distinctly worse, but results in the Parkinson cases were very encouraging. The drug seemed in almost all the Parkinson patients to produce its maximum effect when the limit of tolerance was first reached, and for about one month afterwards. Subsequently, the improvement was less marked, though in most cases was still noticeable. Two of our moderately advanced Parkinson women have been kept fairly active and relatively comfortable for a year, whereas, before treatment they were greatly disabled, whining and depressed. Although it is obvious that no definite statement can be made, it has seemed that the rate of increase of the rigidity and general disability was slowed in the Parkinson cases treated. This opinion is based on observation and comparison of the patients treated, with a similar group of untreated controls. However, all cases showed eventual down-hill progression, and no permanent improvement was noted in any case. After the drug was discontinued its effects rapidly wore off and in a week or less the patients had relapsed to their former state.

Rigidity: Sixteen of our patients showed this in marked degree, and were greatly benefited while under medication, and with this, great improvement in the ability to perform fine movements was noted. Four patients who had been helpless for nearly a year, became able to feed and dress themselves, to move about the ward, and to play such games as dominoes. The others were noted to walk more easily, could run more readily, and in four cases showed some return of a previously absent arm swing. All sixteen said they felt much more comfortable, and appreciated the fact that they could move more quickly and do more with less fatigue. Two patients said they were especially pleased because they could hold their mouths closed, and one boy with a troublesome dysphagia which had led him to refuse all but liquid nourishment, became able to swallow any food provided.

Propulsion and retropulsion: These were lessened but not eliminated in any instance. One boy, R. S., aged 13, showed improvement of his peculiar and very hampering gait. He was unable to take more than six steps forward without making a sort of waltzing turn to the left, frequently falling to that side. Under medication he was able to take as many as thirty forward steps without the dancing motion, and he no longer fell, though his steps remained short and of the propulsive type.

Tremor: All of the sixteen Parkinson type cases showed this in varying degree. In two the tremor seemed entirely eliminated by stramonium. In the other patients the tremor was decreased from fifty to seventy-five per cent, except in three cases when the tremor was unaffected.

Ptyalism: Six patients complained of this, and expressed complete relief while under treatment.

Respiratory disturbance: Three of the Parkinson group were subject to attacks of tachypnoea. and one boy in whom the condition was associated with cyanosis seemed distinctly benefited. The other two showed no improvement while receiving stramonium. The grunting and hissing respiratory disorders of two chorea-athetoid cases were also unchanged.

Tics and choreiform movements: Four children troubled by involuntary movements of different degree received medication. None showed any improvement and one boy seemed distinctly worse. Previously he was at rest part of the time, but while taking tincture of stramonium, 35

minims three times a day, he became a dynamo of purposeless activity, seemed quite unable to sit or stand still for a minute. His old facial tics became more frequent and severe, and he developed new choreiform movements of the hands. When the stramonium was discontinued he rapidly returned to his former state.

Convulsions and oculogyric crises: Three Parkinson patients subject to convulsions showed no reduction in frequency of this phenomenon. Of five patients suffering from oculogyric crises, two showed benefit in that the crises occurred less frequently and were of shorter duration.

Mental condition: All of the Parkinson group seemed more alert, answered questions more promptly, and were happier and more contented. One girl subject to frequent outbursts of noisy weeping became more stable and cheerful as she became able to get about and to occupy herself to some extent in reading or looking at picturebooks. No improvement was noted in mischievous or impulsive tendencies. One girl continued to assault without any provocation those to whom she seemed most attached, although she was much improved physically.

Of the four choreo-athetoid patients two realized they were more restless and uncomfortable but otherwise this group showed no mental change.

Toxic Effects

None of the patients suffered from loss of appetite, nausea or vomiting, and though several commented on the dryness of the mouth, this was not troublesome in any case. Three patients complained of dizziness but this disappeared after omission of three doses and did not reappear. Blurring of vision occurred in several cases as the limit of tolerance was approached. In one patient, aged 13, the dose had to be restricted to 45 minims, three times a day, because of this disturbance.

Two patients complained of an itching of the skin, and one showed a mild urticarial rash which disappeared when the drug was omitted, and did not recur when administration was resumed.

Conclusions

1. Tincture of stramonium in suitable doses seemed of great benefit in alleviating the forced inactivity and discomfort of sixteen cases of post-encephalitic Parkinsonism.

2. In four post-encephalitic cases of the choreo-athetoid type this drug had no beneficial effect, and seemed to aggravate the symptoms of two patients.

3. In the children and young adults observed, the average tolerance of stramonium was high, and the drug caused no serious or lasting toxic effects.

4. In the Parkinson cases the drug seemed to slow the rate of increase of the disability, but did not in any case arrest the progress of the disease.

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For list of officers of County Medical Societies, see this issue, advertising page xxxii.

THE POLIOMYELITIS SITUATION

The poliomyelitis epidemic continues at about the same pace that it has maintained during mid-summer. The center of the disease is New York City, with the surrounding counties showing an incidence diminishing with their distance from New York. The attitude of the family physician toward the epidemic continues to be most commendable. County medical societies have taken the lead in promoting the education of both the physician and the people; and their members are cooperating with departments of health of the State and the local municipalities, and with the local health organizations.

THE STATE MEDICAL JOURNALS

The peculiar function of the official organ of a state medical society is to record the activities of that society and those of its component county societies. The original object of the State societies was almost entirely scientific. They confined their activities to promoting a knowledge of human diseases and their cure. They dealt with the relations of an individual doctor to an individual patient, and entered only slightly into the great field of preventive medicine. But in recent years state medical societies have gradually adopted the second object, that of administrative medicine, or the development of means by which doctors may cooperate with official bodies and lay organizations in bringing medical service within the reach of all persons. The state journals find their special fields in recording what the medical profession is doing along the lines of administrative medicine. Yet, the scientific articles of the state journals are about all that receive notices. While the medical societies are promoting the practice of administrative medicine to an extent that is not generally recognized in current health literature, there is an immense amount of public health literature recorded in the popular health journals and in the health departments of the daily and weekly press, and by the radio; and in all this publicity the medical societies of the states and counties are practically ignored.

State societies are entering administrative fields which were formerly occupied solely by departments of health and volunteer health organizations. The medical profession has asserted its leadership in all these lines of work during the last five years, and possibly the time has been too short for the general recognition of the literature of these activities.

The editors of the NEW YORK STATE JOURNAL OF MEDICINE have attempted to study all that the several state societies are doing in administrative medicine, because the members of the New York Society are assuming the leadership in all branches in the practice of administrative medicine and wish to know what the other state societies are doing. The Editors made their work available by instituting a system of abstracting the records gleaned from the other state journals, and publishing them in a department called "Our Neighbors." This department is the most complete of all the records and indexes of what the several state medical societies are doing. Ten per cent of the Journal is given to this department. Any one looking through the annual index of this department can obtain a fairly complete idea of what the several state societies are doing in the various lines of public health, such as anti-diphtheria campaigns, popular medical publicity, radio talks, child examination, and the relations of physicians to the workers in the voluntary health organizations.

A recent incident illustrates the value of the department of "Our Neighbors." A research worker looking up the literature referring to graduate education had accumulated about a hundred or more references going back for ten years. But practically none of the references referred to the activities of the medical societies of the states and counties. Even the Journal of the American Medical Association was found to have records only of scientific articles that are published in the state journals, and the Index Medicus practically ignores the activities of state societies. The research worker had not run across the department of "Our Neighbors" in the NEW YORK STATE JOURNAL OF MEDICINE because none of the items had been listed in any of the references available in one of the largest medical libraries. Yet last year the activities of eleven states in graduate education had been recorded in this department. The references in the NEW YORK STATE JOURNAL OF MEDICINE for three years added more than twenty-five per cent to the number of references which the worker had been able to find from other sources. Furthermore, it broadened the field of graduate education to include the participation of the general membership of the State and county medical societies.

There are three reasons that the administration activities of the medical societies are not generally known:

1. The active participation of the medical societies in administrative fields is so recent that publicity writers, following the older lines of reporting, have not appreciated the importance of the newer attitude of physicians.

2. The number of articles on administrative medicine put forth by medical societies is small in quantity compared with that issued by lay organizations having paid publicity staffs.

3. The literature approved by medical societies is conservative and lacks the unqualified promises of one hundred per cent effectiveness that are often claimed by lay health writers.

A new movement in medicine is of importance in the proportion in which it may be adopted by medical organizations elsewhere. The records abstracted in the department of "Our Neighbors" are of activities which have a universal application wherever scientific medicine is recognized and practiced.

EXPERIMENTS ON HUMAN BEINGS

If there is anything for which the medical profession is feared, it is that human beings will be used as subjects of "experiments" by doctors.

On the other hand, if there is anything for which the medical profession is criticized, it is that doctors refuse to "try" new remedies that are announced in the daily press.

Medical editors are besieged with requests for aid in securing the cooperation of a doctor or hospital for the trial of a new treatment of some disease. This very editorial was inspired by a visit from a young man who thought himself cured of hayfever by a new inhalant; and he wished to announce his cure for the benefit of humanity. He was told kindly and courteously that doctors do not "experiment" on persons; and that the Rockefeller Institute and similar organizations existed for the purpose of conducting researches into new medical procedures. The man was honest, and was grateful for the information.

The people generally are quite willing to try medical experiments on themselves, and they believe the alluring stories of the curative effects of nostrums advertised to restore sufferers to health "after the doctors have given them up." But let a doctor "try" the remedy unsuccessfully, and his patient starts a suit for malpractice.

It is hard for the people to understand the attitude of the medical profession toward a doctor whose claims to have discovered a new method of treating a disease are announced through the newspapers. The medical journals as well as the daily press recently carried accounts of a hearing conducted by the New York State Board of Charities on the application of two physicians to establish an endowed hospital in which to demonstrate the effects of a new agent upon persons suffering with advanced cancer. The medical profession heartily approved the denial of the application. While physicians are progressive and apply new methods to cases which they have studied thoroughly, yet they strenuously object to the application of any one remedy to every case of a disease.

LOOKING BACKWARD

This Journal Twenty-five Years Ago

Vacation Accidents:—This Journal of September, 1906, discusses vacations editorially, and explains their dangers on grounds that are thoroughly modern. The writer says:—

"The mistake made by our summer vacationist is to plunge into vacation with the confidence of vocation; and in these strenuous days there is too wide a distance for safety between the two.

"The insanity of amusements of our seaside resorts does not give recreation. Most of the patrons of Coney Island find themselves worse off for it on Monday morning. It involves more nervous strain and excitement than exists in their every-day work, and many more dangers, as experience has shown.

"Thousands of employes work hard all the year, and have a vacation of two weeks in July or August. This vacation is an event, and well it should be, for their labors have earned them two weeks many times over. It is prepared for and thought about, and a good time must be had at any cost: The 'good time' too often consists in endeavoring to crowd into that short space a succession of events, which should have been distributed more equably through the year. The vacationist works more strenuously at having a good time than he does at earning his livelihood.

"All of these conditions cause an approach to the danger line in vacation time; and behind it all lies the strenuous life. The average American, who is fighting his way to business success, does not know how to play or to take recreation.

"There is little that the law can do. It is not a matter of throwing more safeguards about the people, as is suggested. The defect is manifestly a fundamental one, and lies in our socio-economic conditions."

MEDICAL PROGRESS

Chemotherapy in Cancer.—In making out his case in favor of chemotherapy, W. Blair Bell states that a local "cure" of cancer by surgery or irradiation by no means implies that the patient is safe from dissemination of the disease throughout the body. Furthermore, in at least three-fourths of the patients who die of cancer the disease is too far advanced before it is recognized to be suitable for local treatment. There are, therefore, investigators who still think it worth while to persevere in the field of chemotherapy. In this field the author has made a special study of chorionic epithelium, with the finding that lead appears to exert an almost specific destructive effect on this type of tissue. He reminds the reader, however, that a chemotherapeutic product which will cure cancer in animals may be ineffectual in, or poisonous to, the human subject. During the past fourteen months he has worked with the Brown-Pearce transplantable epithelioma in rabbits, supplied by W. P. Graves and George Van S. Smith of Boston. This rapidly metastasizing growth untreated is inevitably fatal, the average duration of life without treatment being about twelve weeks. An organic preparation, H_{126}-benzenesulphonylglycinate, prepared in Professor Heilbron's laboratory, gave most dramatic results when injected intravenously in animals with widespread metastases, and one animal was still alive twelve months later. Because of its toxicity, it is impossible to use the preparation intravenously or intramuscularly in the human subject. Recently, W. A. Collier of the Koch Institute has assured the author that in lead we have the only known element that specifically affects cancer, apart from local radiations, and that he also has found the Brown-Pearce rabbit tumor satisfactory in respect of certainty of positive implantation and fatal outcome. Collier also states Rothmann, has prepared a water-soluble, diffusible organic compound in which the lead is not ionized, and which remains unaltered, as has been proved chemically, in the tissues when injected locally—a difficult thing to understand—and is slowly taken up in this state, without any toxic, but with a curative, effect on the malignant neoplasm of rabbits in 80 per cent of all cases. Fournier has for several years used injections of fumarate of lead in cases of cancer in which the tumor was inoperable or inaccessible to *x*-ray or radium treatment. He has never observed injurious effects, and has had very encouraging results, many patients having been cured and the cure having been maintained for more than two years. Bell states that he has seen more than enough to realize that in many cases treatment with lead offers the only possibility of, and frequently secures, beneficial results. He firmly believes that a course should always be given to patients after operations for malignant disease.—*Practitioner*, August, 1931, cxxvii, 2.

The Treatment of the Gastrocardiac Syndrome (Gastric Cardiopathy).—The expression "gastrocardiac syndrome" was coined by L. Roemheld, in 1912, to characterize those disturbances of the circulatory system, and particularly the heart, which are produced by faulty function of the digestive tract, particularly the stomach. Such disturbances are due to one of two cases: (1) Mechanical, from dislocation of the heart and large vessels due tc elevation of the left half of the diaphragm as a result of subdiaphragmatic accumulation of gas, such as may be caused by various functional or organic anomalies; (2) reflex, through the effect of chemical and toxic substances within the stomach and intestine. The basis of successful therapy must needs be the discovery of the specific cause of the subphrenic air bubble and the removal of the accumulated gas. The cause of the gas may be aërophagy, insufficient absorption of gastric or intestinal gas and delay in its expulsion, or increased formation of gas caused by abnormal fermentation and decomposition of unsuitable food in a gastrointestinal tract whose chemism is disturbed. Treatment must first be applied to the psychic and general condition of the patient. He must be assured that his heart is perfectly normal and that it is only his dyspepsia which needs attention. In the treatment of the digestive apparatus all gas-forming foods which contain much cellulose must be excluded. Overeating should at all times be avoided. An occasional change from a vegetable-carbohydrate to a meat-fat diet sometimes yields astonishing results. A mild form of exercise is better than rest after eating, and abdominal massage is of importance. In the medicinal treatment of subacidity or anacidity pepsin combined with hydrochloric acid gives excellent results. Hyperacidity requires atropine or any of the numerous antacids. Not infrequently a gastric lavage produces magic effects. None of these measures has a lasting effect unless it is supported by physiotherapeutic procedures. The purpose of these is to accelerate venous circulation in the abdominal cavity and thereby reduce the accumulation of gas. Abdominal massage, gymnastics, sitzbaths, half-baths, nightly moist compresses, etc., are employed. Of equal importance is training in diaphragmatic breathing, which is identical with the abdominal type of respiration. These procedures carried out for a sufficient length of

time yield excellent results in most cases. The measures recommended for the purely functional gastrocardiac syndrome apply also to cardiac patients, in addition to therapy directed to the heart condition.—*American Journal of the Medical Sciences,* June, 1931, clxxxii, 1.

Origin and Treatment of Chronic Constipation.—Hans Wantoch says that it has been customary for many years to maintain that disturbance of gastric secretion is responsible for certain cases of constipation, but that this causal connection has been pointed out almost exclusively in cases where there has been an increase in the amount of hydrochloric acid and in the degree of acidity, while hyperacidity and anacidity have been held to account for so-called gastrogenous diarrhea. Wantoch has had occasion in a series of cases to observe what seems to be a causal relation between hyperacidity or anacidity of the gastric juice and constipation. It is a familiar fact that gastric anacidity is attended almost uniformly by a significant rapidity of emptying of the stomach, and that the food-mass then very often runs rapidly through the intestine and far into the colon. Hence it is the more remarkable that the fact has been established that, despite this speed, diarrhea has been the result in only a small proportion of cases, and that in some of the remaining cases constipation was the outcome. Four personal cases are cited to emphasize this statement. Dilute hydrochloric acid was prescribed in all, 8-10 drops in a glass of water, to be taken in sips during the course of each meal. All the patients were promptly relieved of their constipation. In 3 of the cases the hyperacidity or anacidity had expressed itself not only in constipation but also in gastric disturbance after eating. To prove whether the effect might not be equally good in cases without gastric symptoms, in which constipation was the only complaint, the fourth patient was given the same treatment. This was a woman of 50 who had suffered with constipation for many years, but complained of no other disturbance. After a test meal there was found free hydrochloric acid 10, total acidity 18; microscopic findings, negative. Administration of hydrochloric acid promptly relieved her condition. The author believes there is more frequently constipation than diarrhea as the result of lack of hydrochloric acid, and urges that his findings be put to the test by others in order to obtain more data on the subject.—*Münchener medizinische Wochenschrift,* May 29, 1931.

Pulmonary Congestion as a Form of Grippal and Toxinfectious Pulmonary Affection.—P. Kaczander and B. Rudin say that in their experience during the grip epidemic of 1930-31, very few cases were followed by lobar pneumonia, bronchopneumonia, or bronchitis, but that nearly all exhibited a pulmonary process which does not fall readily into any of the usual clinical categories. In their cases there was a so-called grippal general infection which was followed by a toxic injury of the pulmonary vessels and by affections of the lungs to which French clinicians have given appropriate names, and which are known in Germany as "moist lungs," "engorgement," and "one-day pneumonia." The essence and the beginning of the pulmonary congestion is, accordingly, an inflammatory active hyperemia of the alveolar capillaries. From the inflammation, as it progresses, various forms of pulmonary congestion are derived. If the advance is toward the lumen of the alveoli, there are epithelial desquamation, exudation of serofibrinous fluid, diapedesis of red, and even more of white, blood cells, resembling the stage of engorgement in croupous pneumonia. Thus we have the picture of an alveolar catarrh, closely analogous to the catarrhal inflammations of other serous or mucous membranes. In most cases there is no persistence of this stage. The affection progresses either toward the lumen of the alveoli—assuming the form described by Voillez, related to pneumonia—or else outward to the pleura, leading to the pleuropulmonary form described by Potain. If it goes in both directions we have the "pulmonary flux" of Dupré and Grasset, and of Dieulafoy. During the 1930-31 epidemic a striking feature was the profound subjective sense of illness in the presence of relatively slight objective signs. There was a marked predominance of catarrhal symptoms in the air passages. The pulmonary findings scarcely fitted into any of the classical forms of bronchopneumonia, bronchitis, bronchiolitis, etc., with or without participation of the pleura. Instead there were varying nonlocalized objective physical symptoms, such as lightening of the sounds over the affected parts, which almost never amounted to dullness. In most cases the pneumococcus was the exciting agent, but frequently there was a mixed infection of staphylococcus, streptococcus, and pneumococcus. The unknown grip virus must in reality be regarded as the primary agent, taken together with other toxinfectious possibilities.—*Deutsche medizinische Wochenschrift,* May 29, 1931.

The Late Sequelae of Encephalitis Lethargica and Influenza.—Charles Hunter, writing in the *Canadian Medical Association Journal,* June, 1931, xxiv, 6, emphasizes the fact that with the passing years the disastrous consequences of encephalitis lethargica have be-

come only more apparent. Like syphilis it may remain active for years within the nervous system, causing by recurrent outbursts, by slow inflammatory lesion, or by gradual disappearance of nerve cells in the basal ganglia, increasing disability to the patient. Usually the more severe the initial stages the more serious are the after-effects. Economo estimates that for all clinically well developed cases the mortality is 40 per cent, recovery takes place in 14 per cent, while in 26 per cent recovery is sufficient to permit the patient to return to work, though some defect persists. Chronic invalidism results in 20 per cent of the cases. The figures of the British Ministry of Health show that 50 per cent of those attacked by the disease suffer from sequelae, and a half of these develop the Parkinsonian syndrome. Second in importance to the Parkinsonian syndrome are the mental changes with marked alterations in character and conduct. Ocular defects are common. Obesity and polyuria occasionally develop, and respiratory sequelae may occur. All methods of treatment have been considered most discouraging. Economo recommends, even in the chronic stages of the disease, Pregl's solution, or 10 per cent sodium iodide solution (100 c.c. intravenously once a week for ten to fifteen weeks). Other remedies endorsed by individual physicians are acriflavine and 2.5 per cent solution of sodium salicylate. The author believes there is no question of the value of hyoscine in relieving the stiffness and tremor, and making the patient more comfortable. The drug may be used for years with safety and does not seem to lose its effect. Beginning with 1/500 grain twice a day, the dose is gradually increased to two or three times this amount. Intractable insomnia is sometimes helped by the intramuscular injection of 2 c.c. of milk; sun baths, light baths and massage have their place in particular cases. Encephalitis lethargica probably bears no relation to influenza, as has been thought by some physicians. In the latter disease the respiratory tract bears the brunt of the acute attack and is the site of the leading sequelae. Tuberculosis is sometimes aggravated by influenza, but there is no statistical evidence to show that it has caused an increase in the number of cases. Occasionally heart symptoms occur for months after influenza, but it is remarkable how little the heart is permanently damaged by the disease. Neurasthenic symptoms often prolong convalescence for months.

Blood Potassium and Malignant Tumors.—In view of the contradictory results reported by other investigators Corradino Giacobbe undertook experiments to determine whether or not there is an increase of blood potassium within the tissues of malignant tumors. He found in every case an increase, observable in all forms of malignant neoplasms, but particularly in those of the epithelial tissues. The amount of excess potassium in the blood of these tissues is proportional to the state of activity and of evolution of the neoplasm. After such a tumor was removed, the blood potassium always dropped to a lower figure. In some cases for the sake of greater accuracy the author repeated the test twice and then used the medium value found. The method utilized was the classic procedure of Kramer and Tisdall, based on precipitation of potassium in the form of cobalt-nitrite of potassium, and for the determination of the latter, after it was freed from excess of the reagent, he used a titrated solution of permanganate, neutralizing the excess of permanganate with excess of oxalic acid, and then liberating this last excess anew with permanganate until the solution assumed a persistent pale rose color. The potassium, which is a normal component widely diffused in the organism, was found to have a concentration 10 times as great in the red corpuscles as in the plasma. The values found in the blood of normal individuals varied from 17.48 mg. to 30.24 mg. per 100 c.c. serum, with an average value of about 24 mg. Of 12 individuals suffering with various morbid affections of a noncancerous nature, an excess of potassium was found in only 1, a patient with hemolytic icterus. Of 8 persons having benign neoplasms, only 1 suffering with a fibrolipoma of the thigh had an excessive amount of potassium. On the contrary, in a group of 24 patients having malignant neoplasms the blood potassium was found constantly elevated. In every instance in which a malignant tumor was removed, the blood potassium fell after the operation, such fall being demonstrable within 10 days after the operation and becoming more marked as the time increased. Although the study of the blood potassium reveals no specificity and has no important clinical value, the behavior of this substance constitutes an index that should not be ignored with reference to prognosis—one that becomes more striking pari passu as the development of the tumor is more rapid.—*Riforma medica,* May 18, 1931.

The Value and Limitations of Sodium Amytal.—In this paper N. S. Clark confines his remarks to the intravenous administration of amytal (sodium iso-amyl-ethyl salt of barbituric acid). He states that the dose varies from 6 to 35 grains, and averages from 8 to 20 grains. With less than 15 grains, however, there is seldom the complete relaxation necessary for surgical operations. The *advantages* of amytal anesthesia are: (1) Quiet induction, there being no stage of excitation, and thus the patient is spared a great deal of pre-operative apprehension; (2) there is no post-operative vomiting; (3) it greatly

facilitates the administration of nitrous oxide, ethylene, and ether, and the amount of these anesthetics is greatly reduced; (4) it produces no kidney irritation; (5) it does not appreciably alter the carbon dioxide combining power of the blood; (6) it produces no irritation of the respiratory passages, and is therefore a safe anesthetic in lung cases. Sodium amytal has been used with success in persistent hiccough, and for the pruritus of jaundice in which a dose of 4 grains intravenously arrests the itching for four hours. It is also useful as an antispasmodic in strychnine poisoning, tetanus, gastric crisis, rabies, epilepsy, renal colic, gall-stone colic, and eclampsia, as well as in asthma, delirium tremens, pernicious vomiting of pregnancy, and severe migraine. It greatly lessens the toxicity of procaine and cocaine. The *disadvantages* of sodium amytal are: (1) The long period of time required for the patient to become conscious, thus necessitating more nursing care; (2) inability of the patient properly to raise mucus; (3) the fall in blood pressure, normally 20 to 30 mm. Hg., but often greater; (4) the difficulty of gauging the proper dose; (5) occasionally the difficulty of entering a vein in which to inject the sodium amytal. Also if any of the solution should enter the tissues, it will produce a sore arm and possibly a slough. Sodium amytal is suitable for narcosis, for light anesthesia, and for a basal anesthetic, but alone it is not satisfactory for deep anesthesia.—*Canadian Medical Association Journal,* July, 1931, xxv, 1.

The Etiology of Anginas with Mononuclear Reaction.—In the belief that there might possibly be etiological relations between Plaut-Vincent's angina and angina with mononuclear reaction, U. Friedmann and A. Elkeles made a study of 16 cases of the former, by which they were able to show the great value the mononuclear reaction may attain in this disease. The cases show from 20 to 81 per cent of lymphocytes and monocytes, only one individual having less than 29 per cent. These figures equal those in anginas with mononuclear reaction, so that it is impossible to distinguish the two diseases on the basis of the blood picture. The response to therapy gave still further support to their identity. It is well known that Plaut-Vincent's angina reacts specifically to treatment with neosalvarsan. All the cases responded promptly and were free from fever in from 24 to 48 hours. The authors then gave the salvarsan treatment to certain cases of mononuclear angina in which spirilla and fusiform bacilli were not found. The results were completely negative. Hence it seems indisputable that in the authors' cases the spirilla and the fusiform bacilli were really the exciters of the mononuclear angina. They therefore came to the conclusion that some of these morbid conditions—in their material more than half—are identical with Plaut-Vincent's angina in their etiology. It is self-evident that if the two diseases have an identical etiology, no distinction between monocyte angina and Plaut-Vincent's angina is possible, in principle. Hence the authors incline to believe that the mononuclear anginas with positive Plaut-Vincent findings are only especially severe forms of Plaut-Vincent's angina. They regard it as most probable that anginas with mononuclear reaction may be divided into two classes, thus far indistinguishable clinically, but different etiologically, one of which is identical in etiology with Plaut-Vincent's angina and is to be regarded only as an especially intense reaction to the infection with spirilla and fusiform bacilli. Between angina with mononuclear reaction and Plaut-Vincent's angina there exist relations similar to those between varicella and herpes zoster. —*Deutsche medizinische Wochenschrift,* June 20, 1931.

A Case of Multiple Sclerosis Treated by Hyperpyrexia.—In the case of a young woman of 22 on whom a wide diversity of treatments had been tried unsuccessfully, H. Christy says that he has had decidedly encouraging results from the use of antichancroid vaccine with its consequent hyperpyrexia. The patient had exhibited nervous symptoms since she was 14 years of age, which gradually became more marked. At the time the diagnosis of multiple sclerosis was made, the neurologic symptomatology was very typical: diffusion of pyramidal excitation, with negative findings in spine and cerebrospinal fluid, and absence of objective sensitive symptoms. The patient could no longer walk nor hold herself upright. The author, not having available any case of unmixed malaria, was loath to use vaccine from a case of general paralysis upon a nonsyphilitic individual. He therefore proposed a substitute form of hyperpyretic therapy, namely intravenous injections of antichancroid vaccine, which the patient accepted. She received 7 injections at intervals of 3 or 4 days, the doses being 115 millions of Ducrey's bacillus, then 120, 300, 500, 550, 600 and 650 millions, with resultant temperatures of 39.4°, 38.8°, 40.2°, 39.9°, 40.3° and 40.1° C. The treatment was well tolerated without any disadvantageous incidents. Marked improvement was soon evident; the patient began to walk again, at first slowly, then more nearly normally; at the present time, although very spastic, she goes and comes, and says of herself that she is another being. The interpretation of the case is difficult. In a disease of such long, slow evolution, it is not easy to judge of the action of a treatment. The author used small doses because the patient was a woman, for he has found that women do not tolerate such large doses as men. He intends to apply the same treatment in other cases of multiple sclerosis, and will publish the results, whatever they may be.—*Journal de médecine de Lyon,* June 20, 1931.

LEGAL

PHYSICIAN AND PATIENT—OPERATION UNDER MISTAKE AS TO IDENTITY

By LORENZ J. BROSNAN, ESQ.
Counsel, Medical Society of the State of New York

The courts in our Western States have been called upon to pass on two cases of great interest to physicians. The lawsuits in question concern themselves with treatment rendered by a physician to the wrong patient. Cases of this character fortunately are rare, but they serve to illustrate the care that the physician must take in order that treatment may not be given by the physician to the wrong patient.

In the first of these cases the facts are briefly as follows: The plaintiff, a woman, consulted two doctors who were associated together in the practice of their profession, for the purpose of having a thorough physical examination made including a blood test. The examination was made and she was instructed to return a week later for the report of the examination. Another patient, upon whom a spinal puncture test was to have been made, had an appointment for the same hour. When the plaintiff returned at the designated hour, she waited in the reception room until a nurse employed by the doctors, without addressing her by name, told her to "come on." The patient followed the nurse and asked what was to be done and was told, "Oh, that is nothing, we are going to give you a test something like a blood test." The patient removed her clothing, was wrapped in a sheet and asked to get on the operating table, and was told that Dr. M. would perform the operation. She had no knowledge of what was to be done, but merely complied with instructions. The doctor made a spinal test in the usual manner, withdrawing a small quantity of spinal fluid by means of a hypodermic needle.

The plaintiff learned that the test had not been intended for her but for the other woman, and instituted suit against the two doctors for the sum of $15,000 for compensatory and punitive damages, claiming that as a result of the test made erroneously and without her consent she suffered great physical and mental pain, severe headaches, nausea and pains in her legs. Upon the trial of the case the plaintiff made no contention that the test was done in an improper manner. The defendants frankly conceded that the test was not intended for the plaintiff and that it was not necessary in her case, but was performed through "carelessness of the assistants in the office." A verdict was rendered by the jury in favor of the plaintiff for $6,250.

An appeal was taken on several grounds. It was contended that the plaintiff consented to the spinal puncture. The appellate court ruled that such an argument was not properly made to them as the jury had decided the facts to be otherwise, and it was unreasonable to interpret the facts as amounting to a consent as a matter of law. On this point the court said:

"The argument that she consented to the spinal puncture does not appeal to us. Neither did it to the jury. Most patients place implicit confidence and trust in their physicians. They do what they are told to do. Questions by the patient are usually not in order. There is evidence that the plaintiff did not know the nature of the test to be performed. If such is true how could she have given consent?"

The court in deciding the appeal ruled that a case of liability entitling the plaintiff to damages for negligence had been established, but sent the case back for a new trial on the ground that punitive damages sometimes known as "smart money" had been included in the verdict which it ruled improper in such a case.

The fact situation in the second case was fairly similar, although it differed in the essential that the defendant doctor did not freely admit that an error had been made. The plaintiff was a young man who attended a state normal school. He suffered eyestrain and consulted Dr. P, an eye, ear, nose and throat specialist of excellent standing, for the purpose of having his eyes examined. On the occasion of his first call at the doctor's office, certain tests were made and the patient was informed that to accomplish a thorough examination dilation of the pupils would be necessary. The patient requested that that be not done at that time and obtained an appointment for the next day. The patient appeared for treatment at the appointed time and the nurse sent him into the doctor's office. According to the testimony of the plaintiff, Dr. P. invited him to sit down in a chair different from the one he had occupied on the previous visit and the doctor, without asking any questions, proceeded to wash out plaintiff's right antrum after applying a local anesthetic. After this was done, according to the patient's story, he overheard the doctor state to his nurse that he was expecting "that young fellow from the normal school." At this point the patient stated to the doctor that he was S, the normal school student, and the doctor thereupon exclaimed, "Gosh, I thought your name was G." The doctor then directed the young man to an-

other chair where he completed the eye tests and concluded that glasses were unnecessary. The plaintiff claimed that the doctor said to him in a joking manner, "At least we known your antrum is clear."

Thereafter the patient brought suit against the doctor claiming that, due to the treatment administered to him without his consent, he became ill and suffered great pain in his head and another surgeon treated his antrum, draining therefrom a quantity of infected matter. The plaintiff further claimed that a subsequent confinement in a hospital was due to the treatment by Dr. P.

On the trial, the testimony of the plaintiff was substantially as set forth above. The doctor contended that there was no mistake in identity at all, but that the treatment was usual and proper and skillfully performed. Experts called on behalf of the defendant stated that the treatment given by Dr. P. was usual and customary in the course of such an examination as he had been requested to make. There was expert testimony on behalf of the plaintiff that the contrary was true. A verdict was rendered for the plaintiff amounting to $5,000. An appeal was taken and the court affirmed the judgment. The appellate court in its opinion said:

"It is doubtless true that if Dr. P. would have washed respondent's antrum as he did had he recognized respondent as S, the mere fact that Dr. P. mistook respondent for another of his patients would not of itself afford a basis for liability on the part of appellant; but as we read the evidence the same presents a conflict, not only as to whether or not Dr. P. mistook the identity of his patient, but also upon the question of whether or not the doctor would have performed such an operation upon respondent had he recognized respondent as S, and not mistaken him for G."

The court ruled that the issues were entirely issues of fact and that the jury had believed the story of the plaintiff and his experts, and would not therefore disturb the verdict.

FAILURE TO BE PRESENT AT DELIVERY

A woman who had been a patient of the defendant doctor for some years and upon whom he had previously operated, consulted him for examination and he ascertained that she was about three months pregnant. He arranged to have her call regularly from time to time and it was understood that he was to deliver her at the proper time. When he saw her last she was having a normal progress in pregnancy and the time of childbirth apparently was about four weeks off. At that time he warned her that as soon as she began to feel pains she should send for him. No word was heard from her by the doctor and one night at about eleven o'clock the doctor's wife received a telephone call to the effect that the patient had been having pains all day and delivery seemed imminent. The doctor had shortly before that been called out on an emergency consultation, and though his wife made every effort to communicate with him, she was unable to inform him of the patient's condition until about 2 o'clock in the morning when he returned home. At about 11:30 the doctor's wife had advised over the phone that the nearest possible doctor be called in to attend the patient and to deliver her, but there had been no subsequent communication. Therefore, the doctor upon reaching his home at a late hour, assumed that the patient had called in some other doctor and did not go to attend her. It seems that the woman delivered herself of a child some time before midnight and that the child died a few minutes after birth. No doctor was present until about 12:45 when an ambulance surgeon arrived, having been called by a friend of the patient. He observed that this had been a case of breech presentation.

Some time later on action was started by the woman in which it was claimed that the defendant was negligent in violating his duties to the plaintiff by failing to be present to care for the plaintiff at the time of her delivery, and that as a result her baby died at birth through asphyxiation, that she had been injured in the region of her pelvis and stomach, and had suffered severe shock and great pain.

The case came on regularly for trial before a judge and jury and after all the evidence had been put in on both sides, a motion was made by the defendant's attorney to dismiss the complaint on the ground that the plaintiff had failed to make out a cause of action. Said motion was granted.

NEWS NOTES

OYSTERMEN'S CONVENTION

The joint convention of the National Shellfisheries Association and the Oyster Growers and Dealers Association of North America, Inc., was held on August 18-20, 1931, in Sayville, Long Island, with over 200 representatives present, including scientists from Canada and England. The convention was remarkable for the high scientific character of the papers and discussions. A report of a similar meeting last year is contained in this Journal of September 1, 1930, page 1052.

The membership of the National Shellfisheries Association consists principally of scientists engaged in research on shellfish. It was these administrators and scientists both those from official bodies and those whose work is supported by the growers who contributed the leading papers; but the commercial dealers and producers not only listened intently to the papers, but also contributed to the discussion of the practical application of the scientific principles. In no other industry, except possibly that of dairying, would producers and dealers spend hours in listening to scientific papers whose basis but few of them fully understood, but whose conclusions are of great practical value to the dealers commercially, and from the health standard, to the people who buy the oysters.

Physicians generally will be especially interested in the medical phase of the program. A paper on the "Nutritive Value of Oysters" was given by Dr. R. E. Remington of the Food Research Commission of South Carolina. Much work has also been done in New York by Drs. Whipple and Wolf the past few years on the value of oysters in the treatment of the anemias, and their value has been shown to be equal to that of liver. One of the demonstrations shown at the convention was that of white rats used in feed experiments by Dr. O. M. Wolf.

An illustrated lecture by Dr. C. M. Yonge, of the Marine Biological Association Laboratory, of Plymouth, England, shed light on the reason for the special value of the oyster in anemia. The oyster has an elaborate system for taking food into its stomach where carbohydrate digestion takes place by means of enzymes, and of proteins and fats by large wandering phagocytic cells which are like the leucocytes of the human body. Absorption of food takes place in a series of microscopic tubes which extend out from the stomach and form the dark-colored organ which is popularly called the liver. The cells of this organ take up the smaller food particles and digest them in their own bodies, thereby performing a great part of the work of digestion. The "liver" of the oyster is therefore a glandular organ whose functions are similar to those of the glands of the human intestine and some of those of the liver.

Medical men know the association of copper with iron in the prevention and treatment of nutritional anemia. The oyster, too, has an intimate relation with copper and also manganese, and contains these metals in appreciable quantities and in a form which may readily be assimilated by the human body. Research workers have demonstrated that the value of oysters in anemia is equal to that of liver.

Another distinguished visitor was Dr. R. W. Dodgson, of the Ministry of Agriculture and Fisheries of England. He has developed a sound and scientific system for conditioning of the mussel which in his country is the "poor man's oyster." This conditioning process is conducted by him for the Ministry and has restored to food consumption enormous quantities of valuable seafood.

Still another visitor was Dr. John Eyre, Bacteriologist of Guy's Hospital, and scientist in charge of the biological survey and control of the Worshipful Company of Fishmongers. This organization is one of the few surviving English guilds dating from the 13th century. It has endowed and continues the support of several large charities in England, including boys' schools, and homes and hospitals for aged seamen and their wives. It is now largely a charitable institution but still has protective control over the fish and shellfish supply of London and maintains the highest type of standards for these foods.

The American shellfish industry, especially that of oyster growing and marketing, has been placed on a high plane within the last decade, until now its sanitary and scientific aspects are equal to those of milk production and sale. Research workers have delved into the secrets of spawning and growth of oysters and other shellfish; their food and its digestion; and the manner of their natural purification. All this knowledge has been applied eagerly by the growers and dealers, until now the industry is conducted on a thoroughly scientific basis by all the larger growers. The purity and sanitary qualities of the shellfish products are maintained by governmental inspectors in the same manner that milk is continuously inspected. One may purchase oysters anywhere in the

United States with the assurance that their sanitary quality is equal to that of milk.

The oyster growers are thoroughly alive to the value of the education of the public regarding the desirability of eating oysters, and they are planning to inform the public just as the dairymen are doing. The dairymen have had the advantage of propaganda of milk drinking put forth by boards of health, lay health organizations, and health periodicals until everybody appreciates the value of milk products. The oystermen may legitimately adopt the same methods of education, and, in fact, are planning to do so on a large scale.

One of the features of the Sayville Convention was a visit to the oyster houses of Long Island. The oystermen are fully aware of the value of sanitary surroundings, and they equip their new buildings with enameled handling tables and washers, and paint the walls a spotless white. The oysters, before being opened, are subjected to a conditioning process in pure water, and the finished product is packed in sanitary containers after the manner of milk. Among the latest methods is that of the quick freezing of the opened oysters, after the method successfully applied to fish and fruit. When this method comes into general use, oysters will be available the year around.

SUFFOLK COUNTY

A meeting of the Comitia Minora and members of committees of the Suffolk County Medical Society was held at Roe's Hotel, Patchogue, N. Y., on August 18, 1931, with eight members present.

Dr. Arthur T. Davis, Health Commissioner of Suffolk County, reported on the poliomyelitis epidemic, stating that thirty cases had been reported in the County since July 1st, seven of them being non-residents. Two had died and twelve recovered, leaving seventeen still under quarantine. The Commissioner had found a high degree of cooperation in both the doctors and the people of the County. The doctors were reporting the cases early, and were doing spinal punctures and taking blood serum from recovered cases for treatment of the present patients.

Dr. D. E. Overton of Hempstead reported on conditions in Nassau County, saying that fifty-eight cases had been reported up to date, and that he had been authorized by the County Society and the District State Health Officer to do diagnostic work and collect blood serum for treatment. He also reported on a meeting of the County Society held on August 4th, which had been attended by 125 physicians and was addressed by Dr. Lloyd Aycock. As a result of this meeting the doctors had entered into the work of prevention and control of the epidemic with renewed interest. (See this *Journal*, August 15, page 1048.)

Dr. Frank Overton, Chairman of the Public Health Committee, gave a report, including the following recommendations:

1. Support the County Health Officer, Dr. A. T. Davis:
   (a) Approve his past actions;
   (b) Support his requests and recommendations in the future.
2. Secure the cooperation of the family physicians by
   (a) Personal contacts of the County Health Officer and his deputies and assistants;
   (b) A letter from the Comitia Minora to be sent to every doctor.
3. Inform the people. A letter to be sent to every newspaper in the County.

On motion these recommendations were approved.

Dr. Overton submitted the following form for the letter to be sent to every doctor in Suffolk County, and on motion it was approved:

August 19th, 1931.

Dear Doctor:

The Comitia Minora and members of Committees of the Suffolk County Medical Society met at noon on Tuesday, August 18, 1931, and considered the measures which physicians should take for the prevention and control of poliomyelitis.

Dr. Arthur T. Davis, County Health Officer, reported conditions as follows:

Number of cases reported in Suffolk County since July 1:

7 non-resident
23 resident

Patients recovered, 12
Number still under quarantine, 17
Number died, 2; 1 a non-resident

Doctor Davis said that physicians were cooperating in an excellent way, and that they had diagnosed over half of the cases in the pre-paralytic stage. Serum had been given to all requiring it.

Doctor Davis also called attention to the letters and literature sent out by the Special Committee of the Medical Society of the State of New York, the more important being printed in the NEW YORK STATE JOURNAL OF MEDICINE of August 15, pages 1038 and 1048. This committee suggested that county medical societies adopt the following measures:

1. Educate and encourage physicians to make a diagnosis in the pre-paralytic stage of the

disease. This means that when the family doctor sees a suspicious case, he does not delay and wait for positive developments, but shall take steps *at once* to determine the diagnosis.

2. Advise every doctor to memorize the essential points of diagnosis in the pre-paralytic stage. There are nine important points listed by the special sub-committee of the Medical Society of the State of New York and printed on page 1038 of the *Journal* of August 15, as follows:

1. Fever
2. Headache
3. Rigidity of the neck
4. Tremor
5. Apathy
6. Vomiting
7. Retention of urine
8. Constipation
9. Sweating

Not all of these symptoms and signs may be present, but yet the doctor should look for them one by one.

The Comitia Minora recommends that every doctor carry this list in his pocket for easy reference when he is called to a case.

The Comitia Minora commends the physicians of Suffolk County for the active cooperation in dealing with the epidemic of poliomyelitis, and believes that a continuation of their preparedness will be sufficient to prevent the spread of the disease.

WILLIAM J. TIFFANY,
President, Suffolk County Medical Society;
E. P. KOLB, *Secretary;*

The Comitia Minora approved the following letter to be sent to every newspaper in Suffolk County:

To the people of Suffolk County:

The officers and committeemen of the Suffolk County Medical Society held a meeting in Roe's Hotel on August 18, 1931, to consider the situation in regard to infantile paralysis. The unanimous opinion was expressed that the County Health Department is handling the situation wisely and effectively; and also that family physicians are keenly interested to recognize the disease early and to give treatment before the disease has developed to a crippling stage.

A positive determination of the presence or absence of the disease is made by means of a spinal puncture, and an examination of the fluid.

If the disease is present, the approved treatment is that of giving serum at once.

The serum used in the treatment of poliomyelitis consists of the fluid part of the blood drawn from a patient who has recovered from the disease. The State Department of Health appeals to former patients to donate some of their blood, for which the State will make payment. Governor Roosevelt set an example by donating a pint of his own blood, he having had poliomyelitis several years ago.

The work of recognizing cases, giving serum, and collecting blood for making the serum is under the direction of Dr. Arthur T. Davis, County Commissioner of Health, whose office is in the County Court House, Telephone, Riverhead 2110. Dr. Davis is in a position to advise any physician or other person in the county regarding poliomyelitis, and to provide all necessary means for recognizing and treating the disease.

The officers of the Suffolk County Medical Society emphasize two measures:

1. Keep children away from crowds, for the disease is caught by contact with a person who already has the disease, possibly in a mild form.
2. Call a doctor *very early* when a child develops a mild sickness, especially headache and vomiting.

Remember, you must call a doctor before he can help you. In 1916 people concealed their cases, fearing to summon a doctor lest he call the sickness poliomyelitis—and the result was the spread of the disease to an alarming extent.

In 1931, people are calling a doctor early and are heeding his advice, and the result is that few cases have developed.

FRANK OVERTON,
Chairman, Committee Public Health.

POPULAR PAMPHLET ON POLIOMYELITIS

The Department of Health of the City of New York has issued the following pamphlet on poliomyelitis for general distribution among the people.

INFANTILE PARALYSIS (POLIOMYELITIS)
WHAT EVERYONE SHOULD KNOW ABOUT THE DISEASE
No. 1

What is infantile paralysis?

It is an infectious (catching) disease.

How is it spread?

It is spread from patient to others by direct contact.

Patients carry the germs in their mouth and nose at least several days after the fever.

The germs are present in the discharges from the mouth and throat of those ill and may be present in the nose and mouth of members of the same family.

The germs may be carried in mouths of healthy persons. These are the reasons why all sick people and crowds should be avoided.

Parents are advised not to visit children's camps and children's institutions so as to protect the children against infection.

What should be done to avoid infantile paralysis?

Follow the well-known and accepted rules that always protect one during outbreaks of infectious (catching) disease.

Avoid crowds and groups, whether public or private.

Avoid all sick children as well as older persons who are ill.

Mothers should see to it that children:

Wash their hands frequently during the day and always before eating.

Don't let your children be kissed by any one.

Are bathed daily.

Avoid the common towel and drinking cup.

Keep fingers and other objects away from nose, mouth and eyes.

Have sufficient sleep.

Have regular daily bowel movements.

Have fresh air and sunlight.

Have rest periods during the day so as not to become overtired.

In the care of the home, mothers should:

Dust with a damp cloth.

Kill all flies and insects.

Guard all food from flies and insects by means of covers, netting and ice boxes.

What ages are attacked?

Infantile paralysis is a disease of childhood. Any age may catch the disease. Most grownups escape.

What are the early symptoms?

Drowsiness, fever, headache, irritability, especially when moved, vomiting, usually stiffness of the neck, followed usually a few days later by inability to move some set of muscles or hands or legs or feet.

What food should be given to children?

Clean, wholesome food, suitable for this time of the year.

Plenty of milk, fruit, fresh vegetables and eggs.

Keep food, especially milk, in the refrigerator.

Avoid fried foods or foods liable to upset the stomach.

Do not give money to your children to buy drink or food. Buy them for your children.

Raw fruit and other foods eaten uncooked should be carefully washed.

What to do when a child is ill.

Send for a doctor at once. Do not try to diagnose the condition or take your neighbor's advice.

Put the baby to bed. Sponge the baby if the temperature is high. Stop feeding, give plenty of cool water.

Keep other children away from the sick child until the doctor tells you what to do.

If you cannot get a physician, notify the Department of Health.

TOMPKINS COUNTY

There being considerable poliomyelitis reported in New York and contiguous States the officers of the Tompkins County Medical Society, feeling it more than probable that cases of this dread disease would develop in this county, called a special meeting of this Society for the purpose of receiving instruction in the latest methods of early diagnosis and treatment.

This meeting was held August 13th, 1931, in the parlors of the Ithaca Chamber of Commerce at 8:30 P. M.

Dr. Wardner D. Ayer of Syracuse, a specialist in this disease, addressed the meeting.

The Doctor stressed the great importance of recognizing the early symptoms before paralysis developed, viz., fever, vomiting, headache, nearly always referred to the back of the head and neck, and more or less stiffness of the back of the neck.

When these symptoms are present spinal puncture should immediately be done, some of the spinal fluid be withdrawn and sent to the laboratory; and human blood serum from a previous case be injected in the spinal cord, which would oftentimes abort the disease before paralysis occurs, or at least very much lessen the extension of it.

He showed many slides of records of cases so treated with material benefit. He stated that paralysis usually begins about three days following the first symptoms.

J. H. Conway of Hornell, State District Health Officer, opened the discussion and complimented Dr. Ayer upon his presentation of the subject, and was followed by many of the members and visitors present. There was a large attendance of members, and visitors were present from several other County Societies.

Dr. Ayer was given an enthusiastic vote of thanks and the meeting adjourned.

WILBER G. FISH, *Secretary.*

THE DAILY PRESS

THE PERFECT GUEST

The irritating guest is the contributing cause of the nervous breakdown of many a housewife, especially during the hot week-ends of summer. The New York *Times* of July 29 contains the following editorial on the perfect guest:

"The first requirement is to arrive at a clearly stated time. The guest who says he will come after luncheon and then turns up before, may embarrass his hostess, even though she has told him that 'any time will be all right.' The housewife will also appreciate it if he will 'announce clearly and firmly after breakfast what meals he proposes to consume during the day.' An occasional absence at mealtime is nothing to be apologized for; it only endears the guest to his entertainers.

"No guest should ever admit eccentricities of diet. 'If you are a dyspeptic or a vegetarian, either do not be a guest, or else consume recklessly everything which your doctor has told you is poison to your system.'

"Don't wait for your hostess to say: 'Well, you have had a busy day, and I must not keep you up any longer.' Make the fatal remark yourself. To come in at 2 A. M. without making a sound displays skilled guestcraft. To turn off all the lights within reach means more merit acquired."

TESTS FOR DRUNKENNESS

The Police Department of New York City introduced a new system in dealing with chauffeurs accused of being intoxicated while driving automobiles. The New York *Herald Tribune* for August 13th described the record blank which every police officer is required to fill out when he brings an arrested driver to a station house. The former custom was described as follows:

"Heretofore in New York whenever a motorist, male or female, has been escorted from a driver's seat to one of those houses where the lights are always green, and the patrolman has told the sergeant or lieutenant that his prisoner was tipsy, the desk officer has telephoned to a hospital and asked for an ambulance surgeon. It was up to the ambulance surgeon to say whether the prisoner was intoxicated or sober. If the doctor said "drunk," then in all likelihood he would have to go to court when the case was called.

"Now doctors are human, and if they can get out of going to court they like to do it. One way to avoid it, in these intoxicated driver cases, is to pronounce the motorist sober, and forget him. Which, it appears, is just what a great many doctors have done despite the firm belief and conviction of the patrolman on the beat that his captive was plastered, boiled or even blotto."

The new plan is described as follows:

"The examinations will be made immediately a motorist walks, staggers or is carried into the station house. A full report will go to the magistrate when the case is called, which is usually several days after the arrest—time enough to give even the tightest of prisoners ample opportunity to sober up.

"The new examinations were prepared by Deputy Chief Inspector John J. Hennessy after long research and profound study of thousands of treatises and documents concerning the application of the oldest of the laws of relativity—those by which a man is judged to be intoxicated or not intoxicated.

"Meanwhile the ambulance surgeons will rest unbothered in the hospital or go clanging through the streets on more serious missions than that of determining whether a man in a police station is intoxicated or sober. When the case comes to court the magistrate will have a report of facts and impressions recorded immediately after the arrest. Inspector Hennessy hopes it will prove an improvement over the old system."

The new form is shown on the next page.

There are two practical reasons for the use of the blank.

1. To prevent a change of opinion on part of the officer, mainly from the influence of friends of the accused.

2. To call attention to a considerable number of details of observations of importance in the determination of drunkenness or sobriety.

It is not generally known among physicians, and even lawyers, that the opinion of a lay observer regarding the drunkenness or sobriety of an accused person must be admitted when offered as evidence. This lay point is discussed clearly and fully in a legal editorial by Mr. Lloyd P. Stryker printed in this JOURNAL on December 1, 1927, page 1321.

Mr. Stryker alludes to the need that chemical tests for the presence of alcohol in the body be

Examination of Prisoner Charged with Driving while Intoxicated

Name of Prisoner.....Address of Prisoner.....

....

Sex Age Color Social Condition Occupation

Owner
Operator } .....
Chauffeur

License Number Registration Number of Vehicle

Charge..... Specific Offense.....

....

....

Time of Occurrence Date of Occurrence Location of Occurrence

....

Name and Address of Complainant

....

Names and Addresses of Witnesses

....

.....

ORAL EXAMINATION

Q. Is there anything the matter with you? A. .....

Q. Have you been drinking? A. .....Have you been taking any medicine? A. .....

GENERAL EXAMINATION

Marks of Injury? .....

Odor of Breath—(Alcoholic—Non-alcoholic) .....

Co-ordination—

1. Unable to stand without aid..... 2. Staggering gait on walking straight line.....
3. Unable to stoop without staggering..... 4. Any other unusual condition.....
5. Normal .....

Speech—

....

Thickened and Slurred Blasphemous or Abusive

....

Loud and Boisterous Normal

Mentality and Manner—

Able to tell time and date correctly..... Violent.....
Abusive..... Excited.....Calm and Normal.....

Reading and Vision—

Ability to read several lines of newspapers (with or without glasses, as required by defendant).....

....

General Appearance—

Face ..... Eyes.....

Clothing clean, soiled or disarranged.....

Conclusion—Found (to be—not to be) suffering from the effects of overindulgence in some intoxicating agent or agents and (fit—not fit) to operate an automobile on the highway at this time.

....

Time Date

....

Arresting Officer (Signature) Rank Shield No. Command

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combined with mental tests. Such a combination test was described in this JOURNAL of August 15, 1927, page 932. New York City has not yet introduced this test, but doubtless that step will be taken soon.

The New York *Times* of August 15 describes the proceedings in a station house at the examination of the first person arrested for driving an automobile while drunk. The *Times* gave the details of the prisoner's responses to the several items on the questionnaire and ended with the conclusion of the desk sergeant, "Not intoxicated," but the *Times* continues:

"Nevertheless he (the prisoner) was locked up on charges of driving while intoxicated and assault in the third degree. He will have a hearing this morning. It was pointed out that the new test is designed to enable the arresting officer to testify, in detail to the prisoner's condition, since in the past he has often been able to give only his general impression, which the courts have held is not enough."

BOOK REVIEWS

THE VITAMINS. By H. C. SHERMAN and S. L. SMITH. Second edition. Octavo of 575 pages. New York, The Chemical Catalog Company, Inc., 1931. Cloth, $6.00. (American Chemical Society Monograph Series, No. 6.)

The Vitamins is an American Chemical Society Monograph, and the authors have made an attempt to "summarize the very considerable amount of information which has been gained regarding the chemical natures of the individual vitamins, and the more voluminous knowledge regarding their roles in life processes, their formation and distribution in nature, their relative abundance in different types of food materials and stability under the conditions to which these are likely to be subjected." One can gain an idea of the tremendous amount of material which has been considered, from the fact that nearly two hundred pages of the book are given over to bibliography, and the story of the vitamins is told from the beginning, when the first lessons were learned from scurvy, to the latest experimental work. In all, six vitamins are discussed, and a chapter is given to each. It is obviously an authoritative treatment of the subject, and yet the authors taking into consideration that many and varying types of individuals would be interested in the matter, have prepared not a pure chemical treatise, but an interesting and readable account of the facts, which in this second edition they have brought up-to-date.

L. C. JOHNSON.

THE TREATMENT OF BEHAVIOR DISORDERS FOLLOWING ENCEPHALITIS. An experiment in re-education. By EARL D. BOND, M.D., and KENNETH E. APPEL, M.D. Octavo of 163 pages, illustrated. New York, The Commonwealth Fund Division of Publications, 1931. Cloth, $1.75.

An interesting frank account of a well conducted effort, termed an experiment, to see how much can be accomplished by application of psychiatric methods, in correcting such infirmities in this youthful class of cases. In the main no gross force, corporal punishment, medication, or prison discipline, but system, grouping, surroundings, occupation, personal influence, regular hours, and study of the individual child. In the six-year period there were at various times 62 children of 12 years or under, 48 being post-encephalitic, and 14 comparable cases as control. Besides discussion of principles and patients the facts and results are shown by tables, charts and a summary of cases. Practical cures in some, improvement in many and several failures, a most encouraging degree of success. The attempts to find deep significance in bits of child dreams and such marks sounds more like a guessing game than is probably intended. It is admirably printed, and a source book for all interested in this field.

WM. BROWNING.

RECENT ADVANCES IN CARDIOLOGY. By C. F. TERENCE EAST, M.A., M.D., and C. W. CURTIS BAIN, M.C., M.B. Second edition. Octavo of 353 pages, illustrated Philadelphia, P. Blakiston's Son & Co., Inc., 1931. Cloth, $3.50. (*The Recent Advances Series.*)

This comparatively small book covers the whole field of cardiology. It provides an admirable supplement to the ordinary text book in cardiology. It contains a great deal of valuable information and discusses all the major changes which have taken place in this subject in recent years. The book is well written and there is an interesting discussion of points which are still in dispute. Although some of the material is somewhat advanced it is presented in a comparatively simple way so that it ought to be readily understandable by those who have not had an opportunity of studying the subject closely. Each chapter is followed by a small list of references to the leading papers on the subject dealt with. Anyone interested in internal medicine as well as cardiologists will find the time well spent in reading this admirable book.

J. HAMILTON CRAWFORD.

THE CRIMINAL, THE JUDGE, AND THE PUBLIC. A Psychological Analysis. By FRANZ ALEXANDER, M.D., and HUGO STAUB. Translated from the German by Gregory Zilboorg, M.D. 12mo of 238 pages. New York, The Macmillan Company, 1931. Cloth, $2.50.

To thoroughly appreciate this book, one must have a reading knowledge of psychoanalysis. And the reader must understand the significance of the divisions of the instinctive (unconscious) psychic life,—into the id (the deepest layer); the ego, and the super-ego. (From the latter is developed the ego-ideal which is based on the ethical principles taught by parents, teachers, religious leaders, society, etc.) The conscious part of the super-ego we know as conscience.

Alexander says that both neurotic symptoms and antisocial conduct, are motivated in part by the instinctive life. He shows the part the ego and the super-ego play in both types of reactions.

The criminal super-ego makes little attempt to restrict the instinctive drives of the id, in favor of society. Of course crime is the result of many psychic motives. In many instances criminality results from a faulty bringing up, Alexander says.

The neurotic expresses his trends by symptoms (symbols); the criminal, by antisocial acts.

The super-ego is the inner representative of reality and depends for its strength on the relation between the ego and authority.

Alexander divides criminals into three classes:

1. Neurotic criminals.
2. Normal criminals.
3. Organically determined criminals (imbeciles, schizophrenics, etc.)

According to Alexander, the chief role of the expert of the future is to say how much the ego, and how much the unconscious played in the given antisocial act. He says of course that there will be no official recognition of the unconscious in our courts in the near future. He feels that perverts need hospital care rather than prison sentences.

Alexander's discussion of the unconscious feeling of guilt, the need of punishment, and the questions of atonement and expiation are most masterful. According to him expiation, retaliation, and compensation all gratify the socially inhibited sadism which interferes with a rational treatment of the criminal problem.

The period when a fine social super-ego is chiefly developed (6-12 years) is the time to really begin to prevent crime. For a fine ego-ideal is the best crime preventative.

All students who are interested, not only in criminality but in the neuroses, should possess this book which is an analytic study in advance of the times, written by one of the master-minds of psychoanalysis.

JOHN F. W. MEAGHER.

WHITE HOUSE CONFERENCE, 1930 ADDRESSES AND ABSTRACTS OF COMMITTEE REPORTS. White House Conference on Child Health and Protection called by President Hoover. Octavo of 365 pages. New York, The Century Company, 1931. Boards 50c.

This book contains the report of the various committees and their recommendations read before the national Child Health Conference, at Washington in November, 1930.

The subject matter of the papers read and discussed are varied and interesting. The entire field of Preventive Pediatrics from prenatal care to child labor are discussed in detail.

The article by Dr. Louise Stanley, on "The Family and Parent Education" deserves special mention. This should be read by every interested man and woman.

Our statesmen and legislators will find this book a valuable guide for their daily tasks. The book will interest every doctor as a citizen but not as a practicing physician.

It certainly makes good reading for the well informed individual for only in such special texts can justice be done to such a voluminous report. The socially minded citizen will find in this book a fund of information which could only be briefly recorded in the daily press. This publication makes it available in its entirety. One can look forward with interest to the next copy reporting the more recent conference held in Washington the early part of the current year.

HARRY APFEL.

PRACTICAL CLINICAL PSYCHIATRY, for Students and Practitioners. By EDWARD A. STRECKER, A.M., M.D., and FRANKLIN G. EBAUGH, A.B., M.D. Third edition. Octavo of 553 pages, illustrated. Philadelphia, P. Blakiston's Son & Co., Inc., 1931. Cloth, $4.00.

For one who wishes to study psychiatry by the case method, this book by Strecker and Ebaugh is to be highly recommended. Their line of approach is more along the lines of orthodox psychiatry. They have only utilized the material of the analytic literature to a slight degree. Both of the authors are well-known in the American mental hygiene movement, and what they have to say is not only scientifically acceptable, but what is almost as important, their style is such as to make their book very interesting to read.

JOHN F. W. MEAGHER.

HEART DISEASE. By PAUL DUDLEY WHITE, M.D. Octavo of 931 pages, illustrated. New York, The Macmillan Company, 1931. Cloth, $12.00. (Macmillan Medical Monographs.)

This volume is fundamental, clear, concise, comprehensive, accurate, modern, carefully written, logical, well-presented, readable, understandable, and instructive. The subject is presented in four parts: cardiovascular examination, symptoms and signs; the incidence, causes and types of heart disease; structural cardiovascular abnormalities; and disorders of cardiac function. The book is one which must be studied carefully; it is of the type which but little can be absorbed daily, as practically all information and useful knowledge of this interesting but difficult subject is presented not only as a text book literature. The is exemplified he writings upon the to is unusual and it study.

A complete bibliography of one hundred and ninety pages is added. An appendix of one hundred and eight unsolved cardiovascular problems gives the reader an idea of some of the important questions upon which to expend our efforts, and indicates some future work upon this subject. No review can present adequately the value of this study.

The publishers have given us a volume of which they may be proud, excellent paper, clear readable type, with illustrations of the finest workmanship. Everyone who attends the sick should have this volume for study and ready reference.

HARRY MONROE MOSES.

AIDS TO BACTERIOLOGY. By WILLIAM PARTRIDGE, F.I.C. *Fifth* edition. 16mo of 311 pages. New York, William Wood & Company, 1931. Cloth, $1.75. (Students' Aids Series.)

This little booklet presents the essentials of bacteriology. There is adequate description of the usual bacteria found in disease and also of those that are less common. The apparatus required for the study and identification of bacteria, the preparation of nutrient media, and routine examination of bacteria are described in separate chapters. The bacteriology of the more recently discovered diseases is also given. There are also chapters on the bacteriological examination of water, air, soil, and food. The book should be of great help to the student of bacteriology.

EDWARD H. NIDISH.

CRIPPLED CHILDREN: Their Treatment and Orthopedic Nursing. By EARL D. MCBRIDE, B.S., M.D. Octavo of 280 pages, illustrated. St. Louis, The C. V. Mosby Company, 1931. Cloth, $3.50.

This is a 275 page book with 159 illustrations, dealing with the elementary features of orthopedic conditions. It is very precise in the discussion of the various nursing problems incidental to each disease. For those who have to give courses in Orthopedic Nursing it will be found invaluable. It is highly recommended to Instructresses in Nurses' Training Schools. It should be in the library of every Nurses' Home.

Like other volumes of its kind, it contains much valuable information for the General Practitioner and the Pediatrician. It makes a nice little manual for the Orthopedic Surgeon, particularly the younger man, who is often confronted with the problem of advising precise nursing care after the desired immediate result from his operative or non-operative treatment of an orthopedic problem has been attained.

D. E. M.

A SYNOPSIS OF THE UNITED STATES PHARMACOPŒIA AND NATIONAL FORMULARY PREPARATIONS. By H. J. FULLER, PH.C., PHM.B. Octavo of 247 pages. Philadelphia, P. Blakiston's Son & Co., Inc., 1931. Cloth, $2.00.

Professor Fuller's Synopsis enables the pharmacist or physician to observe the voluminous official volumes from the vantage point of a birds-eye view. Primarily to supplement the student's survey of the larger volumes, the Synopsis will be of unusual service to any pharmaceutically minded person, for whom it will assume the rôle of an elaborate index. It is not intended as a substitute for the Pharmacopœia and the Formulary but to strip them down to their skeleton.

Professor Fuller's tabulations of the Official Preparations classify them according to their form: aceta, acida, alkaloids, ampullae, and so on. Each reference table regarding synonyms, com- sage. His book is gener- ons. A section is reserved nt details of posology in a form conducive to ready reference.

The Synopsis will undoubtedly come to be considered an indispensable part of the reference equipment of technical office and library.

FREDERIC DAMRAU.

OUR NEIGHBORS

ACTIVITIES OF MILWAUKEE COUNTY MEDICAL SOCIETY

The July number of *Minnesota Medicine* contains an address given by Mr. Theodore Wiprud, Executive Secretary of the Milwaukee County Medical Society, on "Experiences in County Medical Organization," on February 7, 1931, before the Annual Conference of Secretaries of County Societies of Minnesota. The address consisted principally of a description of the activities of the Milwaukee County Society. Doctor Wiprud, in describing the works of the Society during the two years in which he has been Secretary, said:

"To meet the demands which are made upon it the county medical society must be organized. This does not mean the loosely organized unit which has become so familiar, where infrequent scientific meetings comprise the sole activity. It means a unit that will not only improve its members scientifically, but will also assume its responsibility in other directions, not least of all to the community. To do this effectively a full-time secretary or a member who can give a large portion of his time to Society activities is needed. In large centers a part-time secretary has a thankless and difficult job. He cannot possibly do justice to the job entrusted to him and still give adequate attention to his practice."

"A rather unusual situation existed in Milwaukee prior to the inauguration of the new program with a full-time secretary. Difficulties between the Health Department and the medical profession had multiplied with consequent ill feeling. Newspapers were none too friendly, and seldom favored the medical profession's view of any subject under discussion. This in itself was not unusual, but the fact that other organizations were the source of medical information, and that a privately owned physicians' telephone exchange served over 200 physicians, was unusual. Officers of the Society had been disturbed by the possibilities of this telephone exchange under private management. While it was then being ethically operated, under different management it might be a source of great danger to the prestige of the medical profession of Milwaukee."

Physicians' Service Bureau: The first major activity undertaken by the new secretary was the purchase of the physicians' telephone exchange and its organization under the name of "Physicians' Service Bureau." The report says:

"The Bureau has proved exceptionally valuable to our members. To use the service a member must subscribe to the Bureau and pay a monthly fee, for which he is rendered twenty-four-hour telephone service. The Bureau acts as a connecting link between the patient and the physician. We opened on November 1, 1929, with 220 members. At present we have 270. The equipment and personnel of the Bureau has been improved from time to time until at present we believe we have a very efficient service.

"The Physicians' Service Bureau acts as an information bureau for the public. Calls are constantly received on every conceivable subject. Over 52,000 incoming and outgoing calls were handled last year. A third of these were inquiries. Most of them were for specialists. The procedure followed is to refer these inquirers back to their family physician. If they have no family physician, a classified list of specialists, approved by our Educational Committee, is referred to. Three names are given from which the inquirer makes his choice. When the next call is received in the same specialty, the next three names are given. In other words, the list is rotated. No information in regard to treatment is ever given by an operator."

Scientific Programs: Scientific meetings were described as follows:

"Of course our scientific programs are an important feature. Attendance has so greatly increased that our officers have been much elated. An average attendance previous to last year was 100. This was increased to an average of 188. At four out of eight of our monthly meetings, the attendance ran over 250.

"This increase was partly due to the fine programs, the publicity given the meetings in our monthly publication, and the last-minute notices sent members. An added attraction was the social hour which followed each scientific meeting. This hour was given over to visiting and getting better acquainted. Buffet lunch was served during the social hour, and physicians, being human, enjoyed this a great deal. We feel that this feature has helped to stimulate better feeling and understanding among our members."

Education: Educational work among physicians is described:

"A number of unusual activities were sponsored by the Educational Committee. Among them were courses in public speaking and medical writing. The public speaking course, which was given by Professor Ewbank of the Public Speaking Department of the University of Wisconsin under the joint auspices of the University and the Medical Society, was a decided success. Over

(*Continued on page* 1112—*Adv. xvi*)

Identified as we are
with the best years
of pediatric progress,

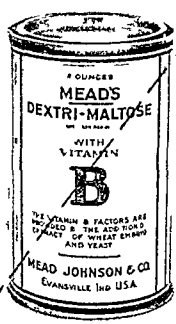
We Know Which Side *of this* Question
You Are On

Never any dosage directions in any Mead Products



Should mothers feed their babies by free medical advice given by neighbors, newspapers, manufacturers and other busybodies — or —

Should the problem of infant-feeding be kept where it belongs — in the hands of the medical profession —



From the beginning—

We have stood on this, your side of the question.

MEAD JOHNSON & COMPANY
Evansville, Indiana, U S A

Specialists in Infant Diet Materials and Pioneers in Vitamin Research

Is It Worth While?

MEAD'S DEXTRI MALTOSE NOS 1, 2 AND 3 MEAD'S DEXTRI MALTOSE WITH VITAMIN B MEAD S CEREAL MEAD'S POWDERED LACTIC ACID MILKS, NOS 1 AND 2 MEAD'S ALACTA MEAD'S POWDERED WHOLE MILK MEAD'S POWDERED PROTEIN MILK MEAD'S SOBEE MEAD'S VIOSTEROL IN OIL 250 D MEAD S 10 D COD LIVER OIL WITH VIOSTEROL MEAD'S STANDARDIZED COD LIVER OIL MEAD'S POWDERED BREWER S YEAST.

With this in hand



The cardiologist is assured of dependability in digitalis administration

EACH PILL CONTAINS
0.1 GRAM (1½ GRAINS)
OF DIGITALIS.

PHYSIOLOGICALLY
STANDARDIZED

Send for sample and literature

DAVIES, ROSE & CO., Ltd.
Pharmaceutical Manufacturers
BOSTON, MASS.

D-14

(*Continued from page* 1110)

70 members enrolled. The course in medical writing has attracted wide and favorable comment. There are 45 members enrolled in this course, which is also sponsored by the Society and the University."

Surveys: A survey was made of charity work done by doctors:

"A survey has been in progress during the past year under supervision of the Social Medicine and Medical Economics Committee. The first survey completed was that of charity work being done by members of the Society in Milwaukee County. . . . This report revealed that our physicians were doing charity work valued at a million and a half annually, over most of which they had no control. Our survey is continuing in all fields of medical practice, and just now we are particularly interested in our county institutions. We feel that much will be accomplished by this committee."

Collections: A collection service was discussed:

"A collection service operated under the supervision of the Society but not by it, has been planned, and we expect that it will be opened on or about March first. Some societies have had unfortunate experiences with such a service. However, others have done well, particularly when carried on as an enterprise separate from the Society."

Publication: A monthly publication is described as follows:

"Our monthly publication, *The Milwaukee Medical Times,* we believe has stimulated the interest of our membership. It has been developed from a four-page folder to a forty-page journal. Many favorable comments in regard to its contents and appearance have been encouraging to the editors. The *Times* has been self-sustaining."

Speakers' Bureau: Public health education is conducted as follows:

"The Speakers' Bureau provides speakers for lay organizations. Since its organization a little over six months ago, increasing demands have been made upon it. Daily we receive calls for speakers. People are interested in medical and health subjects, and many favorable comments are made upon our speakers by the organizations before which they appear. Lists of subjects are sent out to clubs, parent-teacher organizations, and other groups. They select the subject about which they wish to hear, and learn the name of the physician who will speak on it afterward. This Bureau will become increasingly useful.

"All press information is given out through the Executive Secretary's office. Every effort has been made to give the newspapers legitimate and

(*Continued on page* 1114—*Adv. xviii*)

Modern diets often lack minerals

To-day, authorities are stressing the importance of the essential mineral salts. In addition to building sturdy bones, and blood rich in hemoglobin, these mineral elements aid metabolism and contribute to nervous stability.

Yet many modern diets cannot be depended upon to furnish the proper quota of minerals, and therefore millions of people suffer from the effects of demineralization. Cooking destroys a variable amount of the mineral value of foods — in some instances as high as 76 per cent.

To correct this loss and to remedy demineralization — with its attendant symptoms of nerve fag, neurasthenia, lowered vitality and loss of energy—a tonic rich in mineral salts is needed.

Fellows' Syrup contains the mineral salts of sodium, calcium, potassium, manganese, iron and phosphorus, together with the added metabolic stimulants — strychnine and quinine. Sixty years of clinical experience the world over testify to its value as a tonic.

Suggested dosage: A teaspoonful in half a glassful of water three or four times daily.

FELLOWS' SYRUP

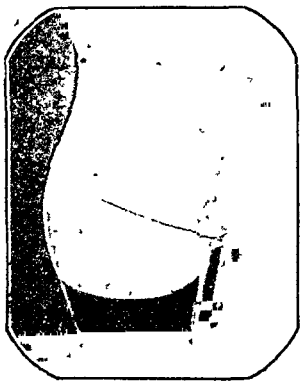
OF THE HYPOPHOSPHITES

CONTAINS THE ESSENTIAL MINERALS

SAMPLES ON REQUEST

Fellows Medical Manufacturing Co., Inc. **26 Christopher St., New York City**

"STORM" The New "Type N" STORM Supporter



One of three distinct types and there are many variations of each. "STORM" belts are being worn in every civilized land. For Ptosis, Hernia, Obesity, Pregnancy, Relaxed Sacroiliac Articulations. High and Low operations, etc.

Each Belt Made to Order

Ask for Literature

Mail orders filled in Philadelphia only

Katherine L. Storm, M.D.

Originator, Patentee, Owner and Maker

1701 Diamond Street, Philadelphia, Pa.

Agent for Greater New York

THE ABDOMINAL SUPPORTER CO.

47 West 47th Street **New York City**

POISON IVY EXTRACT

LEDERLE

for the treatment of Rhus Dermatitis

POISON Ivy Extract (Lederle) is a solution of the purified toxins of Rhus toxicodendron in almond oil. The efficiency of this product has been demonstrated by its clinical use throughout the country during the past six years. This almond oil extract possesses the advantages of being non-irritating and its injection, therefore, does not cause severe reactions or pain.

POISON IVY EXTRACT (Lederle) is supplied in packages of four syringes containing 1 c. c. each, and in single syringe packages.

Literature upon request.

LEDERLE LABORATORIES

Incorporated

NEW YORK

(*Continued from page* 1112—*Adv. xvi*)

reliable information, and they have responded splendidly."

Health Department: Dr. Wiprud referred briefly to the strained relations of the physicians with the City Health Department, and the cooperation brought about simply by a personal contact with the Commissioner in a friendly manner. The first cooperative action was that of immunization against diphtheria.

Health Council: A new body, the Health Council, is described as follows:

"Our Health Council, composed entirely of our members, was created last year. The Council was created for the purpose of developing a public health program in which the Society would assume leadership. More recently it was enlarged to include representatives of hospitals, and nurses' organizations, who will meet with the Council quarterly to discuss mutual problems. The first session of the enlarged group was held the first week of this month.

"The Health Council is going to put forth a systematic effort to interest the rank and file of the profession in periodic physical examinations. First of all it will attempt to determine what comprises an adequate, minimum physical examination to be given by a general practitioner without laboratory and *x*-ray equipment available. Such an examination should be complete enough to reveal the necessity, if any, of extensive laboratory tests.

"To prepare our physicians better for this work, practical post-graduate courses in diagnosis will be given. The first, which is to be given in March, will be an intensive course on the diagnosis of the chest diseases."

Results: The results are summed up as follows:

"While there is much tangible evidence of progress, we feel that the intangible accomplishments have been of equal if not more importance. The prestige that the Society has gained in the past year because of its improved organization has placed us in a different and superior relation to all outside groups. Daily we are impressed with the value of this increased prestige. One evidence of it is shown by the constant seeking of advice and approval of the Society by organizations and individuals who never heretofore gave the Society consideration."

DISSENSION IN KNOX COUNTY, ILLINOIS

The July issue of the *Illinois Medical Journal* contains an account of the proceedings of the

(*Continued on page* 1115—*Adv. xix*)

(*Continued from page 1114—Adv. xviii*)

House of Delegates of the Illinois State Medical Society, in which both the Secretary of the State Society and the Councilor of the Fourth District make lengthy reports on the dissensions in the Knox County Medical Society Dr Coleman, Councilor, reported·

"There have been troubles between the members of the Knox County Medical Society for many years past, resulting in the formation of factions, and finally of personal animosities, so intense that they are hard for an outside individual to believe.

"The present trouble seems to date quite definitely to the standardization of the Galesburg Cottage Hospital, by the American College of Surgeons, in 1929. At this time, all physicians of Knox County in good standing were invited to become members of the staff, and as is the custom in such standardized hospitals, were also to sign a hospital pledge, which a majority refused to sign. They were permitted to practice in the hospital for several weeks, after which a time limit was set and they were notified that after that time, no one could take patients to the Cottage Hospital who had not signed the hospital pledge.

"The Knox County Society had a hospital committee which had fifteen or sixteen members and they held many meetings, held conferences with the hospital board and drew up an agreement which they tried to have the board adopt. The board objected to three clauses in this agreement and refused to adopt it, so the society by a majority vote declared the Galesburg Cottage Hospital an unethical institution dating from August 15, 1930.

"Sometime following this last meeting, when neither side had made any concessions, a petition was sent to the Council, bearing signatures of the majority group, and a request that the Knox County Medical Society be allowed to surrender its charter, and that a new charter be issued to the officers of the society, all of whom were members of the majority group. This was apparently a method to force the minority group out of organized medicine, and the minority sent in a protest.

"A compromise meeting was held but a little while later.

"Notice was received that the majority group had preferred charges against seventeen of the minority group, on from one to six counts. The counts varied from 'Unethical Conduct,' details not specified, and 'Supporting an unethical institution, the Galesburg Cottage Hospital,' to 'Rebellion against the Society,' which last was preferred against all seventeen.

"Next a hearing was held lasting two hours.

"Many statements were presented, some of them sworn to and were introduced as evidence.

(*Continued on page 1116—Adv. xx*)

Here

is one of the advertisements of The Sugar Institute

THE advertisement reproduced here is one of the series appearing in publications throughout the country. In order to keep the statements in accord with modern medical practice, they have been submitted to and approved by some of the leading authorities in the field of human nutrition in the United States. The Sugar Institute, 129 Front Street, New York.



(*Continued from page* 1115—*Adv. xix*)

Those by one group would be presented by good reliable men, and would seem to be of decidedly damaging character to the other group; but the second group would present evidence that seemed equally reliable, from equally good men, that would refute the damaging evidence, and in turn present more of the same type of evidence which would be equally damaging.

The result was that the censors cited fifteen members for 'Rebellion against the Society.' Then both factions petitioned the State Society to annul the charter of the Knox County Society, so that the doctors would be free to form a new one. The report closes:

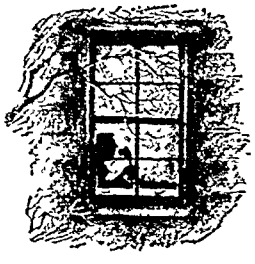
" 'Numerous suggestions for solving their admittedly difficult problem have been offered. The most practical appear to be either re-issue a charter to a neutral group or to a few of the less vehement of both sides, and then have the remainder readmitted slowly enough to prevent a recurrence of the trouble; or to allow one group to join the adjacent societies and issue the charter to the remainder. Another possibility might be to allow all the physicians in the county to have equal access to both hospitals. This last method, possibly the best, is beyond the control of the Council. The adjoining counties so far, have refused to admit any of the Knox County men; and as to finding individuals who are not very zealous on one side or the other, in my opinion, there are none. In consequence the county is at present without a component society and neither faction has been able to work out a compromise.' "

POPULAR HEALTH PUBLICITY IN ILLINOIS

The authorization of the House of Delegates of the Medical Society of the State of New York that popular medical publicity be started, makes the report of similar work in Illinois interesting to New York physicians. The Educational Committee of the Illinois State Medical Society reporting to the House of Delegates on May 5, according to the *Illinois Medical Journal* for July, said:

"*Speakers' Bureau:* Five hundred and fifty-three health talks were given by members of the Illinois State Medical Society before a total audience of 180,000. These speaking appointments were about equally divided between Cook County and down-State.

(*Continued on page* 1117—*Adv. xxi*)



Do you like to be remembered?

EVERYBODY does—at the right time. But many a patient waits for the night to think of the doctor, because pain has a way of pressing into the limelight when silence has spread its blanket under the stars. And nobody likes the ring of the telephone bell at two a. m.

Peralga will often silence that sleep-disturbing telephone bell, by relieving pain, discomfort, nervousness, if you will remember to provide in the daytime for the eventualities of the night. Peralga is not narcotic—you can safely prescribe it for any painful condition, to be used when needed.

Shall we send you a trial amount?

Peralga is a combination of amidopyrine and barbital

PERALGA

for the relief of PAIN

SCHERING & GLATZ, Inc., 113 West 18th Street, New York City

(*Continued from page 1116—Adv. xx*)

"The Educational Committee has scheduled physicians to address Teachers' Institutes, high school assemblies, women's clubs, parent teacher associations, university clubs, household science groups and home bureau organizations, farmers' institutes, nurses' alumnæ associations, churches, business and professional clubs, fraternities at universities, young mothers' clubs, Y.M.C.A., Y.W.C.A., Chambers of Commerce men's service clubs as Rotary, Lions, Optimist, Kiwanis Special emphasis has been given to subjects of current interest

"Over 40,000 high school students of Illinois heard health talks given by members of the speakers' bureau.

"Radio" Four hundred and sixteen health educational talks were given over the radio by physicians All material was prepared by individual physicians and approved by the Committee Due to the fact that the studios of Stations WJJD and WGN are in Chicago, members of the Chicago Medical Society were asked to prepare and broadcast these as radio talks

"The Committee has been responsible for three ten-minute talks each week from WJJD and for a weekly ten minute talk from WGN The Young Mothers' Hour sponsored by the Chicago Pediatric Society and the Educational Committee has been given every morning for the past twelve months and will be continued indefinitely. The excellent material presented in these talks has received favorable comment from many sections of the United States.

"Press Service. Eleven thousand eight hundred and ninety-eight articles announcing medical meetings, educational health articles and special features were released to Illinois newspapers Every paper in the State has received material from the office of the Committee

"During Health Promotion Week, special articles were released to all newspapers and this material covered the subjects designated for emphasis each day of the week

"Notices of the Summer Clinics sponsored by the Chicago Medical Society were released to all papers in the State and to all State Medical Journals.

"An article emphasizing the importance of discovery and correction of defects in pre-school children was written and released to all newspapers in communities registered for the Summer Round-Up campaign by the Parent-Teacher Associations.

"One hundred and twenty-four health education articles were written and approved by the Committee These articles were used in about

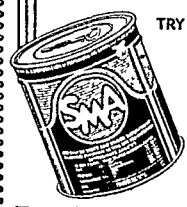
(*Continued on page 1118—Adv. xxii*)

No modification necessary . . .

It is not necessary to further modify S.M.A. for normal full term infants, for the same reason that it is not necessary to modify breast milk - for S.M.A. contains the essential food elements in proper balance. Because of this close resemblance to breast milk, the very young infant can tolerate the fat as well as the other essential constituents of S.M.A. and it is possible to give it in the same strength to normal infants from birth to twelve months of age.

As the infant grows older, therefore, it is only necessary to increase the total amount of S.M.A. diluted according to directions.

Orange juice, of course, should be given the infant fed on S.M.A. just as it is the present practice to give it to breast fed infants, to supply an adequate amount of the anti-scorbutic vitamin "C".



TRY S. M. A. AT OUR EXPENSE

Write for a trial supply - - Now !

S.M.A. CORPORATION
— CLEVELAND OHIO —

Results **. . more simply - more quickly**

PHILLIPS Milk of Magnesia

THE IDEAL LAXATIVE-ANTACID

The name "PHILLIPS" identifies Genuine Milk of Magnesia. It should be remembered because it symbolizes unvarying excellence and uniformity in quality.

Supplied in 4 oz., 12 oz., and 3 pt. bottles.

THE CHAS. H. PHILLIPS CHEMICAL CO.

New York and London

As a General Antiseptic

in place of

TINCTURE OF IODINE

Try

Mercurochrome-220 Soluble

(Dibrom-oxymercuri-fluorescein)
2% Solution

It stains, it penetrates, and it furnishes a deposit of the germicidal agent in the desired field.

It does not burn, irritate or injure tissue in any way.

Hynson, Westcott & Dunning

Baltimore, Maryland

(*Continued from page* 1117—*Adv. xxi*)

100 newspapers of the State as a daily or weekly Health Column over the signature of the local county medical society or the Illinois State Medical Society.

"*Miscellaneous Service:* One hundred and thirty moving picture films were secured for lay and medical groups. Most of the films came from the State Departments of Public Health, the U. S. Bureau of Mines at Pittsburgh, Metropolitan Life Insurance Company of New York, and the Y.M.C.A.

"Twenty-five Poster exhibits were sent to schools.

"One exhibit of educational material available at the American Medical Association was sent to the annual meeting of the Illinois Biology Teachers Association.

"Twenty-four packages of material on State Medicine were supplied to debating teams in colleges of Illinois, Michigan and Indiana. The Committee has asked these debating teams to furnish it with copies of the material presented in these inter-collegiate debates.

"Three hundred and sixty-five package libraries loaned to physicians and 25 special folders compiled on requested subjects."

There Is No Specific For

Loss of Appetite

—just when food is most needed to build up strength after disease has made its inroads.

But let us send you two bottles of Guiatonic, and give it a chance to live up to its name as a "tonic."

The hypophosphites of iron, quinine, strychnine, manganese, calcium and potassium combine with creosote and guaiacol to stimulate appetite, to furnish an abundance of minerals (including phosphorus) and thereby promote cell reconstruction.



IN addition, after febrile diseases, the creosote and guaiacol tend to prevent secondary intestinal infection and intestinal fermentation.

WILLIAM R. WARNER & CO., Inc.
113 West 18th Street New York City

GUIATONIC

THE RECONSTRUCTIVE TONIC

SEND FOR A TRIAL SUPPLY

Fills the need for a dependable antacid mineral water

VICHY CÉLESTINS

This long renowned naturally alkaline mineral water assists in neutralizing excess acid and in regularizing functions of the digestive tract.

Bottled at the Spring in Vichy, France, under Government supervision, it meets the great need of the physician for constancy of composition.

Sole U. S. Agents: AMERICAN AGENCY OF FRENCH VICHY, INC.
503 Fifth Avenue, Rooms 200-212, New York, N. Y.

ANNUAL MEETING IN NEW JERSEY

The House of Delegates of the Medical Society of New Jersey was held in Asbury Park on June 3 and 4, 1931, with the President, Dr. George N. J. Sommer, in the Chair. The minutes are printed as a supplement of the August Journal of the Society.

The procedure of the House of Delegates of New Jersey is radically different from that in New York in three important particulars:

1. The president of the State Society presides, while in New York a speaker skilled as a parliamentarian occupies the Chair.

2. The officers read their reports to the House, while in New York the reports are published in the *Journal* a month in advance of the meeting, and a reprint is mailed to every delegate.

3. The New Jersey House has a single committee, that on Business, to which all reports and notices are referred; while in New York, fifteen reference committees of five members each, are appointed a month before the meetings, so that they may give due consideration to the reports and to proposed legislation. One-half of the elected delegates from county societies of New York serve on reference committees.

The first committee to report was that on Publication, which gave the following summary of the finances of the Journal:

"Amount of advertising secured by Cooperative Advertising Bureau of the A.M.A.	$4,854.42
"Amount of advertising secured locally	4,549.47
"Amount of discount and commission allowed Cooperative	1,176.80
"Amount of discount allowed local advertisers	48.88
"Amount of commission O.K.'s local canvassers	280.75
"Amount of commission paid local canvassers	264.41
"Total amount of advertising (net)	9,403.89
"Total cash receipts, all sources	9,114.87
"Total amount paid Treasurer	8,850.46"

The Budget Committee presented the following estimate of expenses for next year:

"Publication Committee	$15,000
"Welfare Committee	750
"Credentials Committee	400
"Executive Salaries	14,000
"Executive Office and Rent	3,650

(*Continued on page 1120—Adv. xxiv*)

(*Continued from page* 1119—*Adv. xxiii*)

"Executive Travel Expense	2,000
"Treasurer	100
"Secretary's Salary	1,500
"Secretary's Expenses	2,200
"Legal Expenses	1,000
"Printing and Stationery	2,000
"A.M.A. Delegates (a reduction from last year)	100
"Tri-State Conference	150
"Conference of County Society Secretaries and Reporters	150
"Contingent and Miscellaneous	2,500

"The suggestion was brought up to the committee, however, that there might be a possibility of reducing the per capita assessment $1 if the House of Delegates so sees fit. However, your committee recommends the same assessment of $15. I think we all feel that we should have some reserve. If we take the figures, 2,706 members at $15, that gives us an anticipated revenue of $40,590. We probably shall get $850 for interest and the Publication Committee will probably return $8,500, which gives us an income of $50,000 approximately. Our expenses are $45,500. That does leave something over $4,000, but bear in mind that we have taken out that reserve of $3,000. I feel, and I think the committee feels, we should have that $4,000 as reserve and certainly $1 less on the assessment isn't going to make very much difference to the average doctor, probably 4 or 5 cigars."

There was considerable discussion as to which was the first day of the annual meeting of the State Society, for the Nominating Committee should be appointed on the second day. The decision was that the meeting of the House of Delegates constitutes the first day of the meeting of the State Society.

The House voted its disapproval of any member of the State Society taking out a patent on any medical article.

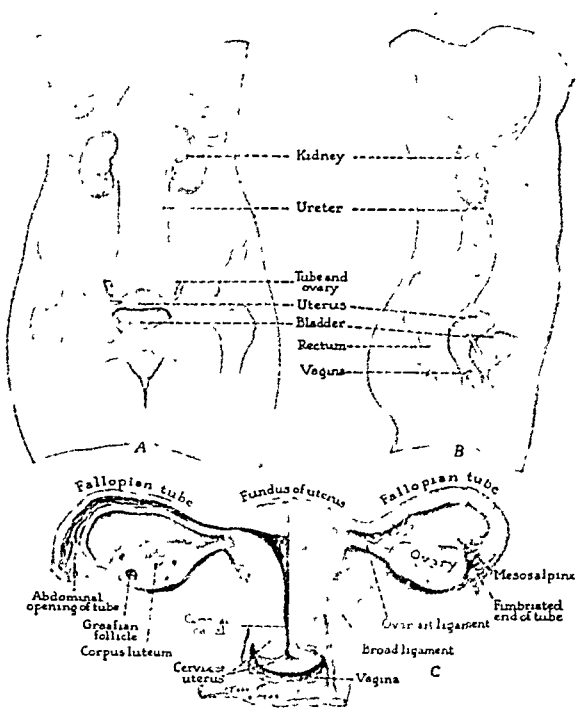
The reports of the Editor and the Secretary covered nine pages of the Supplement to the Journal, and were read to the House.

Regarding printed reports from county medical societies, the Executive Secretary, Dr. H. O. Reik, reported:

"There have been complaints that some counties regularly occupy more space than others on the Journal; an implication that favoritism has been shown in some quarters. If any county is not showing up satisfactorily, by comparison with others, the fault lies with the complaining organizations. From some counties we receive

(*Continued on page* 1122—*Adv. xxvi*)

ANATOMICAL STUDIES



GENITO-URINARY ORGANS IN THE FEMALE
A—Anteroposterior View; B—Lateral View; C—Uterus and Adnexa (at left with anterior one-half removed)

for the Practitioner

A Set of Anatomical Studies (in book form) furnished to physicians on request—upon receipt of 20c to cover mailing costs.

CAMP

Physiological Supports Scientifically Designed

S. H. CAMP & COMPANY
Manufacturers
JACKSON, MICHIGAN

Chicago 1056 Merchandise Mart
New York 330 Fifth Ave.
London 252 Regent St. W.



THE RAGWEED SEASON IS FROM

AUGUST TO FROST



AUGUST to FROST HAY-FEVER

A BULLETIN—*2nd printing now available*

And it is important to emphasize that

COSEASONAL TREATMENT

i.e., treatment started after the onset of symptoms, is usually successful—and ***quickly aborts the attack*** as has been amply attested in the literature.

ARLCO-POLLEN EXTRACTS

provide the several ragweeds as regionally dispersed and are selected for delivery according to the locality.

If unavailable locally these extracts will be delivered direct postpaid, special delivery

LITERATURE AND REFERENCES ON REQUEST

THE ARLINGTON CHEMICAL COMPANY

YONKERS, NEW YORK

Pomeroy Girdles and Supports



WHETHER of elastic (Hand-woven) or fabric, or elastic and fabric, there is a Pomeroy to meet your requirements. Made to measure and designed for the individual, you are certain to obtain the desired results.

In seeking support for movable kidney, ptosis or after - operation, you have at your service a corps of fitters trained in the making and adjusting of surgical appliances.

POMEROY COMPANY

16 East 42nd St., New York

400 E. Fordham Rd., Bronx

Brooklyn Newark Boston Springfield Detroit Wilkes-Barre

(*Continued from page* 1120—*Adv. xxiv*)

excellent reports. From some counties we secure reports only by harrassing the reporter with repeated appeals. The published county society report is an accurate index of the character and ability of the reporter. As each society elects its own reporter, each possesses the power to control the amount of journal space required."

Dr. Reik also referred to an exhibit table, on which the official journals of all the States were shown.

The Executive Secretary also reported that District Branch meetings had been held in four of the five Councilor Districts of the State. This is the first year that the meetings have been held.

Regarding the periodical health examination campaign, Dr. Reik said:

"At a recent meeting of the Hudson County Medical Society, Dr. Waters submitted a new plan for revival of the periodic health examination campaign. The Executive Secretary has volunteered to assist Dr. Waters in the preparation of a moving picture to illustrate his plan, and when ready such picture will be made available to all of the county societies. We intend also to supply the secretaries of all county societies with a list of all moving picture films made available by the American Medical Association, the American College of Surgeons, the American College of Physicians, the United States Government, and some commercial houses that have produced pictures without advertising matter. We would also remind you that the State Society owns projection apparatus for films of both sizes, the standard 35 mm. and the smaller 16 mm., which are at your disposal whenever required."

Radio broadcasts under County Medical Societies were reported as follows:

	Number of Talks
Atlantic County (city) over WPG	14
Bergen County, WBMS and WOR	25
Monmouth County, WCAP	32
Total	71

The Secretary, Dr. J. B. Morrison, reported a membership of 2,709, an increase of 167 over last year. The Secretary reported on contract practice, in Mercer County:

"Mercer County Medical Society has already taken definite action in regard to contract practice. In that county, any physician who engages in any form of contract practice must submit his contract to the component society for its membership in the county society."

Case-lifting was discussed as follows:

"'Case-lifting' has been settled by the Essex County Medical Society. Hereafter, in that county, any physician 'lifting' a case, whether by

(*Continued on page* 1124—*Adv. xxviii*)

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(*Continued from page 1122—Adv. xxvi*)

instruction from an Insurance Carrier or not, will have his status as a desirable member of the County Medical Society investigated by the Council. If he is found guilty of case-lifting, he may be read out of the Society."

Graduate Education was described by Dr. S. A. Cosgrove:

"At the annual meeting of the State Society that year, 1927, the then existing Committee on Post-Graduate Education reported that there was no demand among New Jersey physicians for post-graduate instruction, and the House of Delegates accepted the report and discharged the committee."

"An agreement was reached with Rutgers University, in 1929, by which the University should conduct courses for which a fee of thirty dollars should be charged. The courses were given as follows:

"We have had 19 courses conducted in 14 centers, serving practitioners in 16 or more of the 21 counties of the State, and 350 members have subscribed to the courses at full rate of $30 each, the average number of subscribers to each course being 18."

The subjects were as follows:

"'Straight courses' have comprised Newer Drug Therapy, Pediatrics, Gastro-Enterology, General Medicine, Obstetrics, and Gynecology; several 'combination courses' have included Gynecology and Obstetrics; Heart and Kidney Diseases; Gastro-Enterology and Pediatrics; Gastro-Enterology and Pediatrics; Newer Drug Therapy and Fractures."

The certification of specialitis was discussed along the lines proposed by the Second Councilor District meeting, and abstracted on page 928 of the July fifteenth issue of this *Journal.*

Any one reading the minutes would have difficulty in finding exactly what action was taken on the several reports. They were either accepted as a whole by motion made immediately after their reading, or their recommendations were referred to the Business Committee whose report is not contained in the published minutes.

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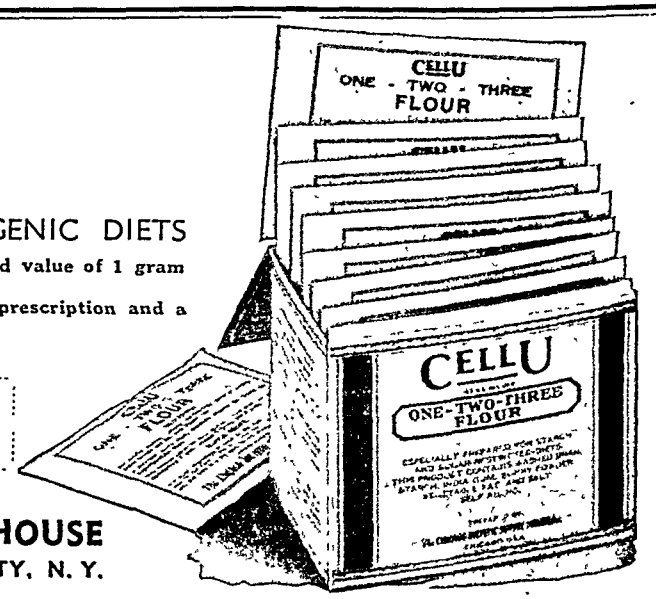
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POLIOMYELITIS SERUM IN ILLINOIS

The *Illinois Medical Journal* for August contains the following editorial on poliomyelitis serum

"The Illinois State Department of Public health undertook to make available an adequate supply of convalescent poliomyelitis human serum sufficient to meet all anticipated needs in Illinois At Springfield and Chicago there is now on hand enough of this serum to treat 200 cases It is available free of cost to any physician in the State who will ask for it Infantile paralysis is by far the most important cause of disability among the 16,000 physically handicapped children in Illinois If the convalescent serum will prevent paralysis in these cases, and evidence indicates that it will, the physicians cannot afford to neglect its use when circumstances make possible the obtaining of it Early diagnosis and the administration of convalescent serum prior to the onset of paralytic symptoms are imperative if paralysis is to be prevented

"In all cases where the service is practicable, a physician from the State Department of Public Health who is especially qualified in that field will be detailed upon request to consult with and assist a local physician in connection with the administration of the poliomyelitis convalescent serum

"For physicians who wish to use whole blood therapy for intramuscular administration, the Department has for free distribution a supply of sodium citrate This will keep the blood drawn from the donors from coagulating prior to its use. Whole blood therapy seems to have a value in treating poliomyelitis cases, while its benefit in preventing or aborting measles in children appears to be unquestionable Physicians outside the range of easy and quick transportation facilities might profit by keeping on hand a supply of the sodium citrate for use in emergencies Full instructions concerning the use of this material go out with each package"

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FINANCIAL REPORTS OF HOSPITALS IN KANSAS

The August issue of the Journal of the Kansas Medical Society has the following comment on a law recently passed by the Legislature

"All churches, lodges, cemeteries, benevolent, charitable, social and educational organizations which have been incorporated, and which are not organized and operated for pecuniary profit will be affected by a law passed at the last session of the Legislature

"Laws of 1931, Chapter 139, provides that such corporations shall make a report to the secretary of state on or before March 31 of the preceding year, giving name of the corporation, name and address of officers, time of annual meeting and other particulars This report is to be accompanied by a filing fee of one dollar The act took effect *May 28, 1931*, on publication in the session laws, and will make necessary the filing of the report indicated for the year 1931 by such corporations, following the close of the year December 31, and before March 31, next following

"As many of these corporations have been in existence for 30, 40 and even 60 or more years without having been required to render any account of their corporate activities to the State, it is manifest that a very difficult task presents itself to the secretary of state, that of getting in touch with the officers who are responsible for the conduct of the business affairs of these corporations Many charters have been allowed to expire by lapse of time and will have to be renewed before proper report can be filed

"In many cases the title to valuable property such as church, lodge, and school buildings, cemetery lots and the like may be dependent on the validity of these corporation charters or the acts of their corporate officers thereunder"

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This booklet is offered free of charge to physicians. See page xxi.—*Adv.*

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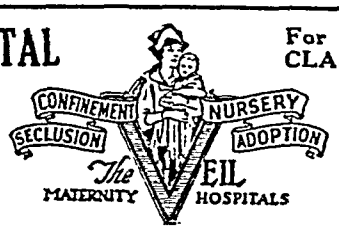
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HIRSCHSPRUNG'S DISEASE: TREATED BY LUMBAR SYMPATHECTOMY

By T. WOOD CLARKE, M.D. and FREDERICK M. MILLER, M.D., UTICA, N. Y.

From St. Elizabeth's Hospital, Utica, N. Y. Read before the Section on Pediatrics, Medical Society of the State of New York, at Syracuse, N. Y., June 3, 1931.

CONGENITAL idiopathic dilatation of the colon, megacolon, giant colon, or Hirschsprung's Disease is a congenital malformation characterized by dilatation of the colon, abdominal distention, obstipation, at times alternating with diarrhoea, emaciation, and general weakness. The earliest recorded case was reported by Parry[1] in 1825, careful studies were made by Hirschsprung[2] in 1886, and complete reviews of the literature by Finney[3] in 1908, and Bartle[4] in 1926. Several hundred cases have been reported.

The theories of the cause of the disease have been nearly as numerous as the authors who have written upon the subject, and may be classified under the headings of congenital, mechanical, inflammatory, hypernutritive, hyponutritive, and neuropathic.

The typical history is that of onset, prior to, or shortly after birth, with rapidly increasing abdominal distention, associated with emaciation and weakness. The obstipation is the most marked occurring in any known disease, bowel movements varying from once a week to once in three months. In one case there was no bowel movement for nine months. There is usually no abdominal pain or vomiting and few symptoms of auto-intoxication other than pallor and weakness, though some have febrile attacks and others such complicatons as pressure symptoms, intestinal ulcerations or obstruction. While some die in childhood, many drag out a miserable existence to old age.

The dilatation of the colon extends from the internal sphincter upwards. Most of the cases are confined to the rectum, sigmoid, and descending colon, but others involve the transverse and ascending colon and even the caecum and appendix.

Medical treatment has consisted of a regulating diet, laxatives, enemata, and the manual removal of scybala. While such measures produce temporary improvement in hospital, the scybala usually reaccumulate after return home.

The surgical treatment, until recently, has consisted of colostomy with artificial anus, or of colectomy. The first procedure necessitates a life of discomfort, and the second has a high mortality, and in many cases the portion of the bowel higher up has enlarged with a return of the symptoms. The most recent surgical suggestion is lumbar sympathectomy.

In 1895, the English physiologists, Langley and Anderson,[5] demonstrated that stimulation of the lumbar sympathetic ganglia causes inhabition of peristalsis with dilatation of the colon and contraction of the internal sphincter.

In 1892, Formad[6] suggested that Hirschsprung's Disease was the result of a neuromuscular defect in a segment of the bowel. This theory was favored by Lennander[7] in 1900 and Hawkins[8] in 1907, the latter suggesting the name he changed to "neuropathic dilatation and hypertrophy of the colon." Pennato[9] in 1902 suggested the cause to be paralysis of a segment of the intestine, and Bing[10] in 1907 believed it to be a lesion of the sympathetic nervous system. Little credence, however, was given to these theories until recent years.

In 1913, Boeke[11] proved that fibres from the sympathetic nervous system run to the voluntary muscles, and in 1915, DeBoer[12] showed that these sympathetic fibres were the cause of muscle tone.

Langelaan[13] in the same year stated that the function of the sympathetic fibres to voluntary muscles was to maintain what he called "plastic tone." Stimulation of the sympathetic nerves to muscles results in the fixation of the muscle in the position in which it happens to be at the time of the stimulation.

In 1924, N. D. Royle,[14] the orthopedic surgeon, and John I. Hunter,[15] professor of anatomy of Sidney, Australia, working together, proved

experimentally that resection of the sympathetic ganglia relieved the spasticity of the extremities in animals in which artificial spastic paralysis had been produced. Royle then performed such an operation on two human patients suffering from spastic paralysis. In the patient with spastic paralysis of the legs from whom Royle excised the rami of the lumbar sympathetic ganglia, he noted complete relief from a long-standing obstinate constipation. These findings have been confirmed in numerous cases since that time.

Hunter further showed that in paralyzed animals in whom the distal portion of the colon was quiescent and dilated, excision of the lumbar ganglia caused immediate resumption of activity of the distal colon and expulsion of feces. He reached the conclusion that an important function of the sympathetic system is to impose a posture on the structure innervated by it, and that section of the sympathetic fibres released this postural state.

In January, 1926, Henry J. Bartle[4] of Philadelphia in a report of a case of Hirschsprung's Disease refers to this work of Royle and Hunter in cases of paralysis and says that after reviewing their work and studying the function of the sympathetic nervous supply of the bowel that "the conclusion is forced upon me that in megacolon we have a condition that very closely resembles in its functional aspect spasticity in centrally paralyzed limb muscles. If this is so, a similar method of treatment would seem rational," and he concludes by saying that Royle's operation "appears to me to be ideally suited to cases of megacolon, or, indeed, even to the obstinate cases of atonic constipation, and when the time comes, unless it can be shown that the premises are faulty, and that the conclusions are illogical, I believe that I shall advise that ramisection be done."

As Dr. Bartle's patient showed improvement under medical treatment, the operation was not performed.[16] The credit, however for first recommending ramisection for megacolon in a published article must be given to Dr. Bartle.

The following year, however, 1927, R. B. Wade and Royle[17] reported in the *Medical Journal of Australia,* a case of Hirschsprung's Disease, in which ramisection of the lumbar sympathetic ganglia was performed on May 20, 1926, with excellent results.

They suggest, following Langelaan's theory, that Hirschsprung's Disease is a condition of postural tone of the colon due to excessive stimulation of the lumbar sympathetics. They believe that the bowel being filled with feces, the sympathetic stimulation inaugurates postural tonic states to fit the increasing intestinal contents, and dilatation results.

In 1928, Judd and Adson[18] of the Mayo Clinic reported two more cases of Hirschsprung's Disease upon which sympathectomy was performed, in 1929 Merle Scott and Morton[19] of Rochester, New York, one case, and in October, 1930, Rankin and Learmouth[20] of the Mayo Clinic, one case, and also one of obstinate constipation. In a recent communication before the Australian College of Surgeons, Wade[21] states that he has performed the operation on thirteen cases of Hirschsprung's Disease "with in the main satisfactory results."

In 1929 and 1930, Learmouth and Markowitz[22] of the Mayo Clinic, by animal experimentation, confirmed the researches of Langley and Anderson,[5] and of Hunter.[15] Among their conclusions are the sections of the lumbar colonic nerve invariably lead to an immediate increase in intracolonic pressure and in the amplitude of the contraction of the colon, and that the internal sphincter derives a certain amount of motor innervation through the lumbar sympathetic outflow.

In their report of their case in October, 1930, Merle Scott and Morton[19] add a contribution by demonstrating in two cases of Hirschsprung's Disease that spinal anesthesia temporarily terminated the motor inertia of the large bowel and caused copious bowel movements. They offer this not only as a further proof that Hirschsprung's Disease is due to a hyperactive inhibitory nerve control in some cases, but they also recommend spinal anesthesia be performed before sympathectomy as a physiological test of sympathetic inhibition to prove whether in any particular case sympathectomy is indicated and can be expected to give the results desired.

The results of the operation of lumbar sympathectomy in the small number of cases in which it has been performed have been uniformally favorable. The patients have shown remarkable improvement in their general health. The abdominal distention has decreased with variable rapidity, and the patients who, previously had suffered from obstipation, report regular bowel movements once or twice a day, usually without the aid of laxatives or enemata. There have been no deaths reported from the operation. No untoward symptoms in reference to other pelvic organs have occurred.

In consideration of the remarkable results that have been attained by others by this new procedure in a condition previously considered almost incurable, and of the small number of cases on record, we feel justified in reporting the following case:

Case R. C., 8 years of age. Admitted to the Pediatric Department of St. Elizabeth Hospital in Utica, New York, on October 25, 1930, referred by Miss Meeder, Herkimer County Agent. The patient was a male child, a twin with four brothers and sisters. The other children were normal. The father died of injuries. The mother was living and well. The boy was born at full term, normal birth. He was nursed for

six months. He has had pertussis, measles, and chickenpox.

The present illness was first noticed at six months of age, when, following an attack of cholera infantum, he became constipated. The abdomen began to enlarge, and has been greatly distended ever since. The distention varied on different days. The constipation has been marked, the patient going for days without bowel movements. This has been partially controlled recently by the daily use of cascara. At times he would pass copious stools containing large masses. There has been no vomiting, no diarrhoea, and no fever. He has always been emaciated, sallow, and very weak.

On admission he was greatly emaciated. The face was pinched, the chest flat, the costal angles flaring, and the abdomen enormously distended and pendulous. The tongue was clean and the tonsils large and spongy. The heart and lungs were normal. The chest measurement was 23 inches. The abdomen was 25½ inches in circumference at the navel, and when the child stood erect, it was markedly pendulous (Fig. 1). Upon exposing the abdomen to the air, a firm hard mass would appear extending diagonally from the right costal border to the left Poupart's ligament. *This was firm and elastic, 15 cm.* in width, resembling in feeling a large bologna sausage. It was tympanitic. After two minutes this would fade away and the abdomen would become comparatively soft, though at all times more tense than normal. This mass was evidently caused by massive contraction of a greatly enlarged colon. During its period of contraction, there was no peristaltic wave demonstrable. The appearance of the colon strongly suggested the condition described by Wade and Royle as postural tone of the colon.



FIGURE 1

The patient one month before operation, and after a thorough emptying of the bowel.

On palpation during periods of relaxation several round masses the size of oranges could be felt in the left iliac fossa, and in the hypogastrium.

On rectal examination the external sphincter was normal, but the internal sphincter was decidedly tight. On passing the internal sphincter,



FIGURE 2

X-rays two months before operation, and after an enema of one gallon of barium solution. The pictures were taken immediately after, ten minutes after, and one hour after the enema, the last being preceded by an effort at movement of the bowels.

the finger entered an enormous cavity and immediately impinged upon a hard scybalous mass at least 10 cm. in diameter.

The reflexes were normal. The musculature was weak and flabby.

The child was kept in the hospital for two months, was given fluid extract cascara, one dram each night by mouth and each morning and night an enema of warm olive oil, 8 ounces, followed in one-half hour by an ss enema. Each day for two weeks a rectal examination was made and large scybalous masses were broken up digitally. After two weeks no more fecal masses formed and he obtained good results from his enemata. His abdominal measurement, after the thorough cleaning out, was 24½ inches.

His urine on admission showed a trace of albumin and a trace of sugar. These never recurred after the first day.

On November third a barium enema was given and *x*-rays taken by Dr. M. T. Powers. One gallon of barium solution was injected with no further discomfort than that caused by the difficulty of keeping his balance on the ball-like abdomen. These pictures (Fig. 2) show an enormously dilated sigmoid, almost spherical in form and occupying practically the entire abdominal cavity and an enlarged descending colon. There were no signs of peristalsis and no haustration, either in the immediate pictures or in those taken 10 minutes later. Half an hour later, after going to stool, the sigmoid was still full, the shadow occupying two-thirds of the abdominal cavity. Apparently what emptying had been possible was from the ascending and transverse colon, the sigmoid still remaining dilated and inert.

After the bowels had been thoroughly emptied, the child weighed 44½ pounds.

On November 26th, one month after admission, and after all scybalous masses had been removed from the bowel, photographs were taken (Fig 3).

At the end of the two months' preoperative care, his bowels had been completely emptied and his general condition seemed proper for operation. His weight at that time was 46 pounds.

The surgical treatment of Hirschsprung's Disease consists in the removal of more or less of the lumbar sympathetic nerves, which act on the musculature of the colon, sigmoid, and anal sphincters.

Just how extensive should be the section and removal of the lumbar sympathetics is a question on which the available literature is not unanimous. Royle and Wade of Australia removed the white ramus of the left first lumbar sympathetic and sectioned the mesial branches to the pre-sacral nerve. Judd and Adson of the Mayo Clinic remove the fourth, third, and second left lumbar ganglia including the main sympathetic trunk, repeating the operation on the right side if the caecum and ascending colon were also involved. Rankin and Learmouth also of the Mayo Clinic, remove the anterior sacral nerve and the inferior mesenteric sympathetic nerves.

Because of the enormously distended abdomen extending upward and causing a bell-shaped contour of the chest, exposure of the site of operation is rendered rather difficult.

The *x*-ray showed that this case had no involvement above the splenic flexure, therefore, a left ganglionectomy and sympathectomy was indicated.

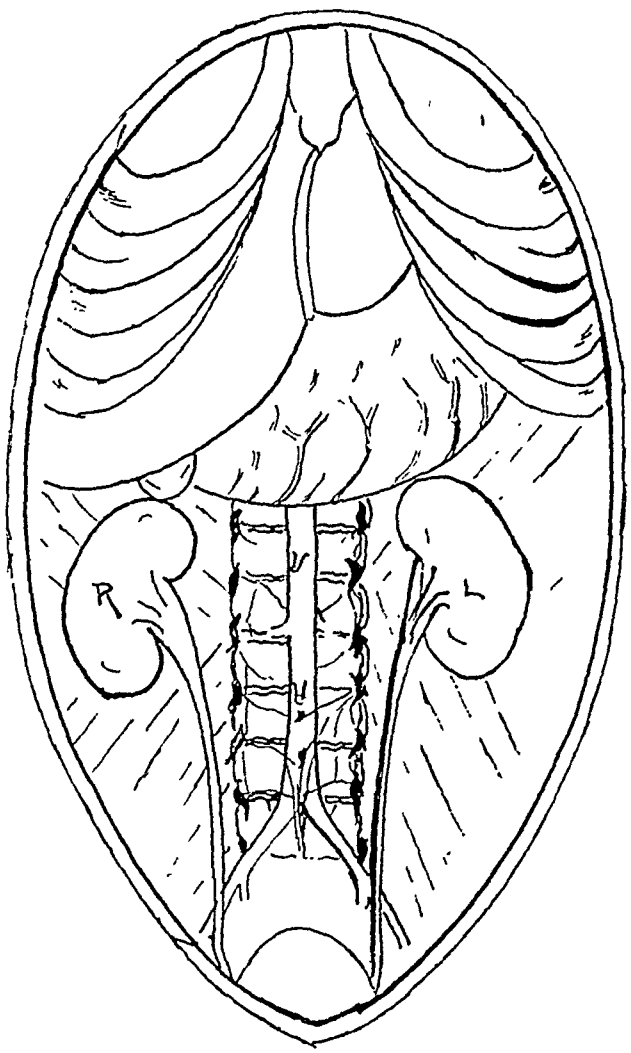


FIGURE 3
Schematic drawing of lumbar sympathetic ganglia and nerve fibres.

Preparation of patient: Three days preoperative soft diet, bowel moved copiously by olive oil and ss enemata. Two days preoperative: Liquid diet, mineral oil oz. i three times a day, five-tenth c.c. pituitrin (surgical) followed in half an hour by ss enema with copious results, preliminary abdominal preparation. One day preoperative: Liquid diet, mineral oil and ss enema.

Morning of operation: Low soap suds enema. Operation December 30, 1930, at St. Elizabeth

Hospital with ether anesthesia. The patient was fastened in extreme Trendelenberg position. An abdominal incision was made seven inches in length through the left rectus muscle, midway to the umbilicus. The greatly distended colon presented itself in the incision. Its walls were thickened and had the appearance of an adult stomach. The intestines were not distended with gas, and owing to the relaxed abdominal walls and abnormally large space in the upper abdomen, it was possible to pack the intestines upward and to the right side, holding them with wet towels. The margins of the abdominal wall were well retracted and with the aid of an electrically lighted retractor a good view was obtained of the posterior peritoneal area. Our landmarks were the promontory of the sacrum, the left ureter, the left iliac artery, and the aorta.

An incision was made through the posterior peritonium three inches in length parallel to the left ureter and one inch lateral to it. The peritoneum was dissected loose from the underlying structures and retracted well across the aorta carrying with it the ureter. This brought into view the inner margin of the psoas muscle, the bodies of the lumbar vertebrae, and the sulcus between, where lie the lumbar ganglia. After removing the loose connective tissue with a dry sponge, the fourth, third, and second lumbar ganglia were exposed lying over the corresponding intervertebral vessels. Beginning with the lowest ganglion, each was carefully lifted up with a blunt hook, the posterior branches cut, and the three removed together with the connecting branches running parallel to the spine. Then with a dry sponge the fibres on the anterior surface of the aorta were removed. There was also a small ganglion on the aorta which was removed. A hot sponge was applied to check the slight oozing. The posterior peritoneum was then closed with a continuous fine catgut suture and the abdominal wall closed without drainage.

The patient showed considerable shock following the operation, which was relieved by heart stimulants, normal saline by hypodermaclysis and enema, and inhalation of oxygen. The pulse remained rapid for two days, otherwise the surgical convalescence was normal.

First day postoperative: Considerable abdominal distention, relieved by pituitrin and enemata.

Third day postoperative: Small bowel movement following a soap suds enema.

Until the patient was out of bed on the fourteenth day the bowels were evacuated daily by soap suds enemata, aided by belladonna and mineral oil by mouth.

The patient left the hospital on February 1, 1931, with orders to continue the belladonna, mineral oil and soap suds enemata, to take regular diet, and report at the hospital in one month.

Photographs were taken of the patient the day before he left the hospital, four weeks after the operation (Fig. 4). These show an upstanding healthy looking child with but slight abdominal distention.

On a return visit on February 17, 1931, seven

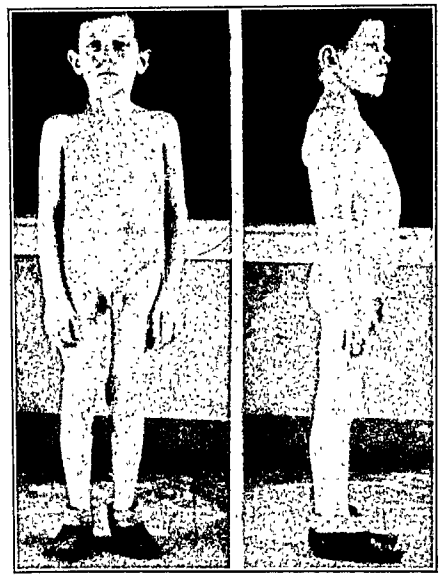


FIGURE 4
The patient five weeks after lumbar sympathectomy.

weeks after operaton, it was learned that the child was feeling well, sleeping well, playing actively, and had a good appetite. He was having two good bowel movements each day. He was receiving cleansing enemata three times a week, and petrolagar, or mineral oil, each day. The abdomen was soft, no distention was noticeable when lying down, but a slight laxity of the abdominal wall below the navel on standing. No masses were felt in the abdomen. The circumference of the abdomen at the navel was 20¾ inches.

A second visit was made on March 17th. At this time it was reported that he was feeling quite well, had had but three enemata during the past month, and that, thought he had discontinued his laxative five days previously, he had continued to have two good bowel movements daily. His appetite was good. He was active and full of life and enjoyed playing with other children.

X-rays were taken on this day by Dr. Powers (Fig. 5). Whereas at the time of the previous *x*-rays, he retained one gallon of barium solu-

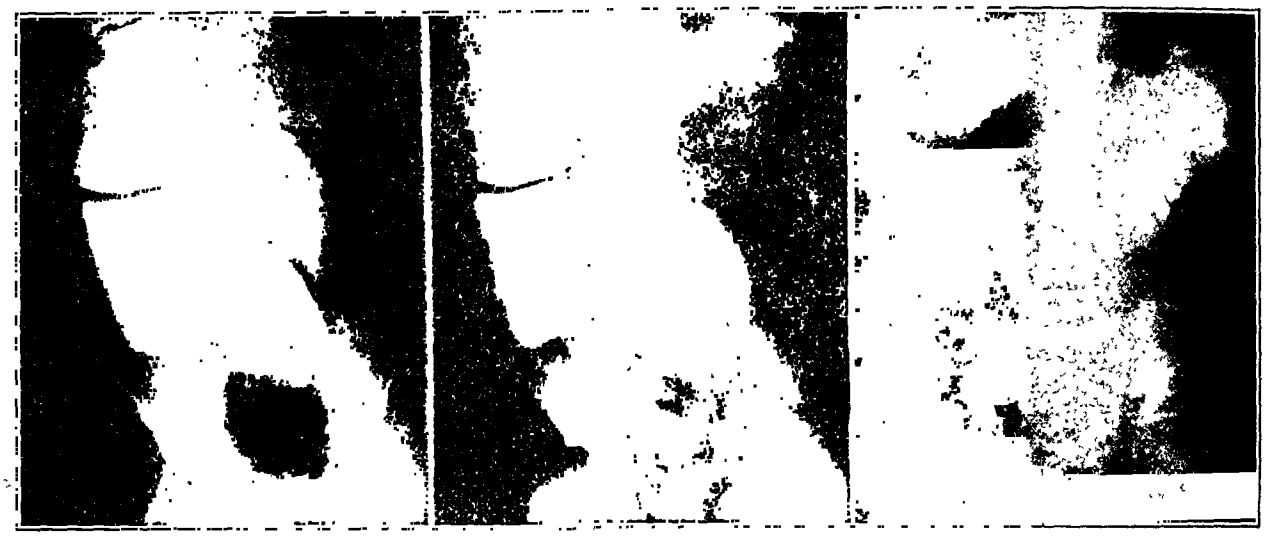


FIGURE 5

X-rays taken two months after the operation, and after an enema of one pint of barium solution, which he retained with difficulty. The pictures were taken immediately after, ten minutes after, and thirty minutes after the barium enema, the last one being preceded by a bowel movement.

tion without discomfort, on this occasion he was not able to retain a quart. The pictures taken immediately after the enema showed a distended sigmoid, but it was tubular, while previously it had been sacular. A picture taken 10 minutes later showed marked haustration and signs of active peristalsis. The picture taken at 30 minutes and after bowel movement showed the bowel completely emptied except for a small quantity of barium at the splenic flexure.

Whereas the first set of pictures showed the sigmoid and descending colon to be an inert sac, the second showed it to be an enlarged but perfectly functioning colon.

When seen next on May 19, 1931, the boy had received no enemata and no laxatives except for a small dose of Agarol each night for two months. His cheeks were rosy. He was active, happy, and except for a slight laxity of the abdominal wall below the navel appeared to be a normal child.

While it may not be justifiable to draw conclusions from a single case, the fact that this case showed such a satisfactory cure in a condition usually considered practically incurable, and that the seventeen other similar operations so far reported in the literature, all showed equally favorable results, we feel that we are justified in our feeling that this new procedure holds forth great hopes in curing Hirschsprung's Disease and restoring these miserable sufferers to practically normal health.

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A STUDY OF PROPHYLACTIC VALUE OF VARIOUS ANTIRACHITIC AGENTS*

By ADOLPH G. DE SANCTIS, M.D., and JOHN DORSEY CRAIG, M.D., NEW YORK, N. Y.

From the Pediatric Department, New York Post Graduate Medical School and Hospital.

Preliminary Report

OF late and especially within the past three or four years, medical literature both here and abroad has been more or less flooded with articles dealing with the merits of various antirachitic agents; opposite or contrary views and results have been reported by various authors leaving the reader in somewhat of a maze at the present time. This clinical study was undertaken to determine the prophylactic value of various antirachitic agents in infants rather than in experimental animals: In the final analysis, the merits of any prophylactic or therapeutic agents must be determined by its effect upon the human patient and not upon the experimental animal. I am in no way attempting to detract from the unquestionable value of the experimental work upon the animals but wish to point out that after all, there are marked anatomical and physiological differences between the infant and the rat or guinea pig. If scientific medicine is to be more than the doubtful recording of successive events it must enable us to understand the clinical applications of the discoveries in the laboratory.

Quoting from an editorial in the *Journal of the A. M. A.*[1] *which* states "at present the pathogenesis of rickets seems to be fairly well defined; few of the advances in the science of nutrition have been made with as striking an outcome as have been the case with this disease. The relationship of the inorganic constituents of the diet, the specific effect of cod liver oil, the curative effect of natural and artificial ultra-violet rays and the activiation of ergosterol to antirachitic potency are milestones along the road of progress elucidating the etiology and biochemical relationships of rickets. The novelty of producing a therapeutic agent of photochemical means together with the tremendous potency of viosterol has led to an undue canonization of the material on the part of physicians. Without detracting from its merited value in the treatment of rickets, certain observations raise a question as to the simplicity of the pathogenesis of rickets implied in the current facile use of viosterol. If there exists a complacent belief among some investigators that rickets is due to a deficiency of vitamin D alone, there are others who do not accept such a simple relationship.

It is a well known fact that although cod liver oil and viosterol are extremely efficacious in curing rickets, only the former contains the indespensable vitamin A. Brown and Shohl[2] have indicated clearly that, whereas vitamin D is concerned with the calcification of bones, the retention of calcium and phosphorous in the body is largely a function of the level of these materials in the diet, irrespective of the presence or absence of vitamin D. At first the vitamin A was held to be the fat soluble vitamin, deprivation of which led to rickets and xerophthalmia. Later McCollum showed that vitamin A consisted of a fat soluble portion (vitamin A proper) unstable to heat and oxygen, a deficiency of which leads to xerophthalmia and another fat soluble portion (first called X now called D) which was more stable to heat and oxidation than the former.

It is interesting to note that while D is now commonly known as the antirachitic vitamin, A is never called the anti-xerophthalmic vitamin.

Harris[3] has shown that the problem of growing bone may be analyzed in terms of three distinct processes[1] the growth of cartilage[2] the calcification of cartilage and[3] true bone formation.

Rickets is a disease involving all three processes entering in bone formation. There is an excessive proliferation of cartilage, calcification is defective and the differentiation of true bone is imperfect. If this is so, then not only is vitamin D involved but also the fat soluable A vitamin and to a certain extent the water soluble vitamines. This may explain why comparatively better results have been obtained by cod liver oil (rich in both A & D) than with an equal number of units of D alone in the form of irradiated ergosterol. Another question which may be raised at this time is whether the functions of A & D are not interchangeable in the human body in the presence of certain mineral constituents. It has been definitely shown by several observers that even as many as twice the number of D units in irradiated ergosterol as in cod liver oil do not afford the same protection against rickets. This observation is cercertainly worthy of thorough investigation before the final word can be said.

In this clinical study, the infants have been divided into several groups:

1. Those given cod liver oil—3 teaspoonfuls daily or (1400-1700 Oslo rat Units) (140-170 Steenbock rat units).

2. Those given irradiated ergosterol—100 D—10 drops a day (3000 Oslo rat Units) (300 Steenbock rat Units).

3. Those given irradiated ergosterol—250D—10 drops a day. (7500 Oslo Rat Units) (750 Steenbock Rat Units).

4. Those given irradiated ergosterol—500D—10 drops a day. (15000 Oslo Rat Units) (1500 Steenbock Rat Units).

5. Those given cod liver oil concentrate in tab-

* Read at the Annual Meeting of the Medical Society of the State of New York, at Syracuse, N. Y., June 3, 1931.

let form 3 tablets a day. (1500 Oslo Rat Units) (150 Steenbock Rat Units).

It will be noted all infants in groups 2, 3 and 4 received more units of D than those in the 1st and 5th groups. That those on 100 D viosterol received twice the number of units of D and those on 250D and 500D irradiated ergosterol received 5 and 10 times as much vitamin D respectively as those on cod liver oil. It is important that this be remembered in comparing results.

This study was started in 1928 and is still being continued. In fact this report is in the nature of a preliminary one. In 1931 and 1932 we intend to use 1000D irradiated ergosterol alone, 250D and 500D irradiated ergosterol with the addition of vitamin A, and 250D and 500D with the addition of phosphorous. Also a more prolonged study of cod liver oil tablet concentrate (A&D) is under way. These studies shall be reported later.

Products Used:

Several good grade cod liver oils were used. An accepted irradiated ergosterol was used in all cases and the cod liver oil in tablet concentrate form is one accepted by the Council of the A.M.A.

Dosage:

As stated before—the cod liver oil was given in a dose of three teaspoonfuls a day—the irradiated ergosterol in doses of 10 drops a day and the tablet concentrate in the dose of three tablets a day.

All infants who received a smaller amount or who did not receive the stated amount daily for at least three months were not included in this study. This necessarily eliminated a great many cases. No premature infants were used.

It must be borne in mind that all infants in the various groups were started on an antirachitic agent at approximately the same age, gained at the normal rate and were kept under observation for approximately the same length of time and during the same seasons; also that the series did not include any infants who were growing extremely rapidly. Various types of feeding were used in all groups but apparently these different methods of feeding had no influence on the results observed. In brief the infants were all similar in age, in duration of time on the experiment, in dietary treatment and in rate of growth.

Interpretation of Clinical Observations:

It is conceded that in the interpretation of clinical observations, there may be a great variation of opinion as to what constitutes clinical rickets. Whenever there was any doubt in interpretation, the case was eliminated. The final examinations were made by at least two well trained physicians, independantly of each other and their observations were charted.

The so-called physiological beading so frequently referred to in the literature, occurring in early infancy was enough to cause elimation of the infant. The congenital and presumably physiologic craniotabes that occurs in early infancy stressed by many authors was excluded.

TABLE No. 1

COMPARATIVE VALUE OF AGENTS USED

	Cod Liver Oil	Viosterol 100D	Viosterol 250D	Viosterol 500D	Cod Liver Oil Concentrate
Children Studied	100	123	128	40	38
Children Completely Protected	97 (97%)	94 (77%)	109 (81½%)	35 (90%)	35 (92½%)
Children Not Protected	3 (3%)	29 (23%)	19 (18½%)	5 (10%)	3 (7½%)
Beading	2 Cases	27	16	5	1
Craniotabes	1 Case	8	11	3	2
Groove (Flaring)	0 Case	3	4	0	0
Epiphyseal Enlargement	0 Case	2	0	0	0
Other Symptoms	0 Case	0	0	0	0
Harmful Results	0 Case	0	0	0	0

TABLE No. 2

TYPES OF FEEDING USED

	Cod Liver Oil	Viosterol 100D	Viosterol 250D	Viosterol 500D	Cod Liver Oil Concentrate
Average Weekly Gain	5½ Oz.	5½ Oz.	5.33 Oz.	5.4 Oz.	5.3 Oz.
Infants on Milk, Water and Added Carbohydrate	75	93	60	19	15
Powdered Milk	8	12	18	4	1
Breast Milk	13	8	50	15	20
Sweetened Condensed Milk	4	9	0	1	0

TABLE No. 3

CONDITIONS OF THE EXPERIMENT IN THE FIVE GROUPS

	Cod Liver Oil	Viosterol 100D	Viosterol 250D	Viosterol 500D	Cod Liver Oil Concentrate
Age of Patients	1½-11½ Months	11 Days-11½ Months	2 Weeks-1 Year	3 Weeks-10 Months	1 Month 10½ Months
Average Age When Started	4½ Months	4½ Months	2 Months	3 Months	2½ Months
Average Time on Antirachitic	4¼ Months	4¾ Months	5½ Months	4¼ Months	4½ Months
Dose (Daily)	3 Teaspoonfuls	10 Drops	10 Drops	10 Drops	3 Tablets

As clinical evidence of rickets we included marked occipital craniotabes, moderate or marked costo-chondral beading, groove and flaring of the ribs, epiphyseal enlargement and spasmophilia. Again as all of these infants were under observation for at least three months the final examination was made necessarily at an age at which so-called physiological beading or craniotabes would not be present. No harmful effects or symptoms or signs of hypercalcemia were noted.

Calcium and phosphorous blood determinations were not made except in a few cases because of the refusal of the parents to permit the withdrawal of blood. However as Hess[4] pointed out recently, the level of inorganic phosphate in the blood is not as infallible a criterion of rickets as heretofore believed. He states that the fact that the cure of rickets was independent of the concentration of the inorganic phosphate in the blood, indicates that variation of this constituent cannot be regarded as an essential or inherent feature in the pathogenesis of healing of this disorder. He also emphasizes the fact that the product of calcium times the phosphorous concentration in the blood is not a reliable indicator as to whether or not active rickets is present.

It was not possible to secure an *x*-ray examination in all our cases but in those who were rayed the examination corroborated the clinical finding.

CONCLUSIONS

1. Cod Liver Oil in a dosage of 3 teaspoonfuls a day (about 170 Steenbock Vitamin D Units) prevented rickets in 97 per cent of 100 cases studied.

2. Viosterol 100D—given in 10 drop daily doses (300 Steenbock Units) prevented rickets in 77 per cent of the cases studied.

3. Viosterol 250D—given in 10 drop daily doses (750 Steenbock vitamin D Units) prevented rickets in 81½ per cent of the cases studied.

4. Viosterol 500 D—given in 10 drop doses (1500 Steenbock vitamin D Units) prevented rickets in 90 per cent of the cases studied.

5. Cod Liver Oil in concentrate tablet form-given in doses of 3 tablets daily (150 Steenbock Vitamin D Units) prevented rickets in 92¼ per cent of the cases studied.

From the above observations, we note that in the form of cod liver oil in oil form only 170 units of vitamin D are necessary to protect the infant against rickets; in the tablet concentrate form as many D units are needed whereas when viosterol is given, even 10 times the number of D units does not confer the same immunity against rickets.

If rickets is solely a problem of Vitamin D deficiency, why is it necessary to give so much

more in its pure form (viosterol-D only) than when cod liver oil is given?

As expressed by us[5] in 1930, we still are of the opinion that rickets is not due to a deficiency of Vitamin D alone but that Vitamin A and possibly other factors play an important part in this disease.

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WHAT IS DIRECT LARYNGOSCOPY?

By JOSEPH W. MILLER, M.D., NEW YORK, N. Y.

From the department of Laryngology and Per-Oral Endoscopy, Beth Israel Hospital, New York City, Service of Dr. Samuel J. Kopetzky

The question of direct laryngoscopy is not entirely clear in the minds of many practitioners of medicine; and even some otolaryngologists are not entirely sure of the subject. In spite of the tremendous volume of literature written on the subject for the past thirty years, and the marvelous results achieved in thousands of cases, the average physician is still dubious about it and has but a hazy conception of the procedure.

Direct laryngoscopy must be differentiated from tracheo-bronchoscopy. The direct view of the larynx is brought about with a straight rigid tube which is used like a tongue depressor, only with the head in extension. This method has no contra indications and may be performed in every stage of life, even in the new-born, when inspiratory dyspnea makes one suspect trouble in the larynx or its vicinity. With this innocent method we can at once rule out a foreign body in the larynx, laryngeal diphtheria, laryngeal polypi, edema of the glottis, an abscess in the soft tissues about the larynx, and the different forms of paralyses.

Especially in children is this method of great importance and very readily performed because of the softness and flexibility of the neck. Two years ago two cases of laryngeal diphtheria were admitted to the hospital with other diagnoses. Severe dyspnea in both infants led to a direct examination of the larynx. False membranes were found and removed by suction, and the children were injected with anti-toxin and then removed to the Willard Parker Hospital.

Never say the child is too sick for a direct laryngoscopic examination.

The problem is entirely different when one has to do an upper tracheo-bronchoscopy. Here one has to push through the glottis a straight rigid tube and the younger the child the greater the danger of subsequent subglottic edema. This method has several contra indications, such as cardiac decompensation, aneurysm, extreme weakness, and grave dyspnea. But when a foreign body is present anywhere in the tracheo-bronchial tree especially a vegetal foreign substance, there are again no contra indications. And in very young children and infants a tracheotomy should be done at once followed by a lower tracheo-bronchoscopy. Unless this is done, a suppurative tracheo-bronchitis will soon follow the presence of a foreign body, especially the vegetal type with resulting broncho-pneumonia and death.

To recapitulate:—Direct laryngoscopy is a simple innocent procedure in the hands of the trained laryngologist. It has no contra indications and should be performed in every case of inspiratory dyspnea the cause of which is not definitely known. In young children and infants it can be carried out in a few seconds without anesthesia either general or local.

Per-oral tracheo-bronchoscopy is a serious procedure in very young children and infants because of the possibility of post-operative subglottic edema. It has several contra indications such as cardiac decompensation, aneurysm of the aorta, high grade dyspnea, marked asthenia, etc. In case of foreign body in the tracheo-bronchial passages especially the vegetal types there are no contra indications. Such foreign invaders must be removed as soon as possible and in very young children and infants we may have to resort to a lower tracheo-bronchoscopy via tracheotomy wound.

THE PROBLEMS IN THE DIAGNOSIS AND TREATMENT OF TRIGEMINAL NEURALGIA.*

By CHARLES H. FRAZIER, M.D., PHILADELPHIA, PA.

From the Neurosurgical Clinic of the University Hospital, Philadelphia, Pa.

RECENTLY I received this letter from the daughter of an elderly lady.

"My mother has had neuralgia for three years. The pain involves the face, mouth and throat. The severe pains are aggravated by a constant, intense burning in the face and mouth. She has had two deep and three superficial alcoholic injections without relief, and has used six bottles of trichlorethylene without results. The pain seemed unbearable and she was taken to some surgical clinic where the radical operation was performed. Certain areas of her head and face pained all the time she was in the hospital. Lately the pains have been terrible, *worse than before the operation.* Before the operation her eye and nose caused little trouble but since then the pain in them is unbearable. The left eye is badly inflamed, much pus forms and the sight is nearly gone. Mother is too miserable now, she is never free from pain."

The same afternoon I saw in my office a patient, sent by his physician with a diagnosis of tic douloureux, who came with the full expectation of going directly to the hospital for the radical operation. He had been suffering for almost five years, not continuously, but for periods lasting weeks. The pain began in the cheek, beside the nose, spread up just to the inner side of the inner canthus, turned sharply to parallel the supraorbital ridge, thence across the temple to a point in front of the ear. Upon being questioned whether it was worse at night or by day he said it was always worse at night. Once he laid his head on the pillow, the pain began. It was an intense burning pain, associated with a dull ache, unbearable he thought. His wife said she thought he would go out of his head.

If an apology is needed, as might seem warranted by the lack of novelty in the theme, I offer these recent experiences, added to which is the invitation of your President to speak to you on the subject of Trigeminal Neuralgia. I subthis letter and this consultation as my texts. It is evident that there are still misunderstandings and misinterpretations of pain phenomena in the trigeminal zone. How may we classify the various forms of neuralgias of the face for the purpose of this informal discussion.

Speaking now only from my own experience with 2,077 cases, in the analysis of which I have made a very intensive study, I have been able to recognize only five groups. There is the postherpetic neuralgia, easily recognized from the preceding history of herpes zoster. Almost invariably in the distribution of the ophthalmic division, these neuralgias may cause intense suffering. The pain is constant, rather than paroxysmal and may persist for weeks or months until the patient may become quite demoralized. In course of time the painful sensation may be transformed into one of various forms of paresthesias, which, to the patient seem equally distressing. In course of time the various sensory phenomena disappear. In other words, we are dealing with a self-limited disease. What is of practical moment is this: the post-herpetic neuralgia, whether in the distribution of the trigeminus or, as more commonly, in that of the intercostal nerves, is not arrested by any treatment directed to the nerve itself. Alcoholic injection, peripheral section of the nerve, or, as when the pain is in the distribution of the intercostal nerves, section of the posterior spinal root, in my experience has had no influence whatsoever. At best, we can treat these neuralgias only symptomatically until the disease runs its course.

Neuralgia in the afferent system of the facial nerve as originally described by Hunt has distinctive features though it must be an affair of rare occurrence. In my entire series, I have seen but one example of what would fit in to the picture which Hunt has so well described. There is no doubt that the facial nerve has many afferent pathways through its anastomoses with the auditory nerve, with Meckel's and the otic ganglion, through the chorda tympani, with the sensory branch to the auricle, but be that as it may, the pain which may develop in this sensory system is no wise comparable to the paroxysmal pains of trigeminal neuralgia.

In but one instance have I seen glossopharyngeal neuralgia, a type comparable in many respects to tic douloureux in that the pain is paroxysmal and of great intensity, quite comparable in its intensity to that of the major neuralgias. The diagnosis is readily established. The pain is induced by swallowing and is referred to the throat in the region of the tonsil and anterior pillar and radiates to the ear. Intracranial avulsion of the glossopharyngeal nerve and section of the pharyngeal branch of the vagus are said to relieve pain although in the single case under my observation the pain recurred.

Excluding these three types, herpetic neuralgia, neuralgia of the geniculate ganglion, and glossopharyngeal neuralgia, what have we left? There are but two groups: on the one hand, true major trigeminal neuralgia, tic douloureux, the term with which the laity seem more familiar, and, on

* Read before the members of the Clinical Society of the Lenox Hill Hospital, New York, May 8, 1931.

the other, a large miscellaneous group which for want of a better term we call "atypical."

To this miscellaneous group I have given a great deal of thought. The problem has driven me into the realm of speculation and research. What is the cause of these atypical neuralgias: how may they be relieved?

Let me first recite what seem to be their characteristic features, characteristic in their distinction from true trigeminal neuralgia. Differentiation of one from the other is important because the methods of relief for one will be futile in the other. In the vast majority of cases the pain expression of the atypical group is so different from that of tic douloureux that there should be not a scintilla of doubt. What are some of the distinctive features?

In the first place the pain is constant, not paroxysmal. To be sure there are periods of remission, but during the attacks which may last for weeks or months, the pain persists day and night, and if you ask the patient whether it is worse by day or by night, the answer almost invariably is "by night." How different from the true tic when the patient's sleep is usually undisturbed.

As to its distribution, if you take the trouble to chart the painful zones, it becomes at once apparent that the pain does not correspond to the anatomical zones of the trigeminus. It is not within the zone of the second or third division of the trigeminus, in either or both. Furthermore, it extends beyond the boundaries of the trigeminus and spreads into the territory of the occipital nerves or the nerves of the cranial plexuses in the neck, sometimes to the shoulder and arm.

The pain, as I said, is constant, often with periods of exacerbation, but again differing from true "tic" is usually deep-seated, deep in the structures of the cheek, or orbit, or temple. It is not a sharp shooting, lancinating pain, but quite the contrary; the painful sensations are described as burning, as throbbing, as those of pressure, as though the tissues were under great tension and would be torn apart. I have been impressed with the difficulty the patient has in describing the pain. Sometimes I have given the patient a pencil and paper and asked for a minute description of his painful sensations. It is surprising, though he has suffered for years, how difficult the patient finds it to describe his misery.

The patient's reaction to drugs, sedatives of one kind or another, is pertinent to our discussion. The patient with "atypical" neuralgia will derive relief from allonal, from codein, from morphin, many of these cases crave drugs, some are addicts. You may record it as an indisputable fact, incomprehensible as it seems, that drug addiction and trigeminal neuralgia never go together.

Now let us review the histories of the two cases with which I prefaced my address, in the light of these distinctive features. In the case of the old lady, her pain spread into the throat, beyond the distribution of the trigeminus, it was more or less constant, the pain was described as an intense burning and, what is of great diagnostic significance, the pain was not relieved by five alcoholic injections. This is an excellent diagnostic test in doubtful cases and supplies at once an absolute contraindication to operative intervention. Under no circumstances should the surgeon consider operation for, as in the case of our old lady, not only was she not relieved, but as is invariably so, the last state of her case was worse than the first. And to add to her distress, she had evidently developed a corneal ulcer.

And what of the second case? As the gentleman described his pain, I charted it on my trigeminal map. I started in the second division, wandered across the territory of the first division and landed in the zone of the third division. The course of the charted pain established the diagnosis beyond peradventure of doubt. The pains of tic douloureux follow anatomical routes; they dart to the periphery, to the terminal distribution at first of one then a second, rarely a third of the three divisions. They do not wander across zones without respect to the course of the peripheral branches. To clinch the diagnosis, I asked the patient one more question, "Is your pain worse by day or by night?" "Always at night." No further evidence was required.

What of these peculiar pain syndromes, whence do they come, how can they be dispelled? I have analyzed a large series of cases and divided them into groups according to their distribution of pain. But nothing was accomplished by this save to indicate that the pain did not correspond to the trigeminal zones and was therefore not of trigeminal origin. It requires no stretching of the imagination to correlate the pain zones of the atypical neuralgia with the distribution in the region supplied by the branches of the external carotid artery.

Wholly without prejudice I have attempted to understand the so-called Sluder syndrome. I became lost in a maze and I am much afraid that Sluder, interesting and persistent as he was, carried away his syndrome with him when he passed on to other realms. I say this with respect for the man and his work, but it so happens that in my experience with members of a large neuralgia tribe that I have never seen a case in which alcoholization of the sphenopalatine ganglion gave any more relief than injections of sterile water, and I have gone one step farther than Sluder or any of his advocates in having designed and practised an operation for the removal of the sphenopalatine ganglion. When this failed to give relief, I considered the chapter closed.

We had rather an interesting time with one of our patients, a lady of 48 years, referred to us by her physician for operation. As in many of these strangely evasive neuralgias, the doctor comes to

the end of his string and generously delivers up the patient to us, giving as his farewell message assurance that by operation her pain will be relieved. In this case, as in other cases, we made our daily charts of her painful zones. These charts speak for themselves and serve a very useful purpose in that they graphically portray the places to which pain is referred at different hours of the day. You will see how the pain spreads from one division to another and beyond the confines of the trigeminal zone.

We noticed that preceding her attack there was a definite pallor of the affected side of the face. What else could account for this but a vasomotor spasm, a sympathetic phenomenon. If there was any anatomical direction or distribution of pain, it seemed to follow the directions of the vessels, of the branches of the external carotid artery, the temporal and posterior auricular arteries. This gave us a clue and we at once prescribed amyl nitrate for its vasodilating effect. For a time there was definite relief, but after a while the effect of the drugs became less apparent. Is it altogether unreasonable to assume that the sympathetic pathways either themselves or through other nerve fibers accompanying them may be held accountable for the occurrence of pain? In support of this supposition there are the gastric crises, there is the relief of pain following the Leriche periarterial sympathectomy. Foerster of Breslau made some interesting and pertinent observations in patients with paralysis of the extremities; in one case of brachial plexus palsy with total anesthesia in the fingers stimulation of the digital artery with faradic current caused a sticking pain in the little finger; in another the face, following section of the sensory root, was totally anesthetic, yet stimulation of the sympathetic fibers in the carotid artery caused pain in the upper jaw. Numerous other illustrations could be cited definitely to establish a relationship between the sympathetic pathways and pain.

Convinced of this, a few years ago in a series of cases I stripped the periarterial plexus from the carotid vessels and removed the superior cervical sympathetic ganglion. The results on the whole were disappointing. These operations failed because we failed to take into account that some of the pain bearing nerve fibers which accompany the periarterial sympathetic plexuses do not enter the nervous system above the first dorsal segment. There are no white rami above this level, hence it would be reasonable to assume that to interrupt these pain pathways to the face, one must inject or remove the sympathetic ganglia and rami below or at the level of the first thoracic segment.

At last it would seem that our speculation and flirtation with the sympathetic system these past years was beginning to bear fruit. Relief of these atypical neuralgic pains has been obtained by injection and by operations on the cervicodorsal and second thoracic ganglia. (Mixter and White, Archives of Neurology and Psychiatry, May, 1931). The results have not been uniformly good. But there has been complete relief in one case for a period of 12 months. At last it appears we are at the point of solving a perplexing problem. This operation, excision of the first two thoracic ganglia by the Henry technic, must be applied to a larger series of cases before any final pronouncement can be made.

So much for the atypical neuralgias. Major trigeminal neuralgia is an uncommon affection; many of you may never see a single case. An almost daily experience with us, I did not realize how infrequent the opportunities for observation of the general practitioner were until I questioned a colleague with an enormous clinical experience, in the closing years of his career. He had seen but two cases.

Hence, I venture to make a few general remarks, even though they may seem commonplace. Tic douloureux is a clinical entity as specific in its complex as typhoid fever or smallpox. Its ear marks are so easily recognized that there need be no confusion as to the diagnosis. Though prevailing in the decade after the fourth decade, I have seen unquestionable examples between the thirtieth and the fortieth year. I have never operated on an Oriental and only twice upon negroes. Tic douloureux always begins in one division of the trigeminus, never in two and always on one side of the face. It never alternates from one side to the other, it never terminates spontaneously. One of my patients is in her 93rd year. There are no exceptions to these statements as there are none to other of its characteristic features. The pain is shooting, lancinating, tearing, always darting to points in the terminal distribution; horribly intense, as are all root pains. (Consider the crises of tabes.) And between the paroxysms complete freedom; incited by contact with the skin or mucous membranes or by movements of the muscles supplied by the motor division of the fifth. With these exciting factors inoperative sleep is peaceful and uninterrupted. The initial attack may last but a few weeks but as time goes on the attacks become more frequent, the interval shorter and the pain more intense. Eventually, in the course of time, paroxysms may be a daily occurrence.

Subjects of trigeminal neuralgia exhibit the most extraordinary tolerance to pain. There are many paradoxes. Justifiable as it might seem, I have never heard of a case of suicide or even threatened suicide. Only the other day a young married woman with atypical neuralgia upon learning she could not be relieved by operation went from my office to a hotel in your city and jumped out of an eighth story window. As I have said before, the "tic" patient never craves opium or per contra you may write it down as an indisputable fact that if the patient is an opium addict whatever may be the nature of her pain it is not tic douloureux. Morphin, the greatest of

panaceas for pain, has no place in the treatment of this specific neuralgia.

I have become convinced that these patients suffer as much from apprehension of pain as from the pain itself. Though relieved of pain for the time being by an alcoholic injection, their minds are never at rest. Like one exposed in a thunder storm, they fear the next stroke of lightning will fell them.

There remains nothing to complete our knowledge of this disease save its etiology. The clinical course, its characteristic features, the methods of relief, are thoroughly comprehended. But of its origin we are in complete ignorance. That it is not due to any systemic ailment, to any toxic influence, to any focus of irritation we are morally sure.

To what are these fleeting pains due which come and go for years without a vestige of a lesion from the mesencephalic root through the sensory root, Gasserian ganglion to the terminal twigs? As a reasonable hypothesis may we not assume a vasomotor spasm in the vessels supplying the trigeminus. The trigeminal we know to be rich in its sympathetic connections. What else could cause a paroxysmal pain that vanishes as suddenly as it appears, without any structural changes in the ganglion itself unless it be a transitory ischemia. We see in Reynaud's disease an illustration of the pain of vasomotor spasm. Whether pertinent or not to this question, two patients volunteered the information that the pains were always arrested when they had fever. Can we postulate in these febrile attacks a hyperemia which counteracts the tendency to ischemia? It is an interesting speculation.

Accepting vasospasm as a reasonable hypothesis, Lux (*Wiener Klin. Woch.*, Vol. 43, 1930, Part 2, page 1435) applied diathermy in a series of cases. One electrode was applied at the occipital protuberance and two over the eye. By this method he claimed to have obtained relief in a number of cases.

Whatever may be the cause of major trigeminal neuralgia, there is no doubt as to the methods which give relief. I can testify only to the results of alcoholic injection and operations upon the sensory root. In a recent number of the *Journal of the A. M. A.*, Glaser claimed for trichlorethylene relief in 15 per cent of cases so treated. I haven't a single observation to offer in support of the efficacy of this drug.

My views as to the selection of one or the other of the accepted methods are well known. Whether it be an alcoholic injection or the major operation, is left to the patient to decide, after he is informed as to what each means. As a rule, after two or three inections the patient has had enough of injections and petitions you to operate. He dreads the next injection, he is wearied with temporizing, he realizes at last that the injections are only a makeshift; he had hoped against hope that his case would be the exception to the rule.

As a class, I find these patients unusually well informed as to the various methods of treatment. They have discussed the question with other victims, with friends of victims, with their physicians. Oftentimes they have secured articles from the medical press with which they have informed themselves. In many instances they have been misinformed. The operation is dangerous, it is disfiguring, the eyesight may be affected. Some time must be spent in clearing away these misunderstandings.

I shall not weary you with a description of the operation or with its evolution. Since 1901, when Spiller first proposed section of the sensory root as a substitute for resection of the Gasserian ganglion, there have been many refinements, chief among which are conservation of the motor root with the advantages implied, preservation of the ophthalmic portion of the root, and later the selective section of the root dividing only that portion in the distribution of which pain is referred.

Conservation of the ophthalmic portion of the root eliminated for good and all the one complication of the original operation, always a source of anxiety to the operator and patient. I refer to trophic keratitis. Fortunately, pain rarely originates in the first division so that only occasionally is it necessary to sacrifice the entire root.

Are there any contraindications to the operation? Up to the 80th year, I should say none. When a patient is 80 years old or older the expectation of life is short and one or two alcoholic injections over a few years will keep the patient comfortable for the short time that remains.

Is the operation difficult? Yes and no. Having performed the major operation 667 times, I never approach the next one without a feeling that I may encounter conditions that may tax to the limit one's patience and ingenuity. No two of this series seem exactly alike. They say practise makes perfect. Be that as it may, this experience at least has taught me how best to deal with the tantalizing annoyances that one may encounter That we have succeeded in reducing the hazards and the risks to a minimum is a matter of record. We have lost but one patient in the last 390 cases. To the patient harassed by pain, his endurance exhausted, nothing is so comforting as to be told the actual facts, when he faces the surgeon with the inevitable question, "Is the operation dangerous?"

RECENT ADVANCES IN OPHTHALMIC SURGERY*

By WEBB W. WEEKS, M.D., NEW YORK, N. Y.

DURING the past year, changes in technique or new procedures in Ophthalmic Surgery reported by men of various countries, have been read of by most of you and many have tried out these new ideas. If the manner of a new method has been correctly described and properly carried out, it has met with approval by some and been considered a failure by others. Most of the failures I might say, are due to the improper carrying out of the procedure advised, one little step having been altered, or not enough experience has been developed in the doing of a particular operation to assure its success or warrant its condemnation by surgeons trying it.

Many of the procedures are alterations of operations or surgical technique evolved long ago, the basic principal remaining the same. One has to but visit various Clinics to see a different method of carrying out many of the commoner operations, each successful in the hands of this or that surgeon. Yet often, what is considered success by one surgeon is not thought of as such by another. Thus an eye may be straightened and look good but the power of convergence may have been weakened or a caruncle may be drawn backward out of position. The results obtained by plastic surgeons with pedicaled or sliding grafts have perhaps corrected a lid or socket deformity, but scars have been made in the area adjacent where no scars formerly existed.

Each surgeon will vary in his technique of the preparation procedure for an operation and in the after care of an operative case, according to his initial training and the ideas he has gathered by visiting various Clinics and watching men of reputation operate. Then too, from his own operative experience he has formulated his system or method and developed changes which are successful in his hands. These may not be best suited to the position in which another operator finds himself, either as to operative facilities, material, personal skill or temperament. In reviewing operative procedures suggested by foreign surgeons we must ever bear in mind that the standards of many foreign countries are quite different from those by which we gauge our patients and carry on our operative procedures. The authenticity or accuracy of the data, too, may be in many instances questioned. Nevertheless, the ideas tried out and expressed in the communications of the various foreign journals can but keep us alert and thinking. From them successful changes in our own methods may be worked out much to the benefit of our patients.

To review with you, I will go over a number of procedures in technique and of operative procedure which seem logical, practical, worthy of a trial and if carried out corectly, assure success in the hands of a good operator.

Asepsis

First let us consider the matter of skin asepsis.

F. M. Liebermann and M. K. Solovieva, report that brilliant green and malachite green aniline dyes possess excellent bacteriocidal properties for the preparation of the skin and lid margins. They are not inferior to iodine and cause no secondary disagreeable after effects, such as: hyperemia, swelling of the lids and loss of the outer layers of the epithelium. These dyes are easy to procure, cheap and usually used in a 1-1000 distilled water or hypertonic salt solution.

Brilliant green is a triphenylemathane compound from five to ten times as powerful an antiseptic as the perchlorid of mercury. Serum interferes much less with the action of this antiseptic, in addition to its antiseptic properties, brilliant green causes no apparent harm to tissues but rather stimulates the formation of granulation tissue. Brilliant green stains the skin readily, can be removed by spirits, should be applied with the operator wearing rubber gloves. Stains on draperies come out easily with the usual washing. It is considered a strong antiseptic particularly as regards anaerobic micro-organisms. (Gram positive.)

If this be true (I have had no experience with it), it seems worthy of trial.

For asepsis of the conjunctiva and lachrymal sac, Polak has found a new disinfectant in Rivanol (Etho-oxydiamino) which is most efficient in a 1 to 20-000 solution. Usually a 1-2000 solution is used to irrigate the conjunctival sac. He tried out a large number of disinfectants in vitro and found that Bichloride of Mercury and the oxcyanide of Mercury possessed the strongest bacteriocidal properties, the staphlycoccus not surviving in dilutions of 1 to 1-000,000. Incidentally, he found that a saturated solution of Boric Acid controlled the growth of Staphylococcii.

Anesthesia

Nerve block has come into its share of approval—first let us say that of the facial nerve as it is successfully carried out by the injection of 1 c.c. of novocain 2% with adrenalin

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in front of the tragus of the ear, just below the zygoma and down to the *neck of the ramus* of the Inferior maxillary bone as advocated by Obrien. This stops orbicular spasm in five minutes. In my hands, this has been eminently satisfactory and successful. Orbital anesthesia as advised by L. Lieberman has a definite place in Ophthalmic surgery. Especially for enucleations, eviscerations, and in operations upon the tender, painful eyeball. A thin 4 cm. needle on a 2 c.c. syringe containing novocain 2% or better a 1-1000 solution of percaine plus adrenalin and a 0.2 c.c. of 1-1000 Rivanol for aseptic purposes, enters the orbit in the lower outer quadrant through the eyelid and is carried backward, upward and inward 3½-4 cm. The solution is slowly injected ahead of the needle to prevent piercing a blood vessel. As advised by Duverger and Green.

This procedure is entirely successful, with no untoward results. Care has to be taken in not injecting too much solution. Some orbits owing to either a small size or to the presence of a relatively large globe, hold less than others. The proptosis resulting puts the lids on a stretch rendering instrumental manipulation difficult and limiting the movements of the eyeball. Some sunken globes are brought forward by this injection so that operative procedure is easier and Lauber of Vienna states that ocular tension is reduced, facilitating the operations for a glaucomatous eye with high tension and favoring lens delivery, there being less likelihood of vitreous prolapse.

It would seem that *Avertin,* or tribromethanol, as a basal general anaesthetic when properly given and watched, offers something worth while in Ophthalmic surgery. Acting in twenty minutes when given rectally, reaching its maximum effect in thirty to forty minutes and lasting one and one-half to two hours with no bad after effects, it does away with the annoying and obstructive ether cone as well as additional hands about the nose and mouth.

It is reported by one western clinic, that ocular tension is quite substantially lowered during anaesthesia with avertin, making it practically impossible to lose vitreous in a cataract extraction.

It has to be given by a skilled anaesthetist and has certain contra-indications such as severe kidney or liver disease and it should not be given in very obese, cachetic or dehydrated patients.

Surgical Instruments

Among the Surgical instruments of note, the eyelid speculum as modified by Guist of Vienna is thought highly of by Ellett and Black. This principally because it lifts the lids away from the eyeball. In my hands, this instrument seems too heavy, cumbersome to insert and remove, and when its thick lid retractors lift the lid away, it presents a difficult way of approach when one is working from above. It was planned for the period when nerve block was not used as much as it is today.

Another instrument which has its appeal, is a needle for the Epilation and transplantation of cilia as devised and used by Kanbai.

Still another useful clamp, is that devised by Lowenstein and used in removing a mucous membrane graft from the lower tip.

Operative Procedures

Perhaps among the operative procedures giving new hope in the desperate cases which for a long time have been given up as impossible for improvement by any procedure may be mentioned—Keratoplasty as done by A. Elschnig of Prague. He reports 144 cases operated upon after the method of Von Hippel, Sr.

In 139 the vision was improved. 113 of these were cases of corneal scarring due to Chemical burns. In 26 cases of Interstitial keratitis, 17 transplants remained clear with visual improvement.

He used careful preoperative antiseptic treatment, nerve block and the superior Rectus bridle suture.

The entire thickness of the cornea is removed from the center of the scarred area if a thin section is desired or from the margin of a thicker one with a Von Hippel trephine. Any prolapse of vitreous is excised. The implant is slipped into place with a spatula and held there by sutures running from above the limbus down over the implant to the limbus below. Both eyes are bandaged. Patient is kept quiet 10 days—first dressing is on the second day—suture removed and atropine instilled. Unoperated eye is left uncovered after 7 days, the operated one only after the 14th day.

It is essential for success that all infective processes must have been inactive for one year. Children under 14 are not suited for this operation.

Cases of Aphakia, increased ocular tension, or where there is a wide flat synechia between the Iris and Cornea, are not to be operated upon.

Another silver lining flashes for a certain number of suitable cases of Spontaneous Detachment of the Retina. Since last reported before this section, nothing much has been added save perhaps more surety as to the type of case to be operated upon. As restated

by Schoenberg. "Those cases of recent date in which the detachment is not too extensive, and there are only a few small tears, so located as to be accessible to the ignipuncture, carefully located and plotted." Lindner has reported 42 cases coming under his observation, 29 of which showed retinal tears and 25 came to operation. 15 of these were considered cured as the retina had remained reattached for six months. 14 of these operated cases were of recent origin, that is, six weeks or under.

He believes that the operative results become progressively poorer after six weeks.

Vogt believes that a presenile or senile change occurs in the eye with a destruction of the vitreous body and a cystoid degeneration in the region of the equator causes the retinal tear. He reports 26 cases operated upon with eleven cures and believes that from 40 to 50% of recent detachments can be cured.

Gonin reports his experience with 250 patients and in more than 300 operations.

1. In 95 per cent of the cases one or several holes were detected where ophthalmoscopic examination is possible.

2. In 10 per cent of these cases the hole was at the ora serrata.

3. In all recent cases when the hole or tear has been closed, cure is immediate, complete and permanent.

4. In older cases, closing the tear stops the detachment and may produce a more or less complete reposition of the retina, but restoration of the vision generally remains incomplete.

5. If the detachment relapses, it is found that the tear has not been completely closed or that there is another tear which had not been previously seen.

6. A recurrence of detachment in a different region of the eye, is due to formation of a new hole in the retina.

Gonin believes 60% of the recent cases can be cured. Against these favorable results one can get an idea of the meaning of them after glancing at the table of other procedures by Stollard.

We have had 10 cases on our service at Bellevue Hospital with but one cure, though I must say that at least eight of these cases were old and showed no tears of the retina.

Rubbrecht brings forward a simple method of localizing a retinal tear. First getting the meridian by sighting along the pupillary edge proxmial and then distal to the tear, placing a suture in this median and carrying it out over the sclera. Allowing 8 mm. for the distance to the ora serrata from the limbus and 1½ mm. for each disc diameter of the tear from the ora serrata a mark with india ink is made on the sclera exposed by reflecting a flap of conjunctiva and Tennon's capsule. At the New York Eye and Ear Infirmary with this mark as a guide a fine needle is inserted into the eye, noting its relation to the tear with the ophthalmoscope, making the igni-puncture accordingly after the subretinal fluid has escaped.

These measurements and methods of plotting are shown by Rupprecht and Schoenberg.

A distinct advance in the technique of Corneal tattooing has been reported and its success is certain if the cases, and precautions advocated by *Pishel* are taken—particularly that of staining with Platinum chloride.

The technique advised, is as follows:

1. Anaesthesia, Cocaine or phenacine without adrenaline.

2. Epithelium carefully scraped off the area to be stained. Area may be stained with fluorescin to determine its outline if it be thoroughly washed off.

3. Wash cornea with sterile water. Hemorrhage must be stopped.

4. A cotton pledget the size of the denuded area, first dipped in 3% platinum chloride is held against the denuded area, being replaced by a fresh one every minute for about five minutes. This pledget should not be dripping wet.

5. Reduction of the platinum chloride with a drop of hydrazine hydrate on the area for 25 seconds, then washed off with sterile water. Color promptly appears.

6. After 5 minutes wash the eye with normal saline and bandage. Vascular leukomas are harder to stain and fade faster.

Worthy of more than passing notice is the procedure for the treatment of spastic or senile entropion, involving the lower eyelid.

As advocated by Terson, Dudinor and Safar, 2-3 c.c. of an 80% alcohol solution in the deep muscle tissue at the temporal orbit margin preceded by 4% novocain.

More recently and specifically, Hughes outlines the following procedure. A hypodermic with 0.3 c.c. of 4% novocain into the outer fibers of the orbicularis muscle extending a distance of 4-5 mm. into the lower eyelid near the margin. Leaving the needle in place, the syringe is replaced with one containing 0.2 to 0.3 c.c. of 95% alcohol (not denatured), which is injected into the same site.

Five cases are reported but since then as many as 12 cases have received this treatment in the Bellevue and New York Eye & Ear Infirmary Clinics, with relief of the entropion.

Of the numerous operations for iridectomy especially when done to relieve the ocular tension in cases of glaucoma, the one suggested by Post has much to commend it. The limbic

incision is similar to the one used by La Grange insuring getting deep into the filtration angle. The tissues in the area of subconjunctiva filtration are disturbed to a minimal degree, giving rise to less scar tissue formation. The iris can be freed at its attachment.

The objection that might be raised, and it occurred in one of the cases I did, is that the ballooning of the conjunctiva and subconjunctival tissues permits of a chance of getting lost when inserting the Iris forceps. Then too, working from the side through a small opening might seem a drawback. But at any time, the conjunctival flap can be freed, turned down and a La Grange sclerectomy be done.

The following steps are done in this procedure:

1. Subconjunctival injection—saline, of upper bulbar conjunctiva.
2. Double fixation below horizontal line.
3. Introduce Graefe knife into conjunctiva at a point about 3 mm. above the upper border of the Limbus in a vertical line with the temporal border of the cornea.
4. The knife enters A. C. directed toward the tip of the nose. Depress handle and counter pressure made at a point which will cause a section of 1/5 of the circumference of the cornea to be made. Complete section upward on a plane with the iris. Point of knife kept subconjunctival at time of exit, turn blade forward, withdraw knife through original conjunctival wound. Conjunctival bleb is still elevated.
5. Enlarge puncture wound of conjunctiva to 4 mm.
6. Slip iris forceps into the a. c. Pupillary border of the iris seized and drawn upward through the limbus incision. Iris is everted. The iris is pulled into the temporal end of the incision. Part exposed is excised. The scissors being introduced subconjunctivally.

Ten cases were reported as having the tension successfully lowered. Dr. Post writes that he has continued to use this method finding it successful in a large percentage of cases of Chronic simple Glaucoma.

Post Operative Treatment

Accustomed as we are to careful dressing and applying a bandage after ocular operations, the reports of Maselinkova and Rabkin as to the open treatment seem most daring and will make most surgeons sceptical of the feasibility of such a plan. Maselinkova reports 115 cases of all kinds, 65 being cataract cases, where no dressing was applied with only a protective wire mask.

Rabkin reports 62 cases so treated.

These men believe that dressings facilitate the growth of organisms by interfering with the natural cleansing of the eye and raising the temperature of the Conjunctival sac. They believe as well, that this method is more comfortable to the patient, is economical, the postoperative phase is shorter and that the complications and unfavorable outcome are no greater than with dressings applied.

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PERFORATED PEPTIC ULCER AND SIMULATING CONDITIONS*

By MAX J. SCHROEDER, M.D., NEW YORK, N. Y.

From the Gastro Intestinal Department of the German Polyclinic.

THERE are very few intra-abdominal conditions that require as prompt and proper recognition as does perforated peptic ulcer. Here time, expeditiously utilized, may tip the scale on the side of life.

The cases to be presented are very significant, for every one of them teaches us a lesson never to be forgotten.

Almost every one is familiar with the text book description, but it is the individual variation that adds color to the situation.

Of a number of very interesting cases of perforated peptic ulcer selected, the following to be presented:

Case 1—A. J., patient, machinist by trade, 50 years of age.

Family History: Negative.

Past History: Had a chancre 25 years ago.

For the past 6 years complained in his own words, of gas in the stomach. The patient was too sick to explain in detail what he meant by gas in the stomach.

Chief Complaint: Was sick 3 days before I was called in to see him. Then the story was as follows:

Three days ago began with pain not localized in the abdomen and chest. At the same time had several stools of bright red and black material of which, he said, passed half a liter. Also had several attacks of hamatemesis the same day. Since the onset of illness, that is, three days before, has not had any more bloody stools. Throughout the three days has had one bowel movement, not bloody.

Physical Examination Revealed:

Abdomen rigid throughout, no definite localized tenderness, liver dullness obliterated.

White blood count, 20,400.

Differential 94% poly morphonuclears neutrophiles.

Pre-operative diagnosis was of perforated gastric ulcer.

At operation a perforation found on anterior surface of stomach to the gastric side of the vein associated with peritonitis. Ulcer was 1½ cm. in diameter.

Blood Wasserman report, received after the operation, was 4 plus.

Five days after the operation developed toxic psychosis (luetic).

Tore off dressings and eviscerated about one foot of colon with omentum.

Died 8 days after the operation.

While one cannot prove that the luetic condition was responsible for this ulcer, yet one does see peptic ulcers clear up sooner with anti-luetic treatment in those afflicted with syphilis. It is permissible to contend that we were dealing here with a peptic ulcer brought about by the luetic condition. The rarity of the condition warrants its report.

Case 2—M. B., painter by trade, 55 years of age.

Chief Complaint:

For the past 34 years complained of pain at the ensiform. Six to seven months during the year was free of pain. Pain was relieved by food, ate 6 to 7 times daily, pain came on 2 to 3 hours after food, also at night.

For the past 12 years complained of constant heartburn, even though was on anti-acid diet.

The *x*-ray revealed syndrome complex of duodenal irritation, i.e., hyper-secretion, hyper-peristalsis, hyper-colonic motility and a small gastric residue. In view of history and Roentgen findings, though not direct but yielded indirect evidence of a peptic ulcer, patient was treated accordingly. That the condition was due to lead was ruled out.

About 2 months after his first office visit, he was suddenly awakened by a severe burning pain in the epigastrium which radiated around to the back. No radiation to shoulder or other regions. Vomited bile tinged mucous. Had a bowel evacuation, noticed no change in color of stools.

Urinary symptoms were normal.

Temperature, 99; pulse, 76.

Physical examination revealed: Patient to be very sick.

Abdomen rigid all over, more pronounced on right side.

Tenderness in epigastrium and right lower quadrant.

Rigidity seemed to be involuntary.

Diagnosis before operation: Perforated peptic ulcer.

At operation stomach and duodenum explored and found them to be normal.

Found gall bladder distended, filled with stones, one was at the cystic duct. Gall bladder and stone in cystic duct were removed.

The points of interest here are as follows:

The patient was operated upon about 5 years ago but just a few days ago he consulted me again giving symptoms of peptic ulcer.

Apropos of the past history, clinical picture and operative findings and present condition, is it not permissible to contend as follows:

A. That the patient had a concomitant peptic ulcer and also gall bladder pathology.

B. That the gall stones were silent prior to this attack.

* Read before the East Side Clinical Society, February 10, 1931.

Internal Causes:

1. Foreign body.

2. Thickening of the mucous membrane due to inflammation or new growth.

3. Hyperplasia of the structures in the bronchial wall, sessile or pedunculated malignant or benign.

4. Accumulation of bronchial secretions, of which the consistency is sufficiently tenacious to overcome the effectiveness of the mechanism provided for their expulsion (seen principally in asthma and bronchitis).

All of these disturbances, with the exception of asthma, may be considered as unilateral and should be thought of when a unilateral bronchial disease presents itself clinically.

When and as an obstruction to a bronchus develops, the ingress and egress of air and secretions become more and more impeded. At length a state exists in which the shifting of secretions or the change in the lumen consequent upon the respiratory movement, causes the bronchus to be alternately open and closed at the site of the lesion. The area of lung supplied by the affected bronchus then becomes a closed space during the period of complete occlusion. This brings about a delicately balanced and constantly changing relationship between the air pressures, proximal and distal to the obstruction.

During a complete respiratory phase the following events may then occur. It is simpler to begin with the expiratory movement from the time when the obstruction is complete. The pressure within the closed space swings toward the positive side. As the movement continues the positivity increases until a point is reached at which the pressure is great enough to force the barrier. Air then begins to bubble through and escape with the general current. If the expiratory movement comes to an end, with the chest wall fixed in its then position, air continues to escape until the differences of pressure are sufficiently approximated to fall below the minimum required to pass the obstructing plug. The bronchus again is closed.

An inspiratory movement begins. A negative pressure is created within the closed space and continues to increase until it is great enough to draw air from the outside through the obstruction. If the inspiratory movement then comes to an end, the chest remaining fixed, air again continues to enter until the differences of pressure are sufficiently approximated to fall below the minimum required to pass the obstructing plug.

The phenomenon can generally be observed at the end of a complete expiration, but unless the bronchial wall is rigid as is the case in infiltrative growth the lumen is likely to become patent at any time during inspiration. In some cases, however, it is only at the end of each respiratory phase that the pressure difference is great enough to pass the occlusion.

If a stethoscope is placed upon the chest wall over the area of lung supplied by the affected bronchus there is audible a ronchus varying in character and intensity with the size of the lumen and the type of the obstruction. It then enters the realm of physical signs and may be conveniently called "After Breathing" because it is a movement of air in the inspiratory direction after the end of inspiration and in the expiratory direction after the end of expiration.

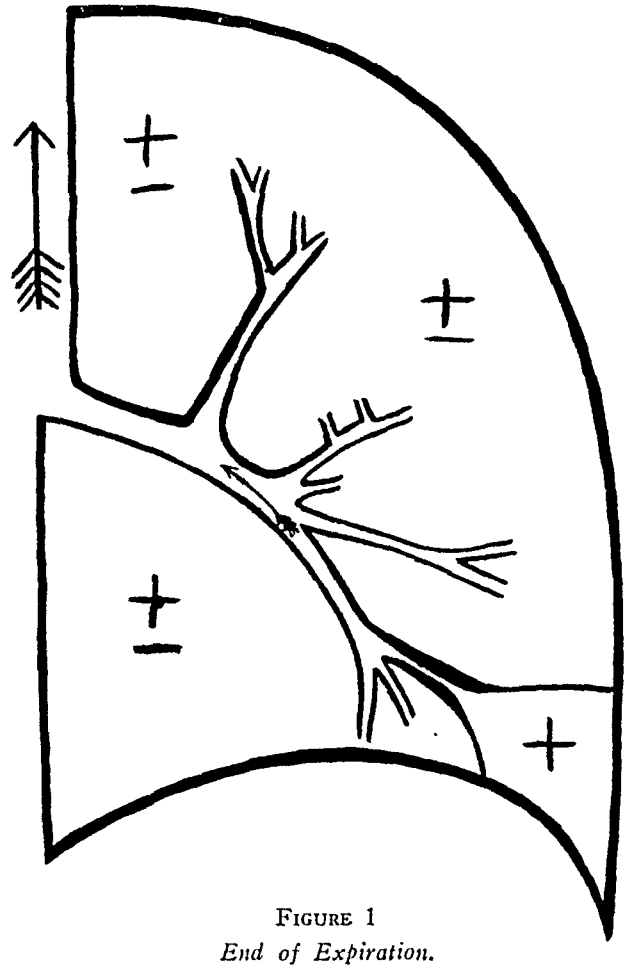


FIGURE 1

End of Expiration.

The diagram shows the relation of the air pressure in the "closed space" to that in the remainder of the lung at the end of expiration, with the air still moving through the mucous-filled narrowing in the expiratory direction. At the end of inspiration the same conditions obtain, except that the pressure in the "closed space" is negative, and the direction of the air current is reversed.

The mechanism involved closely resembles that described by Chevalier Jackson[1] as a "by-pass valve."

[1] The Mechanism of Physical Signs in Neoplastic and Other Diseases of the Lung with Especial Reference to Atelectasis Emphysema. Chevalier Jackson, Philadelphia, Jour. Am. Med Assn., Vol. 95, No. 9, Aug. 30, 1930.

RECENT ADVANCES IN THE DIAGNOSIS AND TREATMENT OF CHRONIC DISEASES OF THE NOSE AND THROAT.*

By GEORGE L. TOBEY, JR., M.D., BOSTON, MASS.

THE subject of this presentation precludes any claim of originality on the part of the speaker. The time allotted allows us to but briefly outline the tremendous advances which have recently been made in the understanding of and consequently the treatment of chronic diseases of the nose and throat.

The monumental works of Schaeffer on the embryology of the nose and throat and the more recent work of Negus on the comparative anatomy of the larynx have bridged a yawning chasm and with which all otolaryngologists should be thoroughly familiar.

We are indebted to Mosher for his painstaking and illuminating demonstrations of the surgical anatomy of the nasal sinuses and oesophagus and their practical application in diagnosis and treatment, notably the intranasal approach to the frontal sinus via the aga nasi cells, and a more thorough understanding of the anatomy and pathology of the oesophagus.

Yates has shown us the action of the cilia demonstrating paresis and actual paralysis in the presence of active and chronic infection, thus explaining many of the local phenomena during the course of nasal sinus and pharyngeal infections.

The emphasis placed by the American Board of Otolaryngology on pathology has been reflected by the great increase in articles dealing with the subject appearing in our literature. Without a doubt, more such articles have appeared in the past five years than in the preceding decade.

Foremost among these articles is that of Knowlton and McGregor. It had been the accepted dictum of all laryngologic teaching that when the mucous membrane of an accesory nasal sinus was removed, it was replaced by scar tissue. This belief is constantly quoted as the reason why diseased antral mucosa should not be removed. Knowlton and McGregor have been the first to study the question scientifically. By operating on dogs, they demonstrate by autopsy and histologic sections that in one month's time epithelial replacement is well established and the gland formation begins. Three months afterwards, epithelial replacement is complete, and the canine fossae opening is nearly filled in with bone. In five months, gland formation is well established in the mucous membrane and the muco-periosteum looks almost normal. Sections studied after secondary operations in man, showed the same replacement of the mucous membrane.

McGregor, in the past two years, has collected 24 cases of secondary operations on the accessory sinuses, that confirm this experimental work. This paper will be published at an early date.

Inspired by this work, Coates and Ersner, tried the same experiment on the frontal sinus of the dog and their findings confirmed that of Knowlton and McGregor, showing replacement of the mucous membrane in the frontal sinus, after its surgical removal.

In an attempt to correlate the pathology found in the accessory sinuses with the symptoms, either local or general, Mullin and Ball conclude that no constant finding is present which will enable one to correlate a definite group of symptoms with the pathologic findings. They divide the histologic findings into four groups, according to (1) presence of edema (2) fibrosis (3) leucocytic reaction and (4) glandular hyperplasia or atrophy.

Simpson and Harris likewise studied the histologic sections of their sinus cases and their findings correspond with those of Mullin and Ball.

McGregor studied cysts of the antrum and concludes that they are infectious in origin and occur only in the presence of a pathological process.

We must conclude from the pathological findings to date that the complete removal of the lining membrane of the antra is the logical procedure. We await further observations of expert pathologists.

Consideration of advances in the diagnosis and treatment of the nasal sinuses other than a clearer understanding of pathology and the development of individual technique may best be expressed in the words of D. Campbell Smyth, with whom I am in complete accord:

"The volume of literature on the sinuses is as usual abundant and also as usual contains little that is new. There may be some excuse for men in the small towns in remote sections of the country writing papers containing well known facts, but there can be no excuse for well-known otolaryngologists looked up to by the medical profession continuing to write year after year papers that contain nothing that cannot be found in the most dust-covered textbooks on otolaryngology on the library shelves. The natural inference is that these men have told all that they know, but wish to continue to write.

* Read at the Annual Meeting of the Medical Society of the State of New York, at Syracuse, N. Y., June 2, 1931.

"The maxillary sinus, probably because, as Mosher once said, it is near the surface and hence easy to get at, is the one about which the most is written. Certainly, this is not due to the fact that trained otolaryngologists should be in any disagreement as to the methods of diagnosis or the proper treatment in diseases of this sinus, for the operative treatment in each case should be well defined in the minds of all well-trained otolaryngologists. It seems to me that there are only two questions concerning the maxillary antrum about which men might logically differ. One of these is the question of using opaque oils as an aid in diagnosis, and the other is whether it is advisable or not to remove all of the lining, diseased and normal, during operation. I feel that these two questions are not settled as yet.

"What I should like to see is more articles on the histology and pathology of the nasal mucous membranes, a practically virgin field. Articles that would add anything to the treatment of osteomyelitis above the orbit would also be of great value."

In treatment of carcinoma of the nasal sinuses and ethmoids, Barnes has combined operation and radiation, using the Moure's incision, cutting away the soft tissues of the cheek, leaving a permanent opening in the face to facilitate immediate radiation and to convert the entire operative field into a surface one which can be inspected for recurrence and further radiation if necessary. The opening may later be closed. He has been successful in 50% of the cases.

The various arguments for and against the different general anesthetics need not be discussed here but if there is any one outstanding rule, a rule which should be applied to the administration of all general anesthetics, it is that the proficiency of the anesthetist and his experience in our special field should be beyond question. If the operation is a nasal, a sinus, a tonsil, or a mastoid operation the anesthetist should be able to cope with the special difficulties that present themselves.

In choosing between local and general, patients of the neurotic type present special problems. The importance of the nervous dread of an operation should not be underestimated even though pain may be entirely eliminated. Anxiety and fear characterize patients of high sensibility and this fear may be increased to the extent of producing a subsequent "traumatic neurosis" in psychopathic patients should they see or hear something that may appear to them alarming or unfavorable during the surgical procedure. Therefore, it would seem that patients of this type are particularly poor subjects for the use of local anesthetics.

The question of pulmonary abscess following tonsillectomies and its development following general or local anesthesia has been the source of more or less study by a number of men. J. Leslie Davis who is a firm adherent of general anesthesia in tonsil operations, stated that recent researches in the field of pulmonary complications has shown that they may develop without regard to whether general or local anesthesia is used or even without any anesthetic. Iglauer in a comprehensive study of the various theories for the development of lung abscess showed that aspired blood was found in the trachea and main bronchi in at least 40% in all cases under general anesthesia and in the trachea of 38% of those done under local anesthesia. If this is true there does not seem to be very much choice between local and general. There is a growing tendency to the more frequent use of local anesthesia in all operations of the nose and throat.

Too much preoperative medication is the rule—it is not necessary to use morphine, hyoscyamin or scopolamin; the barbituric acid derivatives, as sodium amytol, we find to be sufficient, as an adjunct to the local injections of novocain. Avertin is apparently safe, in proper hands, and is finding a definite place in the surgery of the nose and throat.

The usefulness of electrosurgery is becoming more and more evident, not only for the major surgery of malignancy but for numerous minor procedures carried out in the office.

The particular advantages of surgical diathermy are:

1. A comparatively bloodless field of operation, owing to the coagulation of most of the blood vessels traversed.
2. A freedom from local as well as general reaction; pain and sepsis being reduced to a minimum.
3. In malignancy cases the lessening of the risk of dissemination of living cancer cells.
4. An inconspicuous thin scar.

In non-malignant diseases, the indications for its use are numerous.

Epistaxis originating from the anterior portion of the nasal chambers can be very quickly and painlessly stopped by coagulation of the blood vessel. This may be done with the unipolar desiccating current, or with a weak bipolar coagulating current.

Synechiae may be very advantageously eliminated by the use of the cutting current. Remembering past difficulties in preventing synechiae, which have been cut with a knife

or scissors, from reforming, it is very striking to see a broad synechiae completely disappear after the use of the cutting current. The use of packing or splints is no longer necessary.

The hypertrophied inferior turbinates may be cauterized with the use of the diathermy. This can be accomplished in two ways:

1. By the cutting current on the surface of the mucous membrane, or by the use of the coagulating current from a needle introduced into the submucous tissue.

Dr. Lee Hurd of New York has devised a double needle electrode for submucous coagulation of the turbinates. This would seem to be extremely advantageous as the current passes between the two electrodes.

Papilloma springing from the septum may be removed by the use of either the coagulating or desiccating current.

It is extremely advantageous for use in angiomatous tumors of the septum as the bleeding is controlled by the coagulation, and the tumor entirely destroyed, leaving a scar that is not visible. These tumors may be destroyed in toto by one or more treatments, or they may be removed with a snare and the base coagulated.

Diathermy is found to be useful for the destruction of lymphoid collections on the posterior pharyngeal well.

The use of diathermy or coagulation for removal of tonsils in certain selected cases is increasing.

Its use has also been mentioned in treatment of leukoplacia of the buccal mucous membrane.

As in the nose, the removal of papilloma and angioma of the pharyngeal mucous membrane can be accomplished by this method. The chief use in the naso-pharynx seems to be confined to the removal of cictrical adhesions between the soft palate and the posterior pharyngeal wall, and here as in removal of synechia in the nose, it seems to be a very successful method.

Naso-pharyngeal fibroma may be coagulated before removal, or by repeated coagulations may be completely destroyed.

It is open to question as to whether or not the use of radium seeds is not more successful.

The use of this method has been mentioned in treatment of chronic hyperplastic laryngitis, and again in the removal of various non-malignant tumors, such as papilloma, angioma and varix of the cords.

The use of diathermy in malignancy is too well-established to necessitate much discussion at this time. It may be stated that in no way does it supplant the use and benefit of radium. Its application comes principally in operative procedures to be followed by the implantation of radium.

Not only does it control a large part of the hemorrhage but also coagulates the cancer cells and prevents their dispersion.

Those who have experienced the difficulties of doing tracheotomy for malignancy through infiltrated and edematous tissues will appreciate the advantages of using the cutting current as well as the coagulating current.

Tornwald's Disease was the subject of heated discussions for 40 years and gradually lost sight of and rarely diagnosed as such. Dorrance has, through his embryological studies, put this condition on a scientific basis.

A true bursa pharyngea in adults is an independent structure and is not regarded simply as the median recess of the pharyngeal tonsil; it has a definite location for each age of the embryo taking its origin from adhesions of the noto-chord to the pharyngeal entoderm. Clinically it occupies a position in the midline of the pharynx just anterior to the upper border of the superior constrictor muscle. This bursa is often the seat of inflammation and cyst formation.

Cysts of the naso-pharynx should be carefully examined microscopically since most of them, the linings of which contain ciliated epithelium are cysts of the bursa pharynges. It is true that some of these cysts may be of the dermoid type.

We are indebted to St. Clair Thomson, Colledge, Mackenty, Tucker, Lewis and others for the advance in our knowledge of the treatment of cancer of the larynx. St. Clair Thomson and Colledge say that the present position of the use of radium seems to be that it may give promising results in some of the cases which could be more surely and lastingly treated through a laryngofissure, but that, when a laryngectomy is indicated the results are less satisfactory, as a later report shows that in such cases only one out of eleven has survived.

They state in speaking of *x*-ray therapy, that the technique and dosage must always remain in the province of the radiologist, remembering that there are special dangers in the application of *x*-rays to the larynx, which has proved itself to be peculiarly sensitive to their action. *X*-rays have the same effect as radium in producing alteration in the endothelium with obliterative changes in the blood vessels and later telangiectatic appearances in the skin, but if reactions occur, the damage to the larynx can be far more profound than this.

Mackenty is very emphatic in his opposition to the use of radiation in carcinoma of the larynx and gives a striking account of its bad effect.

To quote from Tucker: "Adequate surgical removal is the only treatment worthy of consideration with the hope of cure of cancer of the larynx. The removal of an intrinsic growth by intralaryngeal surgery is not advisable because of the uncertainty of complete removal.

"After early diagnosis, laryngofissure will cure 80 per cent of the anterior intrinsic cases and will give an adequate voice, with no operative mortality, without a mutilating operation. Recurrences following laryngofissure may be amenable to re-operation by laryngofissure, and are always amenable to complete laryngectomy if the patient has been kept under postoperative observation. These patients should be examined by the surgeon who performed the laryngofissure at least every month for the first year."

Complete laryngectomy, according to John Edmund Mackenty, should be done in all intrinsic cases in which there is extensive involvement. Dr. Fielding O. Lewis feels that laryngectomy may also be indicated in extensive cases in which the lesion is extrinsic or mixed, and in other extrinsic varieties, subhyoidpharyngotomy and lateral pharyngotomy.

The use of radium and *x*-ray is now generally conceded to have no place in the treatment of cancer of the larynx, except in some cases as postoperative radiation after laryngofissure of laryngectomy to prevent glandular invasion. It may be used, also, in those cases of cancer of the larynx which are not amenable to surgery because of the location or extent of the growth. Dr. Henry K. Pancoast, from his enormous experience at his clinics at the Philadelphia General and the University of Pennsylvania Hospitals, states: " I no longer use radium in the treatment of laryngeal cancer except in special cases. Cancer of the larynx is not suitable for radium therapy; first, because of the resistant nature of the squamous-cell carcinoma which is the type most often found; second, because of the tendency to necrosis of the laryngeal cartilage after the intensive radiation necessary; third, because of the frequently inaccessible position of the growth.

"Tracheotomy for the relief of dyspnoea with palliative radiation may be advisable for advanced cases."

The recent book—Cancer of the Larynx—by Sir St. Clair Thomson and Lionel Colledge, should be familiar to all otolaryngologists.

It has become apparent during the last few years that the recognition of the importance of bronchoscopy for diagnosis and treatment in disease has resulted in an enormous increase in the proportion of this class of cases as compared with those in which a foreign body is involved, notwithstanding the fact that the actual number of the latter type of cases in which bronchoscopy was used has increased enormously also.

Jackson says: "There is an abundance of clinical evidence at the Bronchoscopic Clinic justifying his opinion that the fundamental factor in all pulmonary pathology is impaired defensive power of the lung due to impaired drainage and deficient aeration. By bronchoscopic drainage we take the load off the cilia and restore spontaneous drainage. With the restoration of aeration and spontaneous drainage we reestablish the defensive powers of the lung."

McCrae summed up his views on bronchoscopy in treatment for abscess of the lung by stating that, when rupture has occurred in a bronchus, bronchoscopy drainage is, without question, the treatment to be tried first. In his judgment, the earlier it is begun the better it is for the patient.

That patients with advanced bronchiectasis can be aided by bronchoscopic drainage is abundantly proved.

Fischer states: "The best initial form of treatment for post-tonsillectomic abscess of the lung, is medical treatment, with or without bronchoscopy; if this fails, continuation of bronchoscopy for a time; if both the foregoing methods are ineffectual some form of operation is indicated, the individual case often being suited for one type of operation rather than another."

Tucker discussed the advantages of bronchoscopy in the diagnosis of suppuration of the lung and pointed out that the bronchoscopist can furnish definite data as to the location and extent of the lesion; the presence of a foreign body in the larger bronchi can be excluded; aid can be given the roentgenologist by the introduction of radiopaque substances into the tracheobronchial tree. This can be carried out most accurately when the substances are introduced bronchoscopically on the fluoroscopic table. Tissue can be removed bronchoscopically for biopsy when deemed advisable. In the treatment of suppuration of the lung, bronchoscopy aids by improving drainage through the aspiration of secretion and local treatment; uncontaminated specimens of secretion may be secured for an autogenous vaccine; structures can be dilated and obstructing granulations removed to improve drainage.

It is now generally acknowledged that carcinoma of the bronchus is more frequently observed than formerly. Whether this represents an actual increase or whether it is a relative increase due to more accurate diagnostic methods cannot be definitely determined.

In Schall's report, a diagnosis of bronchial carcinoma was positively made by bronchoscopy and biopsy in five cases. He concuded that primary carcinoma of the bronchus is not an extremely uncommon disease. Bronchoscopy offered the best means of establishing an early diagnosis of a malignant condition of the bronchi. Patients with obscure conditions of the chest should have the benefit of close cooperation of the thoracic surgeon, internist, roentgenologist and bronchoscopist, acting as a group.

With the advent of bronchoscopy as a means of diagnosis and treatment in cases of pulmonary atelectasis following operation, an entirely different conception of the etiology of this condition was gained. In a study of the records of thirty-three cases of postoperative atelectasis, Lee and others were convinced that three factors have been constant in this group; namely, thick, viscid bronchial secretion, some inhibition of coughing and interference with respiratory movements. Because of the inability of the patient to clear the bronchi of the thick tenacious secretion, it accumulates in the more dependent portions of the bronchial tree until at some point the bronchial lumen is completely occluded. The extent of the atelectatic process depends on the site of the bronchial occlusion; as a result there may occur lobar or massive atelectasis. It has been demonstrated clinically that by making the patient cough, by changing his position (Santee) or by vigorous shaking, an airway can be established past the point of obstruction and the patient may clear the bronchial tree of large masses of secretion. In a number of instances this was ineffective. In eight cases, it was necessary to resort to bronchoscopic aspiration. In each case there was immediate aeration and reinflation of the pulmonary tissue distal to the point of obstruction.

Although the records of the larger clinics show that considerably more than 90 per cent of the peroral endoscopic procedures are performed for conditions other than removal of foreign bodies, there is an actual increase in the number of foreign bodies in the air and food passages. This increase of cases of foreign body is unquestionably the result of more careful examinations by the physician and the roentgenologist and confirms Luis' observations of the now, generally accepted views concerning the necessity of education of the medical profession to consider the presence of a foreign body as a diagnostic possibility in all obscure conditions of the lung.

Smyth's experiences in the use of the fluoroscope for the removal of foreign bodies corroborated the observations of many bronchoscopists. He believed that fluoroscopy should be regarded as a first aid and not as a last resort in the removal of opaque foreign bodies from the bronchial tree. It should be at hand in all cases in which the foreign body has been in the lung for a long period, making the chances of seeing it by direct vision or of feeling it, small. It should be used after one attempt at removal by direct vision has failed, provided the attempt has been made by a competent bronchoscopist, and provided everything possible has been done at the first trial. The mortality is not appreciably raised by this method. The anesthetic should be selected according to the conditions to be combated.

Fluoroscopic removal is preferable to removal of the foreign body by tactile sensation only. Under general anesthesia the excursion of the foreign body can be controlled by having an assistant fix the diaphragm on the side of the intruder. This is of great assistance in the accurate grasping of the intruder. This point, so far as Smyth knew, was new.

Provided no acute condition is present, the duration of bronscoscopy in adults is of secondary importance, the most important thing being the gentleness of the operator, which means lack of any trauma. In other words, the bronchoscopist should not strive primarily for speed, but should rather exercise the greatest patience, and his manipulations should be the most gentle possible. This conclusion is not based on the series of cases reported in this paper alone but rather the result of Smyth's observations in a considerable number of cases of foreign bodies in the air passages, of fairly long duration. Mosher in consideration of the lower end of the oesophagus brings out:

"First, the oesophagus comes to a point at the edge of the left crus, then changes its axis and is confined between the crura until it reaches the stomach. This anatomical formation explains the barium picture of the lower end of the oesophagus, and locates the point of physiological closure on inspiration. Second, forced inspiration causes a more complete closure of the crural angle, and the point of closure of the oesophagus jumps upward a quarter to half an inch, giving the impression that that much of the oesophagus is suddenly amputated. He previously held that this supplemental closure was due to the pressure of the inflated basal lung tips. The findings with the barium striped bag have changed his opinion.

The major clinical conclusions are: As the result of infection transferred from adjacent glands the various components of the oesophageal wall may show at birth a localized or a generalized hypertrophy; ulcer of the oesophagus occurs at or before birth; pouch of the fundus of the stomach is found at birth; infec-

tion about the lower end of the oesophagus can cause a gluing of the fundus of the stomach to the oesophagus and an invagination of the lower end of the eosophagus into the stomach; segmentation is occasionally found in the muscles at the lower end of the oesophagus making the oesophatus at this point structurally weak. The writer has had twenty-five consecutive cases of cardiospasm which show a crural crease in the oesophagus. He believes the crease to be due to a fibrosis of some of the muscle bundles of the crura. It is the result of infection transferred from neighboring organs. The fibrosis of the crural ring is best dilated under fluoroscopic vision. The barium striped bag under manometer control is very efficient for this purpose."

The management of pharyngeo-oesophageal diverticulum has been presented by Lahey who concludes that the two-stage operation is a safe one. Proper dissection of the neck of the sac and implantation of the sac overcomes many of the post-operative difficulties of the operation. He presents a plan for the implantation of small diverticula within the wound, and also one for the excision of the mucous membrane lining the small implanted sacs without reopening the space just in front of the prevertebral fascia.

Allergy

Allergy—meaning altered reactivity of cells and tissues—is the accepted term to designate that condition of hypersensitiveness of certain individuals—roughly 10 per cent—to substances responsible for the production of unpleasant symptoms and lesions; such as, hay-fever, vaso-motor rhinitis, asthma, eczema, migraine, etc. The same term applies not only to the increased or exaggerated activity but also the opposite state of reduced activity.

(Kolmer). It is now known that an antibody is involved in most allergic phenomena or reactions. When the allergic antibody or allergin is in or on cells, the latter are said to be "sensitized" and this constitutes the fundamental state, as it accounts for the altered reactivity of the cells.

When the exciting agent or allergin comes in contact with the antibody or allergin in these sensitized cells, a colloidal shock reaction is believed to occur resulting in the production of lesions and symptoms.

The one and essential difference between normal and allergic persons, therefore, is that the latter produces antibody to pollens, foods and the like while the former (normal) does not, or at least to a detectable degree. In other words, some kinds of antibodies, like antitoxins, afford protection against disease, but in allergy the opposite occurs, in that the antibody is responsible for the disease. Here is a disease that does not appear until antibody is produced or until enough of it has united with certain of the body cells. Why some persons have this capacity for producing allergic antibody to certain substances constitutes the riddle. Natural allergy fortunately is rare and is incidenced by sudden deaths on receiving the first dose of diphtheria or tetanus antitoxin.

The victims of all clinical types of allergy appear either to have inherited a greatly increased capacity for producing allergic antibody or are peculiarly subject to the effects of allergic reactions. Inheritance appears to play an important rôle in many cases of allergy, especially in hay-fever and asthma.

Kolmer believes with Duke that the "physical allergy" due to heat and cold is due to an unstable vaso-motor system.

The proteins of allergens are believed to be the chief sensitizing substances from the clinical standpoint.

A thorough and painstaking history is of the greatest importance in the diagnosis of allergy. Skin tests have proved of great aid. Occasionally skin reactions occur to substances that do not produce symptoms when inhaled or swallowed by the patient. In other words, it would appear that the skin may be sensitive when the mucosa of the respiratory or gastro-intestinal tracts is not. The reverse is sometimes apparent. Skin tests alone, therefore, are not as yet the correct method of diagnosis.

The treatment may be directed along several lines, namely, avoidance or removal of the specific cause, avoidance or removal of contributory causes, specific protein treatment, nonspecific protein treatment and symptomatic treatment.

The outstanding example of specific therapy is of course the treatment with pollen and other protein extracts. Patients showing intolerance to foods may have their tolerance increased by the feeding of minute quantities of the substance in increasing doses.

Treatment with non-specific proteins has a definite place, particularly in cases in which a specific foreign protein cannot be demonstrated as a cause.

Epinephrine is by far the most important drug in the symptomatic treatment of asthma. Patients develop a marked tolerance to the drug.

The internist and the allergist are perhaps not sufficiently alive to the benefits that may accrue from bronchoscopy as to both diagnosis and treatment.

In consideration of nasal and sinus treat-

ment in asthma Tobey propounds three possible hypotheses 1 The nasal pathologic changes are per se the cause of asthma Such an extreme view can hardly be maintained in view of the data obtained from 'follow up" cases Rackemann and Tobey reporting only 5 per cent of cures in 1,074 cases that could be attributed to surgical intervention 2 The nasal pathologic changes are due to the same cause as the asthma and may be considered a part of the asthma —The frequency with which vaso motor rhinitis is coincident with asthma and the similar etiology and pathological changes, particularly the oesinophilia, make this more tenable With this conception, radical surgical intervention is the last procedure to be considered, and then only for the same indications that would hold good if asthma were not present 3 These changes result in a greater permeability to the toxins that cause the asthma This third hypothesis also lends itself to rational treatment

The first hypothesis is arbitrary and in only a few cases can it result in benefit to the patient

Kolmer summarizes as follows

"Hay-fever, asthma and other allergies are still 'strange diseases' concerning which much has been learned and for the victims of which much may be done Desensitization is always worth while under proper conditions if there is at the outset a thorough understanding on the part of both physician and patient that there is as yet no short or 'royal road' to recovery There is much still to be learned concerning etiology and treatment '

RELIEF OF ABDOMINAL PAIN BY SYMPATHETIC RAMISECTION*

By LYMAN G BARTON, JR, M D, PLATTSBURG, N Y

UNTIL knowledge concerning the function of the automatic system in health and disease is much greater than it is at present, therapeutic and surgical procedures on that system will, of necessity, be somewhat empirical and already some procedures which at first seemed promising have proven unsuccessful and have been discarded These cases, reports of which follow, coming as they do in the category of operations based on somewhat indefinite knowledge, are therefore presented largely for the reason that as far as we can determine only five such cases have been to date reported and that in them, thus far, clinical relief has been obtained in what has previously been a hopeless condition

Our interest in ramisectomy for relief of abdominal pain was aroused by an article on the subject by Dr F A C Scrimger of Montreal and the subject, together with a review of the literature was so ably and thoroughly covered by him that much that we have to say is in repetition of his statements The reader is referred to his article for details regarding sympathetic pathways and the technic of ramisection

Historical (largely abstracted from Lewis "Practice of Surgery") In spite of inadequate knowledge of the physiology and pathology of the autonomic system there have already been many surgical procedures instituted some of which have met with a certain degree of success Bodard in 1876 suggested the performance of sympathectomy for Basedow's disease Alexander, of Liverpool, ligated the left vertebral artery in three cases of epilepsy in 1881 and attributed the good results to an interruption of the sympathetic nerve fibers Jaboulay in 1889 proposed isolating the carotid artery from its sympathetic fibers for the treatment of salivary fistula Frank, 1890, suggested cervical sympathectomy for the treatment of *angina pectoris* Jonnesco in 1896 performed cervical sympathectomy for exophthalmic goitre and afterwards for epilepsy, migraine, glaucoma and trifacial neuralgia In 1916 he did the first cervico thoracic sympathectomy for angina pectoris Brown and Coffey (1923), Brunning (1923), Eppinger and Hofer (1923), Diez (1924), Kummel (1923), and Odermat (1923), have all made contributions to the surgery of the sympathetic chain Royle in 1924 did lumbar ramisectomy for spastic paraplegia Fay, 1929, and Grant, 1929, report a great variety of rhizotomies for relief of pain from incurable disease such as cancer White (1929) describes alcohol block of upper dorsal sympathetic rami for relief of pain of angina pectoris Rowntree, Hench and Grist, 1930, report favorable results from sympathetic resection in chronic arthritis Brown and Adson (1929) report favorable results from thoracic and lumbar sympathectomy in vascular diseases of extremities Judd and Adson (1928) report on two cases of congenital idiopathetic dilatation of the colon improved by lumbar sympathectomy However, none of the procedures listed above or any others in the literature except VonGaza's and Scrimger's are directed toward relief of abdominal pain of the type found in the cases which follow

The sense of pain is probably more widely distributed throughout the body than any other one sense It is present throughout the skin, various visceral organs and all the membranes of the

* Read at a meeting of the Fourth District Branch of the Medical Society of the State of New York held at Saranac Lake on October 16 1930

body. The threshold stimulus for pain varies in different parts of the body and it is common knowledge that the pain threshold varies in different individuals and moreover, may vary in the same individual under varying circumstances. While evidence points to the existence of certain pathways for the conduction of pain, histological examination fails to reveal any special end organs for the sense of pain.

Under normal conditions pain perception and localization on the surface of the body is quite accurate whereas pain arising from internal organs is located quite inaccurately, giving rise to what is termed referred or reflected pain. As Head expresses it, "When a painful stimulus is applied to a part of low sensibility in close central connection with a part of much greater sensibility the pain produced is felt in the part of higher sensibility rather than in the part of lower sensibility to which the stimulus was actually applied." Head and others have shown that in many disorders of the viscera there exist segmental areas of hyperesthesia of the skin now termed "Head's zones of cutaneous hyperesthesia."

These zones have been very definitely worked out by Head and MacKenzie and subsequent investigators have varied but little in their findings. Tables showing the relationships between the thoracic and abdominal viscera, the spinal segments and the peripheral nerves are available in many textbooks and will not be reproduced here.

Sensations, interpreted as pain whether arising in the visceral organs themselves or in the connective tissue about the organs or about blood vessels might reach the central nervous system by three possible afferent paths.

1. They might pass by splanchnics to join the cord through the posterior roots of the spinal nerves.
2. They might pass up with the vessels and join the cord by paths as high as the eighth cervical.
3. Or, they might pass through the vagus and phrenic nerves.

Evidence based on the work of Foerster and that of Kappis and Lowen seems to indicate that the pain paths from the abdomen follow the afferent paths of the sympathetic through the posterior roots. The greater number of afferent sympathetic fibers are analagous with somatic neurones, viz., they have a cell body in the posterior root ganglion, a peripheral fiber lying in the white ramus and a central fiber in the posterior root which enters the spinal cord and ends around a posterior horn cell. A smaller number have a cell body in the sympathetic ganglion and a central fiber which terminates in the cell in the root ganglion and so leads impulses to the cord. Others synapsise around the cell in the root of the somatic sensory path. It is on the above evidence that the operation on these cases reported today is based.

VonGaza, who first reported three successful cases of relief of abdominal pain by sectioning of the sympathetic rami was able in thirty instances of *known* abdominal disease accompanied by pain and well-marked Head's zones to obtain by paravertebral novocaine injections relief of pain and anæsthesia of the Head's zone. His localizations differ somewhat from those of Head.

While VonGaza's experimental works in paravertebral novocaine injections were done in cases with *known* abdominal disease, it is in cases characterized by abdominal pain and *lack* of organic disease as demonstrated by previous laparotomy for which sympathetic ramisection is here recommended.

We are all familiar with a certain type of patient who, in spite of all therapeutic procedures including all too often repeated laparotomies with the removal of grossly normal organs, continues to complain of the same pain. These cases are apt to be eventually branded as "neurasthenic" or something equally indefinite but there is one characteristic of these cases which should distinguish them from other patients classed as neurasthenics and that is the fact that they are consistent in their complaint of pain of a like character, in the same location. Their suffering, to them at least, is a real thing and is productive of more disability and distress than some organic condition which might be amenable to known and proven surgical procedures. Hence any operation even though empirical is worth a trial if it offers any hope for improvement.

Theoretically since evidence favors the transmission of pain through the sympathetic chain via the dorsal roots there are at least two procedures which might be tried for the relief of abdominal pain.

1. Paravertebral alcohol injections.
2. Section of the sympathetic rami communicantes.

One would naturally expect the effects of alcohol injections to be less permanent than those resulting from ramisection and moreover anesthesia of the corresponding somatic nerves would result. However, in such conditions as angina pectoris we have been led to believe that alcohol injections bid fair to replace the various operations on the cervical sympathetic.

Ramisection has the advantage of permanency of result without interfering with the function of the corresponding somatic nerves and is useful in that it permits of the severing of sympathetic fibers to a limited area without interruption of fibers from the remainder of the sympathetic chain. Theoretically one should section also one ramus above and one below the segment or segments involved since there is a tendency for afferent impulses to "spill" around adjacent rami; however, this does not seem to be necessary in actual practice.

Acknowledging that ramisection for relief of abdominal pain is as yet an unproven procedure and with the full realization that no definite conclusions can be drawn from so small a number of cases we, nevertheless, are submitting the following reports for whatever interest they may offer.

Incidentally both of these cases met VonGaza's requirements, namely:

1. In both cases any organic pathology had been ruled out by previous laparotomy.

2. The site of the lesions were established by Head's zones of hyperesthesia.

3. Paravertebral novocaine injections preceded the operation and relieved the pain, in each case, for nearly two hours.

Mrs. L. S., New Russia, New York. Referred by Dr. Gersen of Elizabethtown, New York.

White, female, age 19, married 1½ years. Admitted February 21, 1930, discharged March 23, 1930.

Family History: Father 48, alive and well. Mother dead (pneumonia). Two brothers alive and well, one sister alive and well. No hereditary diseases.

Past History: Scarlet fever, pertussis, measles and chickenpox as child. Otherwise well until present illness.

Menstruation began at age 12, always regular, every 28 days until marriage 1½ years ago, since when there has been irregularity. Amount normal, duration two to four days, some clots but not painful, no leucorrhea.

Micturition normal, no dysuria, burning, etc. Appetite poor, digestion poor, no nausea; sense of weight in stomach after eating, eructations of gas at times after eating, no sour stomach, bowels quite regular; never pregnant.

Present Illness: About two years ago she began to have pain in right lower quadrant. Pain referred down front of thigh and "leg ached from hip to knee." Pain "nagging," present most of time with periods at which it became more acute. Worse when she was up and around but not relieved by lying down. Apparently never related to menstruation; not aggragated by constipation. Side felt sore most of time. March 7, 1929 had appendectomy, partial excision right ovary, uterine suspension. Very slight relief for about two months but never "felt right." For past ten months pain has been growing steadily worse and has incapacitated her for all work. No relief from diathermy, vaginal tamponade or organotherapy; about 17 pounds loss of weight in two years.

Physical Examination: General Condition—Temperature 98.3. Pulse rate 80, char. nor.; blood pressure s 110 d 70. Respirations 20, char. normal. Height 5 feet 4 inches; usual weight 138 pounds, present weight, 121 pounds. Nutrition—well developed, fairly nourished. Rather sallow appearance, facial expression and whole bearing show despondency.

Eyes—Pupils react normally, scleræ clear.

Nose and Throat—Negative. Teeth well kept and in good condition.

Neck—No cervical adenopathy. Thyroid not enlarged.

Chest—Equal expansion both sides, breath sounds normal, no rales, no abnormal dullness.

Heart—Percussion outlines normal, apex beat felt in fifth interspace, 1 cm. inside nipple line, action regular, sounds fair quality, A2 = P2, no murmurs.

Abdomen—Level, soft, tympanitic, liver dullness sixth rib to costal margin, edge not felt, spleen not felt, neither kidney felt, no costovertebral tenderness.

Well-healed scar of previous laparotomy; definite tenderness with slight spasm in right lower quadrant about 2 cm. below McBurney's point together with hyperesthesia of skin over area corresponding to distribution of 12th dorsal and first lumbar spinal nerves.

Pelvic Examination: Introitus admits two fingers, no abnormal vaginal discharge, cervix normally situated, normal consistency; uterus normal size and position, freely movable; adnexa normal except that bimanual pressure on right tube causes definite pain which patient states is exactly like the pain of which she complains.

Extremities and reflexes normal.

X-ray of lower dorsal and upper lumbar spine negative.

Laboratory Findings: Urine—Voided specimen February 22, 1930—turbid acid 10.20, albumen 0, sugar 0, bile 0, acetone ++, diacetic 0, Micr-squamous cells +, pus +.

R.B.C.—5,210,000, hemoglobin 95%, *C.* Index .9. Blood Wasserman and Kahn negative.

Progress Record:

February 22 1930, cystoscopic examination—Cystoscopy, bilateral catheterization, right pyelogram.

Findings—The bladder, right kidney and ureter were found normal.

February 23, 1930—Patient suffering from acute coryza. Operation deferred.

March 5, 1930—Paravertebral novocaine injection of 11th and 12th dorsal and first lumbar spinal nerves on right using 6 c.c. 1% novocaine to each nerve. Complete relief of pain with anaesthesia of Head's zone lasting well over two hours.

March 6, 1930—Under general anaesthesia ramisection of 12th dorsal and first lumbar sympathetic rami was performed. Considerable shock following operation and lasting nearly 12 hours. Moderate amount of postoperative discomfort for three or four days. Following this, convalescence

was uneventful and patient was discharged March 23, 1930, wound dry and solid, pain completely relieved.

Report by telephone few days ago to effect that patient has remained perfectly well and has had no return of pain. Slight sense of numbness in right side. Eighteen pounds gain in weight.

Mrs. N. T., Peru New York. Referred by Dr. Sartwell. Admitted July 25, 1930—Discharged August 14, 1930. White, female, age 27.

Family History: Father died at age of 60 of heart trouble. Mother alive and well. Three half brothers living and well. Three half sisters living and well. No hereditary diseases.

Past History: Measles, chickenpox, mumps as child, pneumonia at age of five. Menstruation started at age of 12. Married at age of 15. Three children, ages 9, 7, 2. Since marriage menstruation has been irregular; duration 6 days, amount profuse. Micturition: Quite frequent, with some pain on voiding. Appetite fairly good, digestion fair, bowels regular. Appendectomy, 1918. Uterine suspension, 1919. Tonsillectomy, 1927. Cholecystectomy, 1928. No relief from present pain obtained by any of above operations.

Present Illness: For five or six years has had pain in right kidney region radiating through to right upper quadrant of abdomen. For three years pain was not severe but for past two years has had very severe attacks of pain in same region and some were so severe as to be unrelieved by hypos of morphine. Pain may start in as a dull ache or may start in with a shooting pain. Constant with periods at which it becomes excruciating accompanied by vomiting and nausea. Pain seems worse during menstruation but comes on independent of menses. Patient's last admission to hospital was January 22, 1930, at which time she was suffering from an attack identical with the present one. She was discharged February 1, 1930.

Physical Examination: Fairly well developed, somewhat poorly nourished, sick looking woman. Skin and mucous membranes somewhat pale.

Eyes—Pupils equal, react normally, scleræ clear, no exophthalmus. Nose and throat negative. Tonsils out.

Neck—No enlargement of thyroid, no adenopathy.

Chest—Symmetrical expansion, breath sounds vesicular, no rales, normal percussion note throughout.

Heart—Normal percussion outlines, sounds fair quality, action regular, on murmurs, rate 72.

Abdomen—Level, soft, tympanitic, well-healed scars of previous laparotomies, tenderness throughout whole right side from costal margin down to right lower quadrant and extending well round into right loin. Hyperesthesia of skin over this whole area, slight spasm but no masses or rigidity.

Pelvic examination negative.

Extremities negative. Reflexes active.

Labortary Findings: Urine—voided specimen—turbid, sp. gr. 1016, albumen 0, sugar 0, bile 0, acetone trace, diacetic acid 0. Microscopic—Many squamous cells.

Blood Wassermann negative.

Cystoscopic Findings— January 17, 1930:

Bladder normal. Both ureters easily catheterized. There was a slight increase in the flow from the right side. Aside from that the urine was normal. Pyelogram, right, shows a slight suggestion of dilatation of calyces. Pain caused by the injection was not the same as her other pain. Pelvic examination discloses a moderately enlarged uterus. This finding together with the existence of three abdominal scars, led to the suggestion that tampon treatments plus abdominal support, might be of value.

The day following cystoscopy, patient had another acute attack of pain resembling biliary obstruction.

February 16, 1930:

The right ureter was easily catheterized and normal urine was obtained. A Garceau bougie was inserted to the pelvis without encountering any obstruction.

July 27, 1930:

Paravertebral novocaine injections of 11th and 12th dorsal and first lumbar nerves. This was followed by relief from pain and anesthesia of Head's zones for nearly two hours.

July 29, 1930—Prepared for operation.

July 30, 1930—Section of sympathetic rami communicantes to 10th, 11th and 12th dorsal and first lumbar nerves.

July 31, 1930—Considerable post-operative shock combated in usual manner.

August 14, 1930—Following recovery from immediate post-operative shock patient made an uneventful recovery and was discharged much relieved.

Report of Dr. Sartwell (patient's personal physician) states that patient has continued to gain and to date has had no return of pain. Is now doing light housework.

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PSITTACOSIS*

By R. H. RILEY, M.D., BALTIMORE, MD.
From the Maryland State Department of Health, Baltimore, Md

A DISCUSSION of psittacosis, one of the rarer and less known diseases, can hardly be approached without a brief reference to its historical background.

The first recognized epidemic of psittacosis occurred in Ulster, Switzerland, in 1879, in the household of a physician named Ritter. There were 7 cases, with 3 deaths. Four of the patients lived in the same house, one visited the home daily and two handled the birds' cages. In Berne (1882) four people fell ill in a family shortly after the arrival in the home of sick parrots. Little reference is made to the disease until in 1892, in Paris, when in March of that year several successive cases of pneumonia were reported. An investigation of these cases revealed that two bird-fanciers had brought with them in January, 1892, a consignment of 200 parrots from Buenos Aires, and that 300 other parrots had died en route. The homes of these two men became foci of human infection, one giving rise to 22 cases and 6 deaths and the other to 25 cases and 7 deaths. Three other human fatal cases were traced to this consignment of birds, but who had not had contact with the human cases in the two homes.

Dubief (1893) in Paris, reported two family outbreaks which coincided so closely with the arrival of sick parrots as to make a casual connection inevitable. In one family the parrot died five days after arrival. Five people in contact with this bird contracted the disease and 3 died. In the other family, the bird died two days after its arrival in the home; there were two inmates in this household; both contracted the disease and died.

In 1897, there was a limited outbreak in Florence, Italy. In the home of a music professor, 5 persons became ill, of whom 3 died after the arrival in the home of a sick parrot.

Further outbreaks occurred in Prato, Udine and Genoa. A sea captain brought home two parrots; the entire household of four persons contracted psittacosis. A total of 14 cases occurred in Genoa of which 8 were fatal.

In Leipzig, Germany (1882), 3 patients were directly infected from a *dog* that was purchased from a pet shop. The dog also became ill and died. There were several outbreaks in Cologne in 1884. In one home of 10 persons only 1 escaped infection. Four of the 9 patients died. In another home 8 persons became ill and 1 died. In this group 1 was a physician and 1 a nurse. The physician may have contracted his infection from a parrot, but the nurse had no contact with parrots; she contracted the disease from her patients. In another home 5 persons contracted the disease and 1 died. In Krefeld (1899) 11 cases occurred in a hotel, which was connected with sick parrots and finches; 1 of this group died.

In England, prior to the 1929-30 epidemic, 6 cases of psittacosis were reported. During 1929-30, 100 cases of this disease were reported from England; among the fatal cases was the case of Dr. D. L. Thomas, Medical Officer of Health, of the Metropolitan Borough of Stepney.

In the United States psittacosis was first reported by Vickery and Richardson of Boston in 1904; Scott, 1906; McClintock, 1925, and Sailer, 1927.

During 1929-1930 the disease was also reported from Austria, Czecho-Slovakia, Honolulu, France, Denmark, Switzerland, Algeria, Holland and Egypt. In many of the reports it was mentioned that a ship from South America had arrived in the country with sick parrots aboard.

The U. S. Public Health Service reports of the 1929-1930 epidemic in the United States show 74 foci, which gave rise to 169 cases, with 33 deaths, extending from November, 1929, to May, 1930. The cases occurred in fifteen states and the District of Columbia and do not include 16 laboratory infections with 2 deaths, one of which was that of Dr. William Royal Stokes, Director of the Bacteriological Laboratories of the Baltimore City Department of Health.

Psittacosis was first reported to the Maryland State Department of Health on January 6, 1930. Dr. J. Willis Martin reported 3 cases in one family in Annapolis. These cases were investigated by the Department and the U. S. P. H. S. Following these cases, others were soon reported from other sections of the State and Baltimore City.

* Read at the Annual Meeting of the Medical Society of the State of New York, at Syracuse, N. Y., June 2, 1931.

Symptoms in Birds: The symptoms are those of an acute infection. The bird becomes listless; its plumage is ruffled, it develops a diarrhea; the stools frequently contain blood, and there is usually a discharge from the eyes and nose.

Autopsies on birds dead of psittacosis show enlarged spleens, but microscopic examination does not usually show any distinctive changes. The gastroenteritis is frequently accompanied by a pneumonia. It is stated that parrots suffer from other diseases of this type, which are probably not communicable to man, but they have not at this time been differentiated clinically.

Birds Associated With Human Cases: The majority of human cases of psittacosis reported have been associated with parrots, usually with Brazilian parrots, but gray African parrots have been the apparent cause of infection in some instances. Birds associated with the 1929-1930 outbreak in the United States are known to have some from Brazil, Columbia, Cuba, Nicaragua, Honduras, Germany, Trinidad, Mexico and Japan.

Three of the London cases were due to love birds and one was infected by a canary. In the Argentine series thrushes and an Italian cardinal bird were associated with human cases. In the United States, parrots, love birds, canaries, and parrakeets were responsible for human infections.

Length of Time of Infectivity of Parrots: The majority of human cases of psittacosis have been caused by recently imported birds, but this has not always been so. Several of the London cases became ill three months after the arrival of the parrots.

One other case received a parrot in June, 1929, which had been caught in Africa in November, 1928. The bird did not seem well when caught in November, 1928, and subsequently had slight attacks of diarrhea. In January, 1930, it bit its owner, and the owner became ill with psittacosis on January 19, 1930.

There are numerous instances recorded in which the lapse of time between arrival of the parrot and the occurrence of human cases has been several months. In the present state of knowledge it appears impossible to say how long a newly imported parrot may be a source of danger. It has been suggested that human psittacosis is pneumonia transmitted through the parrot, the bird having been infected, possibly from human sources, passes on the disease once more to man. Scott in Medical Research Council, mentions the susceptibility of parrots to human tuberculosis, but found that primary respiratory tuberculosis in the parrot contracted from man was uncommon, while the birds were more susceptible to the cutaneous form.

The infectivity is not limited to the living bird. It has been conveyed by the corpse of a bird which had died of the disease, also by feathers and excreta. It is difficult to establish definite dates of human contact with sick parrots or fomites, but there appears to be no reason to exclude fomites as a source of infection, especially in a disease which has so many points of similarity with the typhoid group of infections.

Human Case to Case Infection: In considering human case to case infection it is not always possible to exclude contact with sick birds. The first case in the group may be definitely associated with the sick bird; and some days later another who nursed the first case may become ill. Obviously this may be a case to case infection, but if the bird is still in the house or only recently died the possibility of the second case being a bird infection cannot be disregarded. One of the Maryland cases (that of a health department official) presents this aspect. The physician feels that his infection was contracted while examining a human case; still he was in contact with living sick parrots and those that had died of the disease.

There are, however, a sufficient number of clearly defined cases to establish the possibility of human case to case infection. The attendant in the receiving ward of a hospital, a sister and two nurses, and a fellow patient were infected after contact with a patient admitted to the hospital suffering from psittacosis. None of these secondary cases had any contact with sick birds. In Algiers, a sister who nursed 3 cases in another house contracted psittacosis. She had never been in contact with parrots, but she died of psittacosis apparently contracted from the human cases. One of the Baltimore cases (the nurse of Dr. Wm. R. Stokes) had not, so far as could be ascertained, ever had any contact with parrots or other sick birds. She contracted psittacosis and eventually recovered. It is possible, of course, in all the instances cited here and elsewhere, that the secondary cases may have, unknowingly, come in contact with infected material from birds.

House Epidemics: An outstanding characteristic of outbreaks of psittacosis is the occurrence of house epidemics. Gulland remarks that "its occurrence in house epidemics and its relation with parrots are the obvious criteria" of psittacosis. In Ritter's original account the cases were limited to one family. Barros has pointed out "in an infectious pulmonary condition with a general typhoid picture occurring in definite groups, especially family or household groups, we shall have in the future to think of psittacosis, and to ascertain if there has been any association with sick birds."

In the Maryland cases; in the 13 homes which received infectious parrots, 21 cases developed among a total of 49 members of the households. The distribution of these cases according to

household was, 1 case in each of 8 households; 2 cases in each of 2 households; 3 cases in each of 2 households, and 4 cases in 1 household.

In one family in which 2 cases occurred, 2 additional cases developed among visitors known to have been exposed to the same bird.

Among 33 employees of 4 pet shops, known to have had infected birds, 5 cases of psittacosis developed. Four of these cases were among 18 employees of one pet shop.

Age and Sex Groups: In the Maryland outbreak of 36 cases, 5 occurred in those under twenty years of age; 16 in the age group 20 to 39 years; 13 in the age group 40 to 59 years, and 2 cases in persons over 60 years of age. In the Maryland group out of the total of 36 cases, 22 occurred among females and 14 among males.

In 104 cases reported from England in which the ages were known, nearly 50 per cent of the patients were between 40 and 60 years of age and about 60 per cent over 40 years of age. The sexes were affected fairly equally, 57 males and 60 females.

Armstrong reporting 167 cases of known sex which occurred in the United States, states that 105 were females and 62 males, or 63 and 37 per cent of the total, respectively; and further states that the preponderance of cases among females is probably a reflection of the fact that in this country exposures usually occurred in the home where women spend a relatively larger amount of time. The care of birds also commonly falls to women. In the Argentine, Barros brings out the fact that the infection was three times as prevalent among males as females, and attributes the rate to the fact that the infection occurred at exhibits, where men visited more than women.

Clinical Aspects: In man, psittacosis is a severe illness with a high mortality in a limited number of cases; the observed mortality was 20 per cent. The incubation period appears to vary from 8 to 14 days, the average about 10 days and in a few cases it is recorded as long as 21 days.

There seems to have been a uniformity of recorded symptoms of the disease during the 1929-1930 epidemic and it is almost identical with the descriptions of the French epidemics in 1892.

The disease affects all ages and both sexes. The duration of the disease is usually about 2 or 3 weeks, but in a few cases the symptoms have continued for as long as 8 weeks. Convalescence is nearly always protracted and may be interrupted by relapses or by femoral vein thrombosis. Hallucinations are common, and a definite psychosis at times manifests itself weeks after the fever has subsided.

The disease is most often confused with typhoid and influenza. The disease may begin suddenly with a frank chill, chilly sensations, fever and headache, or these symptoms may be preceded for a few days by a general indisposition.

Toward the latter part of the first week, the aspect of the disease becomes more severe. The patient shows signs of profound exhaustion, becomes somnolent and irritable. The fever is at first 100° to 102° F., and tends to rise with irregular remissions to reach 103° to 105° F. during the second week. The pulse is slow in proportion to the temperature. There is intractable headache and insomnia is common. A troublesome paroxysmal cough develops which continues throughout the second week. At first there is little or no expectoration, later this may appear, is thick and at times streaked with blood. Nose bleed is common during the disease.

During the first week signs in the lungs begin to appear, at first a few crepitations or scattered rhonchi, later patches of consolidation develop, which may join to involve the greater part of one or both lungs. One characteristic of the pneumonia is its wandering tendency, so much so as to have been referred to as wandering or creeping pneumonia.

Constipation is the rule, and is obstinate, tenesmus and abdominal discomfort add to the patient's general trouble.

During the second week, the patient may become semi-comatose, often oblivious to his surroundings, and recalled to consciousness with difficulty.

Muttering delirium is often present, and may alternate with periods of restlessness and violent excitement.

Albuminuria is a constant accompaniment, and generally appears during the second week; retention is common—"Rose spots" have been reported in a number of cases in this country and Europe.

The blood count is usually normal during the first few days, but a leucopenia is the rule, the average count being between 3,000 and 5,000.

The temperature generally declines by lysis, and the patient shows signs of improvement, but it is generally at least another week before the patient appears to be out of danger.

Relapses have been frequently reported. The onset of the relapse is with symptoms similar to the original onset, but as a rule milder. The relapses occur as a rule shortly after recovery, but several instances are on record where the relapses occurred 3 weeks after the temperature had returned to normal.

From 15 to 20 per cent of the cases have terminated fatally. Children and young adults withstand the attack better than the old. Death is probably due to pneumonia involvement; the duration of illness from onset to death, ranging from 8 to 15 days.

The Virus of Psittacosis: The discovery by Nocard in 1893 of the B. psittacosis in the bone marrow of a parrot was, up to the 1929-1930 epidemic, the most important contribution on the bacteriology of the disease. The character of Nocard's bacillus, especially its close resemblance to the B. paratyphosus, its pathogenicity for parrots with symptoms resembling those of the sick birds associated with human cases, were in favor of B. psittacosis being accepted as the cause of the disease.

The negative findings since the 1929-1930 epidemic, which resulted from attempts to confirm Nocard's findings, led investigators to demonstrate the fact that the virus of psittacosis belonged to the filterable viruses.

The evidence thus far produced is briefly stated, as showing the causal agent of psittacosis to be a filterable virus—that it is not susceptible of cultivation by ordinary methods in use in bacteriology. It is associated constantly with minute cocco-bacillary bodies which stain with difficulty.

Whether these minute bodies are the virus has not been conclusively proven. They resemble bodies which can be demonstrated in the case of vaccinia and fowl pox viruses, and also bear a close resemblance to Rickettsia.

The number of laboratory infections have caused some investigators to regard the possibility of psittacosis proving to be a further member of the Brucella group.

The investigations thus far conducted show that the virus is present in the mucus discharges from the mouth and nose of human cases and sick birds; It is also present in the excreta and organs of birds ill or dying of the disease. The virus of psittacosis will pass Chamberland and Seitz filters.

Administrative Control: Precautionary measures instituted in Maryland were the quarantine of all birds in pet shops; this regulation continued in force from January 10 to February 21, 1930. Persons owning parrots or other cage birds were advised to pay attention to strict cleanliness of the cage and to the protection of food and water from fowlings of the bird; to remove immediately from contact with healthy birds all birds falling ill; afterward scrubbing and disinfecting the floor of cages and any other article so as to avoid infection of healthy birds; and to avoid fondling and petting of parrots.

From January, 1930, the Governments of those countries in which psittacosis cases appeared prohibited the importation of parrots. As cases of the disease continued to occur in this and other countries, as a result of parrots and other birds being brought in by members of ship crews, it became necessary for the Government to issue regulations to cover this practice.

REPORT OF A STUBBORN CASE OF ACTINOMYCOSIS CLEARED UP BY ELECTRO-COAGULATION

By LEWIS J. SILVERS, M.D., NEW YORK, N. Y.

Read before the North Bronx Medical Society, Oct. 9, 1930

L. H., age 22 years; blood pressure, 110/75; weight, 107¾ pounds; hemoglobin, 70 per cent. Patient had been treated for almost one year for a fungus growth at the base of the tongue, the fauces and the oropharynx. The gradually increasing strength of a silver nitrate solution, applied directly to the growth afforded but temporary relief. Recurrence of growth was evident a few days after each of the caustic topical applications. The ready removal of some small papillomata from the epiglottis by means of electro-coagulation suggested that possibly the same means might destroy the fungoid parasitic growth without injuring the adjacent structures.

Treatment by electro-coagulation was begun on March 10, 1930. The diagnosis of actinomycosis had been made while the patient was under treatment at the Morrisania Hospital, the examination revealing a typical case of mycosis leptothrica of a most persistent strain. The base of each protruding white stem-like growth was touched by the active needle electrode of the biterminal endothermy current. The growth was so abundant and involved so extensive an area that twelve mild doses of electro-coagulation were necessary. The maximum current used was four hundred milliamperes. Fulguration was used in the terminal stages, since the dehydration process is always beneficial in hastening the results of coagulation. At no time did any of the parasitic lesions recur following the coagulation dose. The time required for total cure depended upon two factors, namely: the mildness of the dose and the number of bulbous growths to be treated. Complete destruction of the fungus infestation was accomplished in six weeks.

A RELATIVELY OBSCURE CASE OF CARCINOMA OF THE BREAST

By JOHN BURKE, M.D., BUFFALO, N. Y.

From the Central Park Clinic, Buffalo, N. Y.

WHILE the large series of cases are most valuable in developing the diagnosis and treatment of any lesion, the reporting of single, somewhat obscure cases may be also worth while if only to remind us of the frequent divergence between the textbook picture and actuality. The case reported by Shore[1] is an example in point and one which has led me to report another somewhat similar case.

The patient, a multipara aged 42, consulted me January 5, 1931, because of "a lump in her left chest." This "lump" had been first noticed by the patient in May, 1930, when it was about the size of a robin's egg. As in Shore's case, the patient came for examination solely on the advice of a friend, and not because of any symptoms of disease. There was nothing in the past history to indicate any disturbance before, during or after the several lactations.

The lump was not painful, and at time of examination had apparently not increased in size since its discovery. It was situated just lateral to the anterior axillary line about 8 cm. below the fold of the arm. It was hard, somewhat tender upon palpation, freely movable under the skin and not fixed to the chest wall. The location was so distant laterally from the nipple that it was doubtful, at first, whether or not it belonged to the breast. The remainder of the left breast showed no masses, no tenderness, no nipple retraction or skin dimpling. It was no larger than the right breast. In the left axilla were three palpable, discrete nodes about 2-2 cm. in diameter. These nodes were quite hard, smooth and were apparently not fixed to the surrounding tissues. There were no other abnormalities discovered on physical examination. The past and family history was irrelevant.

Because of the hardness of the mass and of the axillary nodes, a tentative diagnosis of carcinoma was made. In view of the lack of certainty in our minds, preliminary biopsy was suggested. This was performed under gas-oxygen anaesthesia January 6, 1931. The "lump" was removed by sharp dissection, with a liberal margin of microscopically uninvolved tissue.

The specimen obtained was about 2 cm. in diameter, hard and smooth, apparently encapsulated, and to the knife edge presented the supposedly characteristic "feel" of carcinomatous tissue. The cut surface was greyish yellow in color. The report from the State Institute for Malignant Diseases was carcinoma of the breast (frozen section).

With this report in mind the possibility of this mass and the axillary glands being metastases from a distant source was excluded. As no other mass could be demonstrated in the breast it was felt that the mass represented aberrant breast tissue and was probably the primary focus of the carcinoma. Radical breast amputation was performed January 7, 1931. The patient made an uneventful recovery and was discharged to receive prophylactic radiation therapy. Examination six months later, showed no evidence of recurrence.

The breast proper, though examined thoroughly at the State Institute for Malignant Diseases, and further by Dr. J. M. Wainwright[2] in whole breast sections did not show any evidence of malignant disease. The State Institute report was chronic mastitis. The axillary glands showed definite involvement and were reported as metastatic carcinoma.

Discussion:

This case presents several interesting features. From the standpoint of cancer education among the laity here is again a case of a woman of average intelligence who is exposed to the radio and newspaper propaganda of early recognition of cancerous lesions, and who allows a lump in and near her left breast to go unexamined for nine months. The importance of immediate examination of every lump appearing in the feminine *or* masculine breast cannot be sufficiently emphasized.

From the diagnostic point of view, we find a mass almost outside the breast, with no mass, tenderness, skin retraction, etc., in the breast proper, yet with palpably enlarged nodes in the axilla. The diagnosis was definitely established by biopsy.

What the relationship, if any, is between the chronic mastitis found in the breast proper, and the carcinoma in what was apparently aberrant breast tissue is a matter for speculation.

Summary:

A case is presented of a multipara, aged 42 who complained of "a lump in her left side," which was lateral to the anterior axillary line and about 8 cm. below the fold of the arm. Examination showed a breast apparently normal and several enlarged axillary nodes. Biopsy showed the lump to be carcinomatous, and a radical breast amputation was performed. The specimen removed at this time showed chronic mastitis and carcinomatous involvement of the axillary lymph nodes.

1. Shore, Benjamin Rice: *American Journal of Cancer*, Vol. XV, No. 1, 1931.
2. Personal communication.

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For list of officers of County Medical Societies, see this issue, advertising page xxvi.

FALL ACTIVITIES

The absence of a number of officers and committee chairmen during the summer has compelled a suspension of the inventional activities of the medical society of the State of New York; but already the leaders are back in their offices, and are turning the wheels of activities that will lift the Society to new heights of accomplishment. The Joint Committees on Public Relations and of Public Health and Medical Education held its organization meeting in Albany on September 11th to initiate a study of the proposals of the Governor's Health Commission. The annual meeting of County Secretaries occurs on the day of publication of this Journal; and the round of District Branch meetings begins on September 16, with the third at Sharon Springs.

Preserve your Journals, for they will contain the records of these important activities.

EXPERIENCE VERSUS KNOWLEDGE

When a physician deals with the makers of medical laws, he meets with a fallacy which he must combat, for it has great weight with laymen. This fallacy consists in the belief that an experience of several years in applying a special form of treatment to human beings gives to the chiropractor or other cultists a scientific insight into the inner workings of the human body, so that he can make an accurate estimate of the need of the patient and of the safety and efficiency of his treatments.

How do cultists get their reputation? A patient describes a vague symptom, laboriously searching for the appropriate words and phrases. The cultist expresses those feelings in imposing words, and localizes the trouble in some spot that is accessible to his manipulations. What is vague and mysterious to the patient seems to be clear to the healer. Anyone who does this day after day to the satisfaction of the healer must know what he is talking about;—so argues the layman who listens to the tales of alleged cures of cultists. The people say, "You doctors seem to think that all healing wisdom lies in you. Don't you think that some one else may know something about the body?

The credulity of people generally, even the educated classes, is beyond belief. Many persons who give implicit heed to the directions of their family doctors, will also secretly apply an old household remedy that has helped others under the same apparent conditions.

How much does a healer actually learn from his examinations and manipulations? He learns just about one per cent of what a skilled physician would learn by a procedure similar to that of the cultists; and one-tenth of one per cent of what a skilled doctor would learn by a modern examination such as the doctor ordinarily makes.

What a healer actually learns from his experience is the practical application of the psychology of self assurance.

Say a thing dogmatically and some people will believe you.

Argue with a person and you drive him to oppose you.

The greatest force at the disposal of a doctor in dealing with a legislator is his reputation for good judgment and honesty. A layman is impressed with the opinion held by a worthy doctor, rather than by the reasons and arguments by which the doctor reaches his conclusion.

A cultist is likely to beat a doctor at a public hearing, because he merely states what he has seen and done in his experience, while the doctor puts forth learned arguments clothed in long words which the listeners do not at all comprehend.

There is an old saying "Whatever enters the mind by any other way than that of reason, cannot be removed through the route of reason."

People are still deeply affected by the mysterious and ascribe occult power to those who claim it. These beliefs are more fixed and permanent than those which are induced by reason. Doctors must take these beliefs and prejudices into account in dealing with laymen.

The representatives of medical societies are prone to rely on information and arguments in promoting medical legislation, especially those against the cultists. Physicians have a still more powerful weapon in the mere exhibition of their attitude toward healers and their claims. The fact that a doctor takes the trouble to call on a legislator impresses him more powerfully than long arguments. A dozen doctors making brief calls on a legislator impresses him far more favorably than a dozen pages of convincing arguments.

POLIOMYELITIS CONTROL

Information on the nature and control of poliomyelitis has been spread abroad by leaders in public health by means of newspapers, lectures, and the radio, until everybody has been reached. The spreading of information has been persistent and effective to the extent that the people KNOW what to do with their children during the epidemic. But do the people ACT according to their light? Experience tends to make a public health worker pessimistic.

The people expect the public schools to remain closed, on the theory that parents can control their children more effectively than any other agency. Yet unattended children roam the streets and go to the movies. Now and then a mother of isolated children deliberately goes up the street and asks a close friend not to report her infraction of quarantine.

A mother in a cultured community gave a birthday reception to her five-year-old boy, who vomited at the party; and in the evening his case was diagnosed as positive for poliomyelitis; and now the distracted mothers of the dozen guests are asking how to prevent their exposed children from developing poliomyelitis. These mothers belonged to the intelligent class of the community and yet they were willing to risk the exposure of their children to others.

The medical profession and departments of Health have done all they could to give warning of the danger. What is lacking is the still small voice of conscience in the hearts of the people.

A DUAL MEDICAL SERVICE

There is a tendency toward the establishment of a dual medical service for the people generally. One form of service is that given by individual practitioners, both family doctors and specialists. At the other extreme is the doctor on salary paid by a department of health, a school board, or other official body.

General practitioners form about seventy-five per cent of all physicians, and they dominate medical societies. A criticism of them is that their service is incomplete especially in preventive fields. Much is said and preached and written and broadcast about the possibility of preventing all diseases. This propaganda has aroused the people to expect the doctors to give service which is humanly impossible, not so much on account of the inability of the doctors to give it, as the disinclination of the people to accept and make use of the service.

The remedies proposed for filling in the gaps in the medical service fall into two classes:

1. Family doctors to treat all persons.
2. The state to hire salaried doctors to give the service not now given by family doctors.

The leaders of the Medical Society of the State of New York believe that the family doctors will do their part if the state and local communities will provide the hospitals, social workers, public health nurses, and other agencies necessary for giving a medical service. The legislature has accepted the doctor's point of view by enacting amendments to the Welfare Law and the County Hospital Law under which the communities will supply the hospitals and other means by which the family doctors may treat those in need.

The alternative proposal is that the state should hire doctors on salary to treat the poor and others who are unable to obtain medical service. This plan is being tried extensively by schools, many of which employ full time physicians for examining the pupils. While the statement is usually made that these full time doctors shall make diagnoses only and shall not enter the field of treatment, yet experience shows that it is inevitable that both they and physicians of the departments of health will enter the field of treatment also. If the plan should be carried out to its logical conclusion, there would be a dual system of medical service. Fortunately, the State Medical Society has been able to secure the adoption of plans by which family physicians will give the greater part of the medical service required by the community.

LOOKING BACKWARD

This Journal Twenty-five Years Ago

British Medical Association:—The City of Toronto, Canada was host to the 7th Annual Meeting of the British Medical Association, beginning August 21, 1906. The September, 1906 issue of this Journal says:—

"There is no doubt that Toronto extended a warm welcome to those who were present at the 7th annual meeting of the British Medical Association. Englishmen who had imagined Canada a land of perpetual snow did not seem inclined to don the fur overcoats they had brought with them. Outside the exhibition hall, where under the shade of the trees the thermometer registered 90 degrees, a packing case marked "keep well protected from frost" served as the butt of many jokes. A perspiring visitor from the old country was heard to remark to his Canadian confrere, 'I suppose, doctor, you get a great many interesting cases of yellow fever, enteric and similar tropical diseases in your practice here?' and the gentleman from Texas stated that he was leaving at the end of the first day to go back home where it was cool. In spite of the heat, however, Toronto may be credited with one of the most successful meetings of the British Medical Association that has been held in recent years. There was an unusually large attendance, nearly two thousand registering, and practitioners from the 'States' were very much in evidence. From the Empire State alone there were nearly two hundred representatives. In fact, so large was the delegation from the United States and so prominent was the part they played in the scientific programs, coupled with the fact that Toronto is essentially an American city, that one might almost believe that he was attending a session of the American Medical Association rather than that of the British Medical Association. We are forced to admit, however, that on the whole our British cousins manage their meetings rather better than we do ours.

"Striking was the homage paid on every possible occasion to Dr. Wm. J. Mayo, the president of the American Medical Association. The programs of the various sections were very uneven and some showed lamentable weakness. The general opinion of those who attended both meetings was that the program of the last session of the American Medical Association presented far more material that was of real scientific value. It was somewhat a surprise to hear a few points exploited as 'new,' which had been thoroughly threshed out in American literature several years ago."

MEDICAL PROGRESS

Alcohol as a Cause of a Purulent Urethral Discharge Clinically Resembling Gonorrhea—Eliminating recent gonorrhea from consideration and limiting the subject to cases in which there was no such history, Charles M Whitney states that in an active practice, largely venereal he has seen during the past ten years, since the enactment of the Eighteenth Amendment many more cases of non-specific urethral discharge than prior to that time The patients have been those whose means permitted the purchase of a pure grade of liquor only The form of liquor most commonly taken was synthetic gin, made by using alcohol which was mixed with various proportions of water with the addition of spirits or oil of juniper and glycerin Next to it was Scotch whiskey from supposedly reliable sources To ascertain what impurities, if any were carried over in the distillate, an inquiry was sent to the State Health Department The reply stated that the chemical examination of the bulk of the alcohol submitted by the Police Department was pure ethyl alcohol It seems that the reason urethral irritation is more frequent now than before prohibition may be that there is a higher percentage of alcohol in synthetic gin, or it may be found in the changed drinking habits of the majority of people—the substitution of hard liquor for light wines or beer

In every case in the series that was a history of much drinking The incubation period averaged from twenty-four to forty eight hours The urethral discharge was usually mucoid at first, but soon became mucopurulent or purulent There was no dysuria The urine was nearly always clear, showing a moderate number of shreds in most cases Rectal examination in a few instances showed slight tenderness of the prostate but no swelling Microscopical examination of the urethral discharge showed no gonorrheal organisms throughout the course of the disease The treatment which was most effective consisted in the internal use of citrate of potassium with tincture of hyoscyamus For local use at home the patient was given permanganate of potassium or neosilvol, with office irrigations of nitrate of silver Later gentle prostatic massage and vesicular strippings were apparently of value The condition usually cleared up quite readily The fact that in some of these cases a diagnosis of gonorrhea had been made emphasizes the importance of a microscopical examination in every case in which there is a purulent urethral discharge—*New England Journal of Medicine*, July 2, 1931, ccv, 1

The Rôle of Calcium in Urinary Elimination of Uric Acid—According to P L Violle and P Dufourt, it has recently been shown by certain French investigators that the citric ion forms complex radicals with calcium salts, in which the calcium ion as such is suppressed, and that a part of the plasmatic calcium exists in the form of complex radicals that are biologically inactive, ultrafiltrable, and easily eliminated by the kidneys Thus the citrates may play an important rôle in the urinary elimination of calcium waste that is biologically incapable of utilization by the blood and tissues The authors conceived the idea that an analogous rôle might be played by combinations of uric acid and calcium, that uric acid may serve to change calcium waste into a form more readily eliminable, and that, conversely, a reinforcement of the organic calcium from outside might be capable of combining with the uric acid to form a complex easily excreted Under test conditions they found that individuals with normal blood uric acid eliminate this without any uniform ratio to the calcium eliminated On the other hand, in hyperuricemic individuals in whom no kidney complications existed they found a remarkable constancy of this ratio, hence they think that the uric acid calcium combination may explain the clinical tolerance of this form of hyperuricemia In gouty hyperuricemia the ratio is again very variable, according to the precise moment in the attack At the peak of the crisis and after it, the ratio of uric acid to calcium tends to be lowered, chiefly by means of an increase of calcium

This seems to be a favorable phenomenon, indicating increased facility of uric acid elimination and a passing off of the attack It seems reasonable to assume, as a working hypothesis, that there exists a complex combination between uric acid and plasmatic calcium, characterized by facility of excretion In such case, the administration of calcium in a form capable of combination such for example as calcium lactate which the authors used, would re establish for the time being conditions favorable for elimination, by lowering the uric acid calcium quotient It appears that in acute attacks of gout the organism tries to utilize to the utmost its limited resources of combinable calcium and thus to produce that combination that is easily excretable If it cannot find the requisite calcium it is forced to make other combinations the clinical symptoms of which betray the difficulty it encounters in the task—*Bulletin de l'Academie de Medecine*, June 9, 1931

Sport Injuries and Their Treatment.—C. B. Heald, writing in the *Practitioner,* July, 1931, cxxvii, 1, says the man or woman who can enjoy a strenuous day's sport relies upon six principal factors: (1) the integrity of his framework—bones and ligaments; (2) his power unit—the tone and contractile power of his muscles; (3) his lubricating system—synovial membranes and bursae; (4) his scavenging system—lymph channels and glands and skin; (5) and (6) his coordinating supply service—blood and nerves. Injury to the bony framework requires that attention be given to the other systems. During the first stage the principal requirement is rest—support or fixation. The area can be brought rapidly to the second stage by Mennel's glucokinesis, a new form of sedative massage, and small doses of direct current. If these special physical measures are not available, pain and spasm can be relieved by glycerin and belladonna liniment applied on lint for twenty-four to forty-eight hours. Aspirin should be given in powdered form or the tablet should be sucked slowly. The value of massage, passive movements, resisted movements and reeducative movements is well known, but too little use is made of the Smart-Bristow coil, which can be used in many valuable ways to recondition injured and debilitated muscles. Its application should be continued until the injured limb is at least equal to the uninjured one in circumference, and preferably until it is larger. In the treatment of synovial membranes and bursae, the use of electrical currents and massage requires care and special technique if the condition is not to be made rapidly worse. There seems to be no doubt that variations in temperature are helpful. The recently introduced "elastoplast," a modified form of Unna's paste on an elastic bandage, is valuable in supporting parts where there is synovial effusion. In traumatic bursitis, the only method which has yielded a high percentage of successful results in the author's hands is the giving of a succession of erythema doses with the Kromayer lamp, every three to five days, to small areas of skin over the bursa. This treatment is almost specific for subdeltoid bursitis. The lymph flow is aided by massage and other physical methods. A simple and valuable technique is for the masseuse to wear rubber gloves and over them cotton gloves connected with a Bristow coil by means of a flexible electrode on the back of each hand. The gloves are soaked in warm soap solution and the hands can be used as electrodes while they carry out the movements of massage. As everything depends upon nutrition and nerve supply, these must never be forgotten in the treatment of injuries.

Inoculation Malaria as Cause of Congenital Malaria.—H. Schadow, writing in the *Münchener medizinische Wochenschrift* of June 5, 1931, describes the case of a newborn male infant who developed characteristic signs of malaria in the third week of extrauterine life. The finding of plasmodia of tertian type in the red blood corpuscles made all doubt of the nature of the infection impossible. The tumor of the spleen was enormous, and the child's condition became so grave that only the administration of two blood transfusions with a long course of quinine over a period of twelve weeks finally restored him to health. The child had been separated from the mother immediately after birth owing to the fact that the latter was suffering with general paralysis and was mentally unbalanced. A closer check-up of the familial history revealed that the mother had been in very poor health for several years and had been taken to the neurological hospital three weeks before the child was born. In view of her serious condition and a three-plus Wassermann reaction, she was inoculated with malaria despite the lateness of her pregnancy. Two weeks later, after six severe chills, she went into labor and a living child was born spontaneously. The blood from the umbilical vein gave a three-plus Wassermann. The mother's condition never improved, and she died a few months later. No signs of syphilis were ever observed in the child, who remained at the clinic up to the age of seven months, when he was discharged in good condition, but with the spleen still slightly enlarged. A subsequent examination at the age of a year revealed a healthy, active child, normal for its age, but still carrying a small splenic tumor. Provocative injections of adrenalin failed to demonstrate plasmodia. In this case the locality and the time of year made it possible to exclude any post-natal malarial infection, and there could be no slightest question that this was a case of congenital malaria due to intrauterine transmission of the plasmodia. The possibility of such transmission should always be borne in mind when a pregnant woman is to be inoculated with malaria.

A Preliminary Report of Twenty-Three Cases of Corneal Opacities Treated with Surgery and Radium.—H. L. Hilgartner and Henry L. Hilgartner, Jr., relate their experience with an operation described by Meyer Wiener in 1926-27 for the removal of corneal opacities, which was followed by remarkable improvement in every case. The procedure consists in making a crucial incision through the scar with a small sharp scalpel, the incision being extended almost to the margin of the cornea, both vertically and horizontally, and into the cornea as far as possible without penetrating the anterior chamber. The apex of one of the quadrants is then lifted up with a small sharp iris hook, and with the scalpel dissected back toward the base of the tri-

angle, care being taken to keep in the same corneal layer throughout the dissection. At the base of the triangle the segment is cut off from its attachment. The remaining segments are dissected in like manner. Atropine is instilled, a small quantity of xeroform powder dusted over the denuded area and a dry gauze dressing applied. The authors have observed under the slit lamp that the scar tissue is thinner following the operation, due to the fact that the corneal epithelium regenerates more rapidly than does scar tissue. In spite of the gratifying improvements following these operations, there was still much to be desired. Since Lane and others had reported favorably on the results obtained with radium in these cases, the authors started using this agent. The patients received weekly treatments of 10 mg. of radium element for two and one-half, three, and three and one-half minutes, respectively, passed to and fro from one to two millimeters above the cornea. Following the third application radium treatments of three, four, and five minutes were given every three weeks. As an anesthetic, 3 per cent cocaine was used and silver-plated lid retractors protected the lids and gave exposure. Scar tissue appears to be more sensitive than normal tissue and becomes markedly softened by erythema doses of radiation. If there is failure to get a clear spot the operation and radium treatment may be repeated. —*Southern Medical Journal*, July, 1931, xxiv, 7.

Amidopyrine and Water Economy.—A series of observations is reported by D. Scharf with reference to the influence exerted by amidopyrine upon the water economy of the body. He administered 2 gm. daily by mouth of amidopyrine, distributed in such a way that each patient received 100 c.c. of a 2 per cent aqueous solution in the course of the day in teaspoonful doses. In a few cases the same amount was administered in tablet or suppository form, likewise in fractional doses. The weight was accurately recorded each morning with the patient in a fasting condition. The tests were made chiefly on compensated and decompensated cardiac patients, but also on patients suffering with other conditions in which the circulation was not affected, who served as controls. The decompensated cardiacs were completely digitalized before the amidopyrine was administered, and care was taken to keep the circulatory conditions constant in these individuals by regular small doses of digitalis. Most of the tests were made on ordinary house diet after it was established that patients with a salt-free diet reacted in essentially the same way, only to a less degree. In 84 per cent of the patients treated for five days, with and without circulatory disturbances, there appeared a retention of water and of sodium chloride, accompanied by an increase of body weight in excess of kilo. No clear connection could be demonstrated between the degree of circulatory disturbance and the amount of water retention. After the amidopyrine was stopped the retained water and sodium chloride were excreted and the body weight decreased. During and after administration of amidopyrine the individual patients exhibited various peculiarities in the nature of the water retention. This was especially noticeable in the decompensated cardiac patients. Amidopyrine inhibits digitalis and purin diuresis; a short treatment with this substance also inhibits salyrgan diuresis in the majority of cases. Excretion of water is inhibited in greater degree than that of sodium chloride. It is impossible to say whether this is due to the action of amidopyrine upon the tissues directly or upon the central nervous system.—*Klinische Wochenschrift*, June 13, 1931.

The Significance of Raised Blood Pressure.—John Hay says that an abnormally high blood pressure indicates some underlying psychological or pathological abnormality. It is the result of several factors—frequency and vigor of the ventricular systole, the tension of the arteries, and varying peripheral resistance. The diastolic pressure is important, since it is increased by any cause which augments peripheral resistance. Hence vascular elasticity is likewise highly important. Hay thinks that in some instances there is faulty reading of the blood pressure. In a patient with a systolic pressure of 200, there may be a silent gap between 180 and 160, and unless this is recognized a blood pressure of 160 will be recorded. This mistake may be avoided by verifying the systolic pressure as judged by auscultation with that obtained by palpation of the radial pulse. To take the age plus 100 as the normal limit for blood pressure is incorrect. A table compiled by Hay, giving the average of a very large number of blood pressure records, shows, for example, for age 50, a systolic pressure of 130 and a diastolic pressure of 83; for age 60, 135 systolic and 85 diastolic. In assessing the significance of high blood pressure patients should be classified under three headings: (1) hypertension due to psychological influences; (2) hyperpiesia with no essential primary renal involvement, but with some degree of cardiac hypertrophy and arterial disease, and (3) a renal group. A steady diminution in the expectation of life accompanies high blood pressure, and this is more marked in the obese, and is most serious if it appears during the middle period of life. In the treatment, moderate exercise, suited to the individual, tends to lower the pressure slightly and proves of benefit. In the later stages more can be done by a revision of the patient's mode of life than by drugs prescribed for the purpose of lowering the blood pressure. When feasible it is well to prescribe bed rest

for a few weeks, and bromides. Worry and anxiety should be removed so far as possible. The diet should be carefully supervised, especially in those above normal weight, since every unnecessary pound of weight adds to the load the heart has to carry. A good rule as to food is "No second helping." A blue pill or calomel once a week, followed by saline, and saline daily is of undoubted benefit. Iodine is acceptable, either as collosol iodine or as the tincture. Within the last few years luminal, acetylcholine, and the sulphocyanates of potassium and sodium have come into prominence. They are more likely to be of service in the earlier than in the later stages. Luminal has a helpful sedative effect. The sulphocyanates are prescribed in doses of 1½ to 2 grains three times daily after food, the dose being increased gradually.—*British Medical Journal,* July 11, 1931, ii, 3679.

Studies in the Function of the Saliva.—Since there is theoretically a relationship between the function of the sweat and that of the saliva, Julius K. Mayr reports that after making intensive studies of the former he undertook parallel investigations of the saliva in the same individuals. He found wide variations in the hydrogen ion concentration during the course of a day. Normal saliva has an acid type of reaction, the pH ranging between 5.0 and 8.5. This wide range of difference permits the conclusion that there is a considerable variation in the composition of the saliva. These acid values are present not only as the average values among many individuals, but also as the average for a day's variation in one and the same individual. Just as occurs with the urine, the acidity of the saliva is greater soon after a mixed meal than it is a few hours later. In a general way the acidity or alkalinity followed the same curve as that of the urine and sweat, but the curves varied considerably in different individuals. For example, in patients suffering with psoriasis there is regularly a shift toward the alkaline side in the saliva. In diabetes, on the other hand, the shift is toward more strongly acid values. The more severe the diabetes, the greater the degree of acidity. Whenever the body is called upon to excrete large amounts of material, saliva as well as sweat is charged with some of this labor. If 15 gm. sodium bicarbonate were administered to a subject with normal kidneys, these organs took care of the entire amount, and the saliva showed no alkalinity. But if 30 gm. were administered, the saliva exhibited an alkalinity curve parallel to that of the urine. Tests made in 6 patients with disturbed renal function showed a delay in the curve of urinary alkalinity, which rose only gradually, while in the saliva the alkaline values rose immediately, and were maintained for 2 hours before they returned to the former level. Thus it is seen that the saliva is called on for the excretion of alkaline valences in a measure far beyond the limits of error, when a disturbance of renal function exists. This suggests the usefulness of a methodical examination of the saliva as a test of kidney function. The amount of urea found in the saliva was as a rule between 8 and 20 mg. per cent. Administration of 15 gm. urea to subjects with healthy nervous systems resulted in the finding of increased amounts of the substance in the saliva within an hour, which were maintained for another hour and then returned again to normal, thus furnishing one more proof that saliva participates in the work of excretion.—*Klinische Wochenschrift,* July 4, 1931.

Atropine Treatment in Encephalitis.—E. Schenck reports excellent results from use of atropine in a series of 10 cases of encephalitis. The favorable effect was first seen in the cessation of driveling, then of the fixed stare; then the power of motion returned to the lower extremities. After this a considerable period of time elapsed before the stiffness of the upper extremities yielded to the treatment. The amount of dosage required differed with different individuals. For most of the patients rather large doses were necessary, probably because of the chronicity of the cases. Schenck began with 3 drops of the usual one-half per cent solution, and increased the amount daily by 2 drops. Later on he administered the atropine in the form of tablets, a method that is very convenient and absolutely exact. No disturbances of the internal organs were noted. The pulse, originally high (often over 120) came down to 96. Anorexia and vomiting were quickly overcome; loss of weight was soon compensated, and was never great enough to be disquieting. In a few cases the patients even put on weight, without any special dietary measures. In one case there were severe cerebral symptoms of atropine intoxication, requiring injection of morphine. The patient refused further treatment, but 10 days later begged for it again. All these effects could be avoided if the atropine were given correctly, either maintaining the dosage reached or reducing it to a smaller amount that could be tolerated, then slowly increasing it again. Patients who have already received atropine are well pleased to take it again. Some are at first disconcerted by the disturbances of vision that it causes at the outset. Individuals vary in their susceptibility in this respect, some never speaking of these troubles, while others require reassurance. As a rule all are quite eager to take atropine when they perceive that they are getting back the use of their limbs. Not infrequently even patients of low intelligence and seeming psychic unresponsiveness demand to participate actively in the treatment. Five case histories are outlined as evidence of the value of the method.—*Münchener medizinische Wochenschrift,* July 10, 1931.

LEGAL

PHYSICIAN'S FEES—PATIENT'S ABILITY TO PAY

By LORENZ J. BROSNAN, ESQ.
Counsel, Medical Society of the State of New York

The physician is called upon to do an immense amount of charity work. Very often he is imposed upon by those who are financially able to pay. Few persons have any idea of the extent of the gratuitous contribution of physicians and surgeons to society. In an article published in the JOURNAL under date of March 15th, 1931, and entitled, "The Economic Contribution of Physicians to the Community," Dr. Charles Gordon Heyd, President-Elect of the Medical Society of the State of New York, says:

"It is claimed by competent statisticians that physicians treat one-eighth of the population of the United States free of charge. Since at all times there are two per cent of the population incapacitated and about four per cent physically impaired, it follows that from 375,000 to 500,000 persons are daily treated without charge."

The system which brings about this situation is economically unsound and, as Dr. Heyd properly points out:

"The doctor is entitled to a monetary return for his labor that is fair and commensurate with his services, training and experience."

With these preliminary observations, we will discuss a case recently decided by one of the courts of this country where the question was squarely presented as to whether the financial ability of the patient to pay should be taken into consideration in fixing the fair and reasonable value of the services of the physician, in an action brought by the physician to recover for medical services rendered.

Over a period of years the plaintiff in this case, who specialized in the treatment of goiter conditions, had treated one Mrs. McD and succeeded in improving her condition and had finally performed upon her a highly successful operation for the removal of a goiter. Her husband Mr. McD. died, and the doctor filed a claim against his estate for the sum of $15,000 for professional services. The executrix disallowed the claim in that sum, but offered the doctor $1,000 in settlement. The doctor refused to accept the smaller sum and sued the estate for the full amount. The matter came on for trial and the doctor obtained a judgment for the sum of $3,500.

An appeal was taken on behalf of the estate raising the question whether certain evidence was properly admitted by the court upon the trial which, if excluded, would have resulted in a failure of proof to sustain a verdict of more than $1,000. A portion of the testimony which was claimed objectionable was that of a physician and surgeon of some thirty-four years' experience in the community, and was in part as follows:

"Q. Are you familiar with the general practice of physicians and surgeons in this community and in this State with reference to the matter of fixing the amount of their bills considering the financial standing of the patient? A. I am.

"Q. What is that practice? A. I think it would be according to the financial standing of the patient, his annual income, a certain amount. A poor person would not pay as much, or anything at all.

"Q. What is the relation between the bill for a major operation and the yearly income? A. I would say about ten per cent of the annual income."

Then a hypothetical question was asked as to the reasonable amount of the plaintiff's compensation, describing his treatment of Mrs. McD. and stating the approximate wealth of Mr. and Mrs. McD. to be $1,600,000. To this the witness answered:

"A. I should think his fee of $15,000 would be just."

Another doctor of wide experience and practice was called and similarly testified as follows:

"Q. Are you familiar with the practice of physicians and surgeons in this community as to taking into consideration the financial standing of their patients in fixing the fee? A. I am familiar with it. It is based upon their income, the amount they earn per month or year.

"Q. Roughly speaking, what is the relation between the amount of the estate or the amount of the income and the fee for major operations? A. The practice varies somewhat. With some it is a practice of charging a month's income for major operations, again ten per cent of the total yearly income for major operations.

"Q. State how widespread that practice is. A. So far as I know it is universal in the United States.

"Q. And you are familiar with the general practice throughout the country in that respect? A. I am fairly so."

In response to a hypothetical question the same as put to the other doctor he testified:

"A. I would say a $15,000 fee is reasonable and proper."

The court affirmed the judgment and in the course of its opinion said:

"We are of the opinion that the rule best supported by reason, in any event as applicable to this case, is that in some substantial measure the reasonable compensation of the physician is determinable by the ability of the patient or her husband to pay for the service, since the contract for the service was by the physician directly with the patient, for the service to be rendered to the patient, the services including a major operation, and it being shown by competent evidence that it was customary among physicians to charge for such service in some measure according to the ability of the patient to pay for such service."

The ruling of this court, however, is not in accord with the rule in many States in this country. A number of State courts have, when presented with the problem of determining the value of professional services, treated such services as a commodity and rejected the financial ability of the patient to pay as an element in fixing the proper amount of the physician's fee.

For example, in Iowa, in an action brought by a physician for services rendered, the trial court charged the jury as follows:

"The facts of the circumstances of the parties subject to be charged as defendants herein do not constitute an element in fixing the value of the services. And, if any evidence has been offered on this subject, the jury should entirely disregard it as the right to recover an amount that might be recovered on the financial worth or standing of the defendant."

On appeal, that portion of the judge's charge already referred to was approved by the appellate court in the following language:

"The instruction is, we think, correct. There is no more reason why this charge should be enhanced on account of the ability of the defendants to pay, than that the merchant should charge them more for a yard of cloth or the druggist for filling a prescription, or a laborer for a day's work. It is true a physician in general practice will often be called upon to treat indigent persons from whom he will not be able to recover the value of his services. He may take this into account and regulate his charges with reference to that fact, just as a merchant may take into account probable bad debts in fixing his per centum of profit upon his goods. But the value of a service depends upon the difficulty of rendering it, and the skill required in its performance, and, sometimes, upon the results accomplished, and not upon the riches or the poverty of the person for whom the service is performed. If the ability to pay determines the reasonableness of a charge, then the richer a man is the more he should pay for any service. No such rule of charge can be recognized or countenanced by the law."

In Alabama, in a similar case the court, in holding that the financial ability of the patient to pay was not relevant testimony in the case, said:

"The trial court erred in admitting testimony as to the value of the patient's estate, against the objection of the defendant. The inquiry was as to the value of the professional services rendered by the plaintiff to the defendant's testator and, * * * the amount or value of the latter's estate could shed no legitimate light upon this issue nor aid in its elucidation. The cure or amelioration of disease is as important to a poor man as it is to a rich one, and * * * the services rendered the one are of the same value as the same services rendered to the other."

In Texas, in passing upon the point here involved, we read from the court's opinion:

"We are of the opinion, further, that the court erred in permitting plaintiff to show the reasonable value of his services by proof that defendant was wealthy, coupled with further proof of a custom among physicians to graduate their charges according to the financial condition of the patient, and to charge a wealthy person a higher fee by reason of his superior ability to pay. * * * Certainly no court would hold that the value of ordinary labor could be determined by such a test, and upon principle we can see no distinction between such a claim and one of the character now under discussion."

Every principle of equity and justice is in favor of the rule that the financial ability of the patient to pay should be a factor in determining the reasonable value of the services of the physician. In one case in the State of New York the court very properly followed this rule. The facts are interesting and may be briefly stated as follows:

A wealthy man presented himself at a hospital for care as a charity patient, and under a mistake as to his means he received such treatment. Upon his death it became known that he was worth at least $400,000, and two surgeons who treated him at the hospital made a claim against his estate to recover $2,000 as the reasonable value of their services. The court first held that they were entitled to receive such reasonable value and then, in determining the reasonable value, held that it was proper for the court to consider evidence as to the financial standing of the decedent. In its opinion awarding the doctors their claim of $2,000 in full, the court stated the following:

"In measuring the value of a lawyer's services, the prominence of his clients can be taken into account. An equal, and probably a greater, social bearing is attributed to medical service. In order that such skill may be highly developed and well paid, and that the greatest number and the

group itself served thereby, it is recognized as a social necessity that those who are quite able to pay, especially for the best, should pay adequately and liberally, in any case, to avoid the social danger incurred either in allowing those less able, or unable to pay, to go about the community in a diseased, untreated condition, or in allowing the skill and equipment of competent medical men to be lessened, or lost to the locality, by inadequate over-all recompense. ***

"From the social point of view, it is immaterial whether the wealthy recipient of medical service is, or is not, unconscious at the time the physician is called, or is in attendance. For the same reason, such a person obtaining such service in the manner in which this decedent did, is in no different position. Neither of them has any social right to expect such service from such men at the same rate, the inadequate rate, at which it is received by those who have less successfully made use of the opportunity that society affords, or who happen to be forced to avail themselves of the protection of the individual that accrues from the duty of the group to protect itself as a group."

The quotation above referred to leaves but little to be said on the point involved. It is refreshing to find a judge writing in this vein. The opinion is not only good common sense but in addition it does justice to the physician. Few people stop to think that the physician must pay his bills in precisely the same way as any other individual. His gratuitous contribution to society is enormous, and this in some measure should be compensated in determining the reasonable value of his services to patients of ample financial means.

CLAIMED IMPROPER TREATMENT OF FRACTURED ARM

A young man was brought to the defendant doctor for treatment with respect to a fracture received from a fall from apparatus in a gymnasium. The doctor was told that the patient's forearm was fractured and that temporary cardboard splints had been applied as a first-aid measure. Upon examination the doctor found the arm in a very bad condition and informed the patient that *x*-rays should be had as soon as possible, but as it was late at night they could not be obtained until the following day. The doctor then placed the man on a table and without an anaesthetic attempted to get the bones in their proper positions as well as possible, and then applied an anterior-posterior splint with a sling.

The next morning the patient went with the doctor to a hospital where *x*-rays were taken. These pictures showed a fracture of both bones of the lower forearm with considerable overriding and displacement, especially of the lower fragment of the radius. The doctor advised the patient that further manipulation was necessary and recommended an anaesthetic which was refused. With the aid of a fluoroscope the doctor attempted to correct the overriding without an anaesthetic but because of muscular spasm he had difficulty. A metal splint was applied but failed to hold. Then a short posterior and long anterior splint was used. The doctor explained that the nature of the fracture was such that it was altogether likely that a good result could only be obtained by an open operation but this was promptly refused.

The young man returned to the doctor several times for treatment. About three weeks later additional *x*-rays showed some displacement of the fragments. The doctor again advised an open operation, but it was again refused. When last seen by the doctor there was pronation and supination, no false point of motion or crepitus and the fragments were in fair position. The man was to return but failed to do so. In the whole course of treatment the patient was uncooperative, and failed to comply with the doctor's request that he obtain additional *x*-rays.

The next the doctor heard of the case was a communication some time later from another doctor that the patient had consulted him, and he had found a displacement of the fragments of both the radius and the ulna and non-union. The said doctor performed an open operation which gave the man a good end result.

An action was instituted against the defendant doctor charging malpractice. The case was duly tried before a judge and jury and a verdict rendered in favor of the defendant.

NEWS NOTES

POLIOMYELITIS AND THE SCHOOLS IN NASSAU COUNTY

The Medical Society of Nassau County has advised that opening of schools be not postponed on account of poliomyelitis, and is allaying public apprehension and making school attendance safe by particular instruction to teachers and school nurses in discovering early signs of illness among the students.

A conference of medical men and school authorities was held on August 31 to which were invited Ambrose J. Fry and Wellington Mepham, school district superintendents of Nassau County, the school superintendents of the two largest villages in each of the three townships, the health officers of the three townships, Drs. William H. Runcie, Hempstead; Charles A. Steuer, North Hempstead; and Walter F. Stillger, Oyster Bay; and Dr. M. D. Dickinson, District Health Officer for the State Department of Health. Following this conference, the Executive Committee of the Nassau County Medical Society conferred and issued the following statement to the school authorities and to the press:

"The Executive Committee of the Medical Society of the County of Nassau has given a great deal of study to the subject of infantile paralysis and the opening of schools. We have consulted with experts and we have held a conference of school executives and health officers. After careful consideration of all the known facts and factors we are of the following opinion:

1. There has been no sharp increase in the number of cases during the last three or four weeks, and the total number of cases reported are not sufficient to constitute an alarming epidemic.

2. While it is generally believed that the disease is transmitted by contact, there is nothing to indicate that it is more dangerous to associate with children than with adults.

3. Unless a child is being kept closely confined to his own premises and away from church, places of entertainment, and his customary neighborhood playmates, he would be in no greater danger in school than he is at present.

4. When in school the child will be under the daily direct supervision of his teacher, school nurse, and the school physician who will be particularly instructed in the early recognition of dangerous signs and symptoms. Early recognition of the disease is our only hope of preventing crippling. With the double supervision of parent and school, the child is doubly guarded.

5. To assure this the Medical Society will hold a meeting on September 8th for school doctors, nurses, and others interested, and will secure as a speaker a poliomyelitis expert who will lay particular stress on early recognition and precautions to be observed in schools.

6. In view of these facts it is our carefully considered opinion that we are not justified in recommending that the schools be kept closed. Final decision will rest with the school authorities of each community. This statement is issued merely because our advice has been asked."

The County Society will next sponsor a meeting in the Auditorium of the County Police Headquarters Building in Mineola, Tuesday evening, September 8, of superintendents of schools, and medical inspectors of schools. The school authorities have been asked to direct their school nurses to attend, and to invite any school teachers who are interested. Dr. George Draper has been secured to instruct those present in the school aspects of poliomyelitis. This meeting will be well reported to the daily press in articles reassuring parents and children of safety in attending school and combatting the feeling of uneasiness which many parents have expressed.

The meeting will be followed up by the mailing of four thousand letters, distributed through school authorities to teachers, quoting the nine diagnostic points from the Journal of the Medical Society of the State of New York (See August 15 Journal, page 1038) and asking them in turn to hold meetings with the school inspectors.

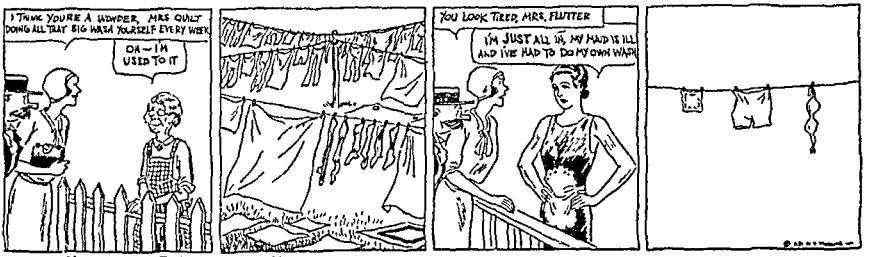
A semi-popular meeting was held in the police headquarters on the evening of September 8, and was attended by 250 persons including health officers, school nurses, members of boards of education, school teachers and others interested in poliomyelitis. Dr. J. W. Bulmer of Glen Cove, vice president of the Nassau County Medical Society, presided. Dr. George Draper of New York City explained the nature of poliomyelitis and methods of its recognition and control. Dr. Wm. A. Howe, Medical Director of Schools of the State Department of Education, reassured the people regarding the relation of the schools to the spreading of poliomyelitis.

The meeting adjourned without taking any definite action. The opening of the schools in Nassau County is generally deferred as was done in New York City.

THE DAILY PRESS

Mr. and Mrs.—

A Big Monday's Wash—Ancient and Modern



From the N. Y. *Herald Tribune* *August* 31, 1931

SANITARY ODORS

If foul smells suggest sickening conditions, why may not pleasant odors create a healthful atmosphere? The New York *Times* of August 13 comments editorially on the possibilities of a new device for spreading attractive perfumes out of doors, and says:

"The latest device is to bring to town the fragrance of a rose garden, a field of new-mown hay or a honeysuckle bower. The new machine can spread synthetic scent over vast areas—swamps, refuse dumps, stagnant pools, glue factories and other regions where the natural atmosphere is far from pleasing, declares the editor of *Aromatics Magazine*. The new machine is described in a Paris dispatch as 'a cross between a motor-spirit pump and a vacuum cleaner.'

"On an island in Lake Daumesnil, within the boundaries of the French Colonial Exposition, a luxurious restaurant is enjoying a successful season. Its romantic setting is made deliciously fragrant by perfuming the surrounding lake. Guests arriving by motor drive over wide bridges above the perfumed waters.

"Various happy applications suggest themselves. Certain residents of Long Island might be glad to have a screen of jasmine laid down on the open dump of Queensboro Hill. Unpleasant exhaust gases on Broadway and Fifth Avenue might be masked under gusts of Parma violet. And it should be simple to flood the subways on hot days with the scent of sweet clover."

TUBERCULOSIS IN PIGS AND HENS

It is not popularly known that tuberculosis often affects pigs and hens as well as cows; and that a great factor in the disease is the custom of throwing the offal from the dressed animals back into the pens and yards of the live animals, thus inviting the direct spread of disease. The New York *Sun of* July 27, commenting on the disease, says:

"Having achieved considerable success in the campaign to free cattle from tuberculosis, the practicability of which is now not disputed, Federal and State agricultural department officers have now undertaken to demonstrate that poultry may also be rid of the disease. Their work will be carried on principally in the Mid-Western and North Central States, where fowl tuberculosis causes serious losses. Swine raisers are also interested, for, through close association with hens, the pigs become infected. The diseased poultry and swine impose heavy losses on the growers.

"The campaign for tuberculosis-free flocks of hens will be carried on as the campaign for tuberculosis-free herds has been conducted. The poultrymen will be instructed in the prevention of infection and informed as to the folly of tolerating in the chicken runs a malady that keeps dollars out of their bank deposits."

SURVIVAL OF THE WEAK

Articles frequently appear in the current press on the subject of "who shall inherit the earth." The articles recite the complete disappearance of the enormous fish and reptiles of by-gone ages, and the threatened extinction of our wild mammals which have more bulk than brains. But the writers seem to follow the style of assigning the survival to insects—and there are many arguments to support the theory. The subject is treated in verse and rhythms by James J. Montague who writes in the New York *Herald Tribune* of August 21, as follows:

"The flies careen about the house
With undulating rhythm,
And, like the wicked rat and mouse,
They bring diseases with 'em.
They are not large, they are not rough,
They are not fierce or savage,
And yet we watch them do their stuff
And calmly let them ravage.

"We know, as we have known for years,
That when, in hut or palace,
A germ-encrusted fly appears
His heart is filled with malice.
We know each time we hear him sing
His predatory carol,
The evil, ugly, buzzing thing
May put our lives in peril.

"But though we've dwelt upon this earth
Through many, many ages,
The fly, which has no grace or worth,
In murder still engages.
He's flown around the whirling sphere
In this or that direction,
And day by day and year by year
Has spread about infection.

"The tiger lurks in his retreat;
The lordly lion cowers;
Both know that it is not discreet
To brave man's mighty powers.
The polar bear is hidden out
On icebergs bleak and jagged,
And yet the fly still swarms about
And runs us humans ragged."

AMERICAN NURSES' ASSOCIATION

The *New York Times* of September 2 comments editorially on the American Nurses' Association as follows:

"One evidence of the general interest of the nurses in their profession is the formation of a committee to survey nursing education and economics. By voluntary contribution a fund of more than $90,000 was accumulated. It is being used to find out if there are enough nurses being graduated to care for the sick, if specilization is better than general care, what are the chances of continuous employment in the private field and many other matters of importance. Some of these questions have already found an answer. More nurses are needed for mental and contagious disease work. Emphasis which has for years properly been on "quantity production" should now be shifted to quality. For a time there were not enough trained nurses. Now there are enough, though almost none of them have continuous, year-round work. Even in 1928, their most prosperous year, the average private-duty nurse was employed only eight months of the twelve. People in moderate circumstances will be glad to know that the nurses are at work on the problem of giving them service at a price they can afford to pay."

READING FOR INSOMNIA

The *New York Sun* of September 2 comments unfavorably on the list of books suggested by Dean Inge of St. Paul's Cathedral, London, to be read at bed time for the purpose of producing sleep. The *Sun's* editorial writer says:

"Few readers, whether wakeful or not, would willingly pick up 'Society in Rome Under the Cæsars,' 'Christian Mysticism,' 'Speculum Animæ,' 'Types of Christian Saintliness,' 'The Philosophy of Plotinus' or 'The Eton Latin Grammar,' which are the books mentioned by the Dean. Surcease from insomnia comes from the pages of a book which is just on the shadowy line that divides the readable from the unreadable, not from a book that will drive the ordinary reader away by its opening paragraph. The books mentioned by the Dean would be laid aside instantly by the insomniac and the sufferer would be roused to an even more intolerable alertness. It is a book which stupefies and lulls the senses that is needed, a book that contains paragraphs that can be read over two or three times without convincing the reader that he has read them a single time, a book that fails, by the scantiest margin, to hold the interest. Every reader must compile his own list. No general prescription will do."

BOOK REVIEWS

Acknowledgment of all books received will be made in this column and this will be deemed by us a full equivalent to those sending them A selection from this column will be made for review, as dictated by their merits or in the interests of our readers

THE SIGNIFICANCE OF WATERBORNE TYPHOID FEVER OUTBREAKS, 1920-1930 By ABEL WOLMAN and ARTHUR E. GORMAN Octavo of 82 pages Baltimore The Williams & Wilkins Company, 1931 Cloth, $2 00

This small monograph is an important contribution to the study of waterborne typhoid fever The authors have collected, assembled and interpreted the results of investigations of waterborne typhoid fever outbreaks in the past ten-year period While a detailed bibliography is not given, the amount of time required for the study made must have been considerable

The interpretation of the facts and the conclusions drawn seem very well taken They are moreover most interesting and timely in the warning they convey as to the alarming incidence of waterborne typhoid particularly in the small municipality, where evidently the administrative control over the collection, treatment, storage and distribution of the public water supply is inadequate A startling fact brought out is that unprotected cross connections between polluted fire or auxiliary water supplies and public water systems stand out as the most important single source of these outbreaks The financial and personal liability resulting from such outbreaks should show municipalities and private water companies the necessity of more strict control In the introduction Dr Thomas Parran, Jr, emphasizes the facts brought out by this study and calls the attention of public health and waterworks officials to the negligence which permits such epidemics to occur

JOSEPH C REGAN

ABDOMINAL PAIN By JOHN MORLEY, Ch M, F R C S Octavo of 191 pages, illustrated New York, William Wood & Company 1931 Cloth, $3 50

A noted surgeon has recorded his observations on abdominal pain and in so doing has created an entirely new and fruitful conception of its interpretation

The viscero-sensory and viscero motor reflexes of Mackenzie so widely taught to medical students the world over are critically reviewed and found wanting The author considers to have demonstrated, and rightly so in the opinion of the reviewer, that a viscero sensory reflex does not exist and that it is a peritoneo-cutaneous or peritoneo muscular transposition of sensory stimuli with which we are dealing in most instances of abdominal pain The existence of a true visceral pain, which has been denied by other investigators is considered as established by the author of this remarkable little volume It furnishes delightful, instructive and constructive reading for every student of medicine, graduate or otherwise

GEO WEBB

MEDICINE A Historical Outline. By M G SEELIG M D Second edition 12mo of 205 pages illustrated Baltimore, Williams & Wilkins Co, 1931 Cloth, $3 00

The demand for a second edition is evidence of the place this work has attained as a brief manual among the histories of medicine It has been the purpose of the author to give a panoramic view of the development of medical science intended more especially to stimulate interest on the part of students We feel that he has accomplished his end admirably

The book consists of eight lectures comprising a course given by Dr Seelig to the students of the St. Louis University School of Medicine The material is arranged in chronological order beginning with the primitive period and concluding with the 19th century and covers remarkably well the salient facts in the evolution of medicine The text is written in attractive form that holds the attention of the reader Added interest and value is afforded by the considerable number of portrait plates of outstanding characters which embellish the reading matter

In this second edition the author has taken the opportunity to correct errors that crept into the first edition The book makes its appeal not only to medical students but to physicians and others seeking a delightfully interesting account of the story of medicine We heartily recommend it as one of the best handbooks among recent medical histories

C F

THE SEX FACTOR IN MARRIAGE A book for those who are or are about to be married By HELENA WRIGHT, M B, B S 12mo of 122 pages New York, The Vanguard Press, 1931 Cloth, $2 00

Dr Helena Wright, a London physician, has written a strange and intensely fascinating book on the sex factor in marriage She takes it for granted that one of the prime requisites for a happily wedded life is intimate sexual understanding She is convinced that much of the marital unhappiness and divorces must be traced to dissatisfying and improperly performed sexual intercourse and maintains that most of these cases are dismissed by the physician with such a cursory diagnosis as dyspareunia or sexual neurosis or sexual incompatibility Just as healthful dieting in a civilized person depends on an intelligent choice of foods and a conscious control of one's appetite, so should satisfying sex relationship be subject not to one's uncontrollable instincts but to an intelligent familiarity with the sex act

The facts cited in this book never form part of a medical school curriculum, and even though some physicians may object to the nature of such a treatise it would be advisable for the practitioner to be informed of its contents The information seems superficially sensual, but reflects a praiseworthy courage on the part of the writer to record some of the facts of civilized existence and to interpret them for us

Dr Wright adopts a more intimate relationship with her reader than the physician does with his patient For that reason alone it is a creditable undertaking Our present attitude on love and marriage and divorce is apparently inspired and influenced by our religious affiliations And because this book bears an endorsement by members of the English clergy the American Y M C A, and is accepted by the U S Customs Service, the reviewer can speak freely without fear of bigoted criticism There is but one justifiable objection to this book—it will no doubt readily find its way to sexually gullible youngsters, but proper legal regulation of its sale to properly qualified persons should help to solve this problem

This book should serve to modify our Puritanical conception of morals for by its whole hearted frankness it should serve to simplify human relationships It should be read by all newly married couples who wish to be introduced to the physical intimacies of a happy and successful married life

EMANUEL KRIMSKY

OUR NEIGHBORS

RURAL MEDICAL SERVICE IN VERMONT

The *New England Journal of Medicine,* of July second, says:

"According to Dr. W. G. Ricker of St. Johnsburg, secretary of the Vermont State Medical Society, there are now 110 towns and villages in Vermont without the services of a doctor. This statement was contained in a report on medical facilities for rural people which he made on June 17 in connection with the general session of the Vermont commission on country life.

"Figures contained in his report showed that 40 years ago there were 693 physicians in the state, and hardly a hamlet was without one. Today there are 458 doctors, 34 per cent of whom are in cities, and additional 33 per cent in towns of more than 2,500. There are 43 towns ranging from 500 to 1,000 in population without doctors, and also 67 towns with smaller populations which are in a similar position."

DISTRIBUTION OF DOCTORS IN MAINE

The August number of the *Maine Medical Journal* contains the following report of Dr. H. C. Knowlton, Chairman of the Public Relations Committee of the Maine Medical Association, on the distribution of doctors:

"We have heard considerable talk lately to the effect that our country districts are not getting adequate medical attention. It is to find if there be any truth in this talk that I have prepared a map of Maine, showing the location of the physicians and their relation to the population.

"Maine has an area of 29,895 square miles, but in this area there are only 490 cities, towns and plantations which have a population of 100 or more people.

"To serve this area there are 882 physicians. These men are located in 208 cities and towns. This leaves 282 towns of 100 or more population with no resident physician. However, the arrangement is such that only a very small part of the people in the state are beyond reasonable distance from a doctor.

"We are often told of the good old days when the town had four doctors instead of one and fees were much lower. I always feel that in those good old days four physicians were needed in that town. They made their calls either on foot or behind horses, where the maximum rate of speed was ten miles an hour, and over roads often hardly more than passable in the summer, blocked in the winter, and slippery quagmires in the spring and fall.

"I believe that the solution of many of our rural medical problems lies not in more physicians—God knows they are poorly enough paid as it is—but in better summer roads and winter roads opened for the automobile.

"I have arbitrarily taken an area ten miles in radius as that to be possibly served by each doctor or group of doctors. When one comes to plot the state in this manner one finds that in the majority of cases the circles overlap and the bulk of the population is within five miles of a physician. This is so in Androscoggin, Cumberland, Kennebec, Knox, Lincoln, Sagadahoc, Waldo and York counties. In Aroostook 2.5 per cent (2,000) are more than ten miles from a physician. In Franklin 5 per cent (1,000), Hancock 2.6 per cent (900), Oxford 4 per cent (1,281), Penobscot, 1.7 per cent (1,596), Piscataquis 3.5 per cent (650), Somerset 4 per cent (1,381), Washington 4.4 per cent (1,683) are outside the circle. These people are scattered in regions, many so isolated as to be out of the question so far as this survey in concerned. A circuit riding physician with an aeroplane would be their only solution. There are a few localities where physicians might settle with reasonable hopes of a living.

"I believe our hospital facilities to be adequate. I also believe that any physician capable of doing his own work can interest a nurse and citizens of his locality in founding a small institution. There are many such in the state.

"Our large hospitals are well run and altogether adequate. The severest criticism that can be leveled against them and their staff is that they do not pay the attention they should to the practitioners who send them cases.

"We are favored by having with us some 77 osteopaths, 70 chiropractors and 18 assorted healers. It is not my purpose to discuss the inadequacies of their methods of healing. They do not, however, relieve our problems in any way, as there are only 2 osteopaths and 6 chiropractors settled in towns of less than 2,500 population, and it is with these that we are chiefly concerned.

(*Continued on page* 1180—*Adv. xiv*)



..and in cases of

Infantile Gastro-Enteritis

FOR over three generations physicians have prescribed Robinson's "Patent" Barley as a valuable modifier in the diet of healthy infants. But its use has been extended to meet many *abnormal* conditions, such as those caused by Summer Diarrhea in infants.

The evidence collected by many authorities leaves little doubt that this trouble is often initiated by bacterial contamination of cow's milk.

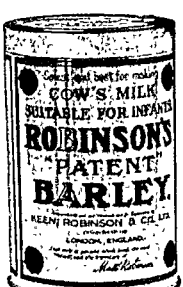
Injudicious feeding, too, particularly failure to give sufficient water, is now widely conceded to be a contributing factor.

Another aspect of the ailment...the Dehydration Theory...attributes the aggravation of Summer Diarrhea to excessive perspiration of the infant, with consequent thirstiness and fretfulness.

If at this stage the mother makes the mistake of giving the infant milk, overfeeding may aggravate the condition.

• • •

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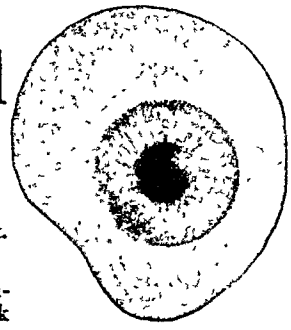
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(*Continued from page* 1178)

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"The smaller towns have 43 per cent of our population and there are 35 per cent of our physicians settled in these places.

"One fact stands out, which is to be put on the debit side of our ledger. Twenty-eight per cent of all our physicians are sixty years of age or over. That seems a large percentage and makes one feel that we are not getting our share of young men. Also while that 28 per cent applies to all our physicians, when we come to the smaller places, we find that 36 per cent of their medical staff are of mature age. This is a large percentage and augurs badly for the future. We do not want graduates from Class B. schools. Our people are as deserving of good treatment as any, but we shall need young men for the future.

"I believe that the survey should be carried on by the Association, the physicians indexed so the society can be always in close touch with conditions in the State. Thus can we more quickly fill our vacancies and give sensible advice when called upon."

CRIPPLES IN ILLINOIS

Figures on the extent and nature of the defects of cripples in Illinois are contained in an article in the *Illinois Medical Journal* of August. The number of known cripples is shown in the following table:

"Infantile paralysis	2,308
Spastic paralysis	1,062
Bone infection	907
Tuberculosis of spine	650
Accidents	555
Congenital deformity (unspecified)	497
Congenital deformity of joints	468
Club foot	418
Bow legs from rickets	386
Flat feet	268
Arthritis	197
Total these causes	7,716
Miscellaneous	2,295
Total	10,011"

Discussing the causes of the conditions, the *Journal* continues:

"The very large part played by infectious diseases in the production of the physically handicapped gives to this problem an important public health feature. Infantile paralysis alone is credited with responsibility for 23 per cent of all the physically handicapped child population. To no other single cause is attributed more than 7 per cent of the crippling conditions recorded. Spastic paralysis and bone infections were credited with

(*Continued on page* 1181—*Adv. xv.*)

(*Continued from page* 1180—*Adv. xiv.*)

10 and 9 per cent respectively, but these two are groups of causes.

"Since 1916 infantile paralysis has been charged with 1,033 deaths in Illinois. Thus it appears that 3 out of each 4 cases of this disease prove either fatal or physically disabling to the victims. This consideration suggests the importance of utilizing to the utmost the facilities for preventing and treating the disease. To this end the State Department of Public Health has collected and offers free to physicians convalescent serum. Early treatment with this serum prevents the onset of paralysis in a high percentage of cases and reduces the mortality to a minimum, according to reports on experimental observations.

"Tuberculosis of the spine was given as the cause of deformity in 650 cases. Prevention of this condition depends to a considerable degree upon the eradication of bovine tuberculosis and upon the pasteurization of milk.

"Malnutrition was charged with the responsibility of 386 cases of physical impairment that were reported as handicapped. Club feet were found in 418 children. Preventing malnutrition is simply a matter of reasonably good infant and child care. Where active disease plays no pronounced part the proper balancing of the diet together with a reasonable amount of sunshine keeps nutritional difficulties from arising.

"Club foot can nearly always be corrected satisfactorily by surgical measures. Many cases have been so skillfully managed that nothing short of a most careful examination would disclose evidence of the former condition.

"There are available preventive and corrective facilities which, if fully applied, would cut down the future handicapped population and reduce tremendously the impairment of those now suffering."

COSTS OF IOWA STATE SOCIETY

The August issue of the *Journal of the Iowa State Medical Society* contains a full page diagram of the proportional costs of the several activities of the Society varying from one per cent for medical economics to 27.5 per cent for the Journal. The occasion for the explanatory chart is set forth in an editorial, as follows:

"At the meeting of the House of Delegates during the last annual session the Trustees reported a deficit in the finances of the society amounting to $5,081.85 and recommended an increase in membership dues to remedy the condition.

"In an earlier editorial we have attempted to describe the many activities and worthwhile achievements of the State Society; and in this editorial we shall show the exact expenditures during the past year on account of these various activities and accomplishments.

(*Continued on page* 1182—*Adv. xvi*)

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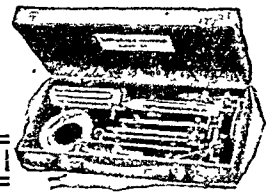
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(*Continued from page* 1181—*Adv. xv*)

"Attention is directed to the fact that the item of major expense are respectively, the publication of the Journal, the salaries of the necessary office personnel, the expenses incurred by the activities of the Legislative Committee, the costs of the studies of the Committee on Medical Education and Hospitals, the Speakers' Bureau, and the Annual Session. These six items are responsible for over 75 per cent of all costs for the year.

"Comparing the quality of our Journal and its costs with that of other state publications of a similar character, we are fortunate in our publication contracts. It is to be borne in mind further that the Journal is essentially maintained by paid advertising and that the annual cost to each member is less than one dollar.

"To discuss salaries and the amount of personnel necessary for the conduct of society affairs involves an unending delineation of the activities of the central office. Those in a position to understand all of the varied calls made upon the central office feel that the personnel has been maintained at a minimum level and that any further curtailment of help would cripple materially the effectiveness of this organization. The largest single salary paid is that given to the managing director, an office created and continued during the past three years by the will of the House of Delegates.

"Specific attention will not be directed article to the activities of the Legislative mittee and its accomplishments in the last lature since these matters will be discusse later article. It should be pointed out, ho that this expense should properly be divi half, since it is a biennial expense which be charged in two consecutive years. I one-half of the expense for legislative ac were charged to the year 1930-31, the cost would be $1,438, or 3.9 percent of the

"The amount required for the activities Committee on Medical Education and Ho is an unusual one and barring the develo of some unforeseen exigency, will not quired again for many years.

"The Speakers' Bureau, like the Jour purely educational in motive and essentiall supporting in its operations. If perpetuate Bureau may become an item of greater ex since the present plan of financing its act may prove inadequate. That it fills a de demand for scientific education is testified by the enthusiasm with which its services have been received and the increasing demand for speakers and courses of instruction. Certainly its support is in keeping with the recommendations of the Amercan Medical Association and the practice of other state societies.

(*Continued on page* 1183—*Adv. xvii*)

(*Continued from page 1182—Adv. xvi*)

"No comment is required relative to the expense of the Annual Session. Each member in attendance at any recent session appreciates the value of this conference and the necessity for expense in its operation.

"Particular attention is directed to the item of Administration Travel shown in the accompanying chart, since this expenditure has been questioned in several quarters. This item of $456 or .2 per cent of the total expense, covers actual mileage and hotel expense incurred by the executive officers of the society in transacting the affairs of their respective offices Needless to say this sum covers but a small part of the actual money spent by these officers in the performance of their duties and makes no provision for loss which they have cheerfully borne.

"The issue, if one exists, is not one of expense, but one of purpose. If economy exists in the management of our affairs, as our survey indicates, and a reduction of costs is demanded, then the House of Delegates, representing the members of our great society, must determine a reduced program of service and order their officers and committees accordingly. It becomes a question of progression or regression—a matter of society policy."

DROUGHT RELIEF HEALTH WORK IN TEXAS

The August issue of the *Texas State Journal of Medicine* carries the following item regarding the State Department of Health of Texas:

"STATE HEALTH DEPARTMENT ACTIVITIES: *The Dallas News,* of June 9, briefly but graphically described the work carried on in Texas by the State Department of Health during recent months. It quotes Dr. J. C. Anderson as proclaiming it the 'largest and most successful adventure in rural public health work ever conducted in a Southern State. . . .' and it says that an even broader program of work is contemplated. 'Details of the campaign in Northeast, Northwest, Central and Central Southwest Texas have been compiled in a bulletin, styled A Progress Report of the Texas Drought Relief Health Work, and distributed by the State Health Department.

"'The work has been carried out with funds supplied from the $2,000,000 appropriation made by Congress for emergency sanitation work in drought areas designated by the United States Department of Agriculture. The Texas Health Department was allotted about $25,000 for use during April and May and the report discloses that $33,500 was spent. In addition to labora-

(*Continued on page 1184—Adv. xviii*)

THERAPEUTIC ALMANAC



SEPTEMBER OCTOBER

Months of change and readjustment in diet, clothing, living habits. Coughs, colds, tonsilitis will again gain the upper hand. Acidosis is generally a predisposing, frequently an accompanying, and always an aggravating factor.

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(*Continued from page* 1183—*Adv. xvii*)

tory work, there were in the field an epidemiologist, a mobile unit, a corps of nurses, engineers and inspectors.

" 'Central county committees were organized in more than fifty counties and particular work was done in improving milk supplies, water supplies, and in sewage disposal, as well as in the distribution of biologics for immunization against communicable diseases, including smallpox, typhoid and diphtheria. Requests for biologics were more than three times the estimated demand.

" 'Central committees were set up in sixty-five counties.

" 'County judges, county health officers and county superintendents are directing the work in most instances.

" 'Now that the work is well organized a new budget will be submitted to the United States Public Health Service before July 1, to cover twelve months, and the budget will be based on surveys and recommendations of county health officers and county judges.' "

GOLD MEDAL MEMBERS IN MAINE

The *Maine Medical Journal* for July has the following editorial on the recognition of those members who have practiced medicine for fifty years:

"A pleasing and unusual feature of this session was the presence of twelve of the twenty-eight living veterans in medicine, men who have practiced fifty years, and the presentation to them at the banquet by Governor Gardiner of gold medals commemorating their long and faithful service.

"In presenting these tokens, Governor Gardiner said:

" 'Perhaps it is the bustle of modern life that has brought more forcibly to our minds, the minds of the general public, the reliance that we must place in the medical profession. We have, in the ordinary course of life, come to recognize good health as associated with efficiency, and more and more people are turning to the medical profession, not only for the relief and cure of acquired ills, but for advice and treatment that will ensure good health as a matter of efficiency. Today a doctor has more responsibility than merely meeting the individual responsibilities that come to him as a member of the profession, and now owes it to the profession to assist his associates in shouldering the responsibilities that fall upon the medical fraternity to lead our citizens into paths of health and happiness. Your medical associations, national, state and local, have well-defined responsibilities toward their fellow human beings.

" 'Tonight the Maine Medical Association takes a very distinctive step in honoring those of your association who have spent fifty years or more in the practice of your profession. You speak in

(*Continued on page* 1185—*Adv. xix*)

If There Were No Pain

If pain and acute distress would not set off the protective alarm, there would be no need for prompt neutralization of gastric hyperacidity. As things are, the alarm must be heeded quickly. CAL-BIS-MA quickly neutralizes the excessive acidity that gives pain and distress, whether it is due to improper digestive function or excessive secretory activity. It raises no deceptive smoke screen by introducing digestive ferments. Neither does Cal-Bis-Ma bring new discomfort by excessive gas formation, and endanger the situation when gastric ulcer is present by distending the stomach. Sodium and magnesium for quick neutralization, calcium and bismuth for lasting effect and for protection of the mucous membrane, *colloidal kaolin* for the adsorption of gases and toxic substances.

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(*Continued from page* 1184—*Adv. xviii*)

this memorial token, not only as members of your profession, but also for the citizens of three generations who owe a great deal to the ministrations of these gentlemen.'"

The New Hampshire Medical Society presents a gold medal to those who have been members of the State Society for fifty years, and lists two who are entitled to the honor. The Society also publicly recognizes the doctors who have been in practice fifty years and lists five who will receive the congratulations of the Society. (See the *New England Journal of Medicine,* June 4, page 1208.)

EXPANDING THE COLORADO JOURNAL

Plans are frequently announced for the union of the medical societies of several States in publishing a common medical journal. California, for example, joins Utah and Nevada in publishing *California and Western Medicine;* Oregon, Washington, Idaho and Montana join in publishing *Northwest Medicine,* and Louisiana and Mississippi join in the *New Orleans Medical Journal.* On the other hand, Delaware gave up its union with Pennsylvania and now publishes its own journal; and the *New England Medical Journal* was unable to persuade Maine and Rhode Island to give up their journals and join the other four States in supporting a common journal for all of New England.

The latest proposal for a merger of State medical journals is that of Colorado, that the Rocky Mountain States unite in publishing a single medical journal to be known as the *Rocky Mountain Medical Journal.* The August issue of *Colorado Medicine* announces the plan as follows:

"Former editors of *Colorado Medicine* and members of the Publication Committee have led in cultivation of an idea, a dream, of a *Rocky Mountain Medical Journal* to succeed *Colorado Medicine.* This idea took definite root last September when the House of Delegates gave authority to invite neighboring States of the Rocky Mountain chain to join with Colorado and Wyoming in such an endeavor. Authority also was given to change the name of *Colorado Medicine.*

"Formal invitations have now been extended to New Mexico and Montana at their respective annual sessions on behalf of the Colorado State Medical Society. The Wyoming State Medical Society has added her own invitation and has graciously stated to our neighbors that she is thoroughly pleased with the results of having joined with us some five years ago.

"As is natural, neither the New Mexico nor the Montana society felt in a position to take definite action at their meetings this summer.

"In the first place, New Mexico at present is

(*Continued on page* 1186—*Adv. xx*)

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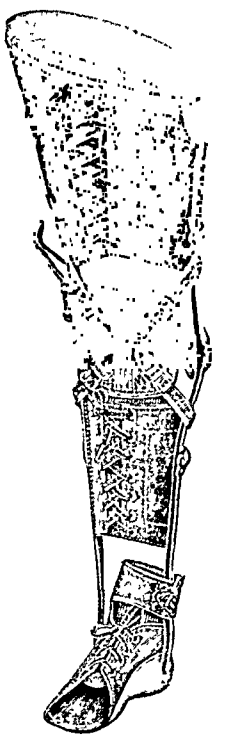
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(*Continued from page* 1185—*Adv. xix*)

associated with another journal, an association which she would probably wish to sever or alter if she should adopt the Rocky Mountain plan. Her present association is with *Southwestern Medicine,* published at Phoenix for the States of Arizona and New Mexico and the western counties of Texas centered in El Paso."

"Montana's situation is different, but no less complex. At present she has no journal of her own and is officially associated with no other State. A few counties on the east patronize a journal published in Minneapolis, a journal notably commercial in its general makeup, apparently published principally for private gain, and not conforming to the ethical standards of the American Medical Association. A few counties on the west subscribe to *Northwest Medicine,* the official journal of the States of Washington, Oregon and Idaho, published in Seattle. Therefore there is at present no journal wherein a Montana doctor may speak to the membership of his State Society, no journal wherein any writer may publish an article for the benefit of that great State. Inviting Montana to join us in a Rocky Mountain publication, we are to some extent in competition with journals which border on the east and west of that State, and which, from the point of view of railroad transportation, are closer in time and miles."

"Montana has in the past had far from the most satisfactory associations with medical journals. Being one of the few remaining States in the country not officially represented in any journal, it is natural that several publications have considered her 'fair game' and have tried to 'sell themselves' to her. The type of salesmanship that has been used is only too apparent to anyone discussing the journal situation with officers and leaders of the Montana Society. Certain other journals have evidently desired only Montana's good round dollars in subscriptions, offering in return only a medical journal published far away, by and for its local owners and with interests not Montana's. Therefore it is again natural that Montana finds it hard to believe there is no ulterior motive in our own invitation. It is hard for her to believe that Colorado is willing to give up the time-honored name and local identity of *Colorado Medicine* that has been built up proudly for almost thirty years, that the largest medical society in the Rocky Mountain region is willing to place itself on an equal footing with societies one-third and one-fourth its size to publish a greater medical journal that can truly represent the huge district where medicine still pioneers, that by our proposal we would make Montana an integral party to a publication representing Rocky Mountain medicine."

There is a great value in a publication representing a single State Society. The success of the dozens of journals of county medical societies would indicate that even the smallest State can make a success of its official journal.

WOMAN'S AUXILIARY IN NEW JERSEY

The physicians of New York State, who have not yet formed a Woman's Auxiliary to the State Medical Society, will be interested in the evidence afforded by the minutes of the Annual Meeting of the "Woman's Auxiliary to the Medical Society of New Jersey," as published in the Official Transactions, 165th Annual Meeting of the Medical Society of New Jersey, as a supplement to the August Journal. The minutes of the Auxiliary cover 22 pages, while those of the House of Delegates of the State Society fill 62 pages.

The membership is 727, while the dues collected amounted to only about seventy dollars. An item of the Treasurer's Report reads, "Annual Meeting Fund (State), $241.75," but this item does not appear in the report of the Treasurer of the State Medical Society.

The Publicity Chairman gave a descriptive report of social meetings, and relief. And the Chairman of the Welfare Committee reported on the promotion of subscriptions to *Hygeia*, the popular health magazine of the American Medical Association.

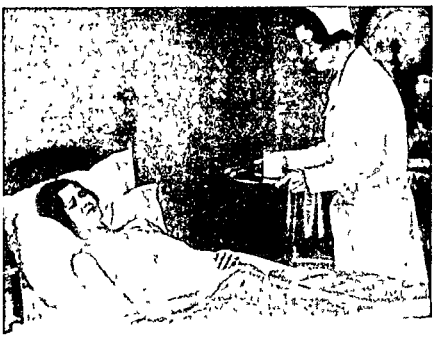
Thirteen county auxiliaries use four pages in reporting their activities which are largely social.

Ten pages were devoted to a discussion of the Constitution.

The Executive Board reported on the conditions in the County branches, one dormant one having been revived, and three disbanded. The chairman also reported:

"I have emphasized the value of keeping well informed; pursuing carefully the study programs issued from time to time by our National Auxiliary, reading regularly our own *New Jersey State Medical Society Journal*, spreading the use of *Hygeia Magazine*, keeping in general touch with the work that is being done in our Health Departments as well as the Health Educational work that is carried on in our local schools, public and private, all this effort that we may equip ourselves for the day, which I feel is in the offing, when the Woman's Auxiliary as a whole will be assigned to some concrete work which will make us an asset to the medical profession.

"Every Auxiliary has a direct responsibility as to the character of health information disseminated in the community and should be on the alert to forestall anything that might not savor of reliable instruction. Along these lines, the exposing of fraudulent advertising might well be considered an Auxiliary work. There are multitudes of people who accept as gospel the attractively gilded advertisements which confront us each day in our newspapers and magazines. Harmful, indeed, and a menace to unsuspecting readers. A united crusade against these fraudulent tactics would place each Auxiliary in a field of helpfulness worthy of its name."



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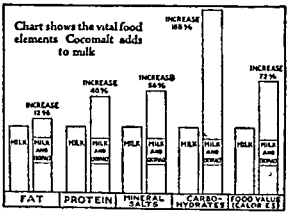
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There is a wonderful chance to establish a *Sanitarium* or *Private Hospital* in the suburbs of a town of North New Jersey, 25 miles from N. Y. City. Has 9 acres of landscaped grounds with three buildings having rooms for staff nurses, and fifty or more patients in single rooms—all buildings *completely furnished* in bedrooms, dining rooms, parlors, kitchen, etc (almost new). Full particulars as to why this place is to be sold. Address *Swift Realty Co.*, 196 Market St., Newark, N. J.

THE SUMMER-TIME USE OF VIOSTEROL

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Mead Johnson & Company, Evansville, Ind., invite you to send for samples of Mead's Vioserol in Oil 250 D for clinical use during the summer months to replace cod liver oil. See page ix.—*Adv.*

HOW TO CORRECT DIARRHEA

After a starvation period of twelve to twenty-four hours on boiled water or gelatin water (1/3 oz. of gelatin to one pint of boiled water), the infant should be given Protein S.M.A. (Acidulated (diluted 4 level tablespoons with 9 ounces of water, and without any additional carbohydrate.

	1st Day	2nd Day	3rd Day*
Severe cases ..	3 oz.	6 oz.	9 oz.
Medium cases..	10 "	15 "	20 "
Mild cases ...	15 "	30 "	

*Until the proper amount for their age and condition is reached, which is 200 c.c. per kilo of body weight per twenty-four hours, or three ounces per pound of body weight per twenty-four hours. However, the total twenty-four hour intake need not go above thirty-two to thirty-five ozs. or 960 to 1050 c.c.

After 48 hours or when the stools become normal, SMACO (400) Maltose and Dextrins (Spray Dried) should be added gradually, beginning with one oz. to the quart, and increasing until the infant is gaining steadily in weight. In certain cases, it may be necessary to increase the carbohydrate to a total of 12 to 15% (3 to 4 oz. of carbohydrate to the quart). See page xv.—*Adv.*

LIVER EXTRACT—LILLY

A review of the recent literature on the action of Liver Extract No. 343 in the treatment of pernicious anemia, suggests a number of generalizations:

1. That the optimum maintenance dosage is an individual consideration which can be determined accurately only by repeated blood examinations by the physician, and that a patient whose blood count has been brought to normal may continue for a year or more on a dosage of potent substance that is less than the required maintenance dose, but that eventually the need of a higher maintenance dose will become evident.

2. That during infection and fever it must be expected that the hematopoietic response will be inhibited but that an adequate dosage of liver extract should nevertheless be continued.

3. That if single massive doses of liver extract are given, the excess is not necessarily wasted, but may continue for a limited time at least to give results similar to those to be expected from a dosage of three vials daily.

4. That "the average gain in red blood-cells at the end of one month's treatment bears an inverse relation to the level of the red blood-cells before treatment was begun," and that in uncomplicated cases the number of red blood-cells produced at the end of one month by a daily dosage of three vials of Liver Extract No. 343, is essentially the same as that produced by higher dosages of four to ten vials per day.

Liver Extract No. 343 is supplied through the drug trade in boxes containing two dozen vials of powdered extract. The contents of each vial represent material derived from 100 grams, or about 3½ ounces, of fresh raw liver. See insert.—*Adv.*

POISON IVY

A new poison ivy treatment, in the form of a balm prepared according to a formula by Dr. Robert Morris of New York, is now being offered the drug trade by E. R. Squibb & Sons.

It is said that the new preparation contains, in addition to certain well-known remedies for ivy poisoning such as zinc oxide, methyl salicylate and phenol, a newly discovered vegetable solvent for rhus poison.

According to the manufacturers the new balm is effective in treating the poisoning in all its stages and that it is a remedy for infection from not only poison ivy but from poison oak and related plants also and for bites of insects, ticks and mites.

Packed in collapsible tubes, the new product is convenient to handle and to apply. The balm whose function is essentially to absorb the poison is applied to the affected areas of the skin allowed to remain there for fifteen minutes and is then washed off with common laundry soap. A second application, to remain longer, is advised.

The new remedy is in addition to already-established Poison Ivy Toxol Squibb and the Poison Oak Toxol Squibb which have been on the market for some time as an effective subcutaneous treatment. See page viii—*Adv.*

CREST VIEW SANATORIUM

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NEW YORK STATE JOURNAL of MEDICINE

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THE MATERNAL MORTALITY RATE COMPUTED AND STANDARDIZED BY A NEW METHOD*

By ROBERT J LOWRIE, M D, NEW YORK, N. Y

THE high maternal mortality rate in the United States has now become one of the favorite topics of the lay press, and is one of the chief planks in the midwifery cause

Custom has decreed that the rate of death due to pregnancy and childbirth—the maternal mortality rate—be expressed as the number of maternal deaths per thousand babies born alive Thus 6 1, the rate quoted for the United States birth registration area in 1928, means that 61 mothers perished for every 10,000 babies born alive For the same year in some other countries, the figures are as follows Scotland, 7 0, England and Wales, 4 4, Netherlands, 3 4

How is the actual number of maternal deaths ascertained? Obviously every death certificate on which there is mention of pregnancy or childbirth cannot count as a maternal death, for pregnancy and childbirth are not infrequently complicated by cardiac disease, hyperthyroidism, tuberculosis, etc Physicians actually in attendance upon fatal cases often find it difficult to distinguish between the actual and the contributing causes of death This difficulty is magnified in emergency cases where there has not been adequate antepartum examination Surviving relatives often furnish meager assistance and autopsy is usually refused In short, the physician "does the best he can" with the certificate

In a straightforward case of death, for example in hemorrhage due to placenta previa, the cause is purely obstetrical However, where the patient dies for no apparent reason, to what degree is the death obstetrical and to what non-obstetrical? I recall a case of death three hours after delivery in an apparently healthy woman who ran an uneventful course and then just died What is the physician going to put on the certificate here?

Where there is a joint cause of death the question is again complicated For example, a woman dies on the 15th day postpartum, easy forceps delivery of normal child, fever 100 8 to 104 6 after third day, signs of congestion in the right lung, history of a questionable tuberculosis six years previously, no x-ray, no sputum nor blood examination, no autopsy Who can say whether the fever was due to puerperal sepsis, pneumonia or to lighting up of the alleged tubercular condition? If the Bureau of Vital Statistics interprets the exitus as being caused primarily by tuberculosis, then it is not classed as a maternal death If, however, the evidence favors sepsis or pneumonia then it is called a maternal or puerperal death

The physician's statement on the certificate as to primary and contributing causes of death, that is, whether or not the pregnancy and childbirth were the cause, is not necessarily final This decision rests with the Vital Statistician who is guided by the International List and Classification of Causes of Death These say, in part

"When one of these puerperal causes appears in conjunction with some non-puerperal cause on a death certificate, the death is classified according to definite rules irrespective of the order in which the causes are stated, or the apparent assignment as primary or contributory which the physician in attendance may have indicated"

That even these rules are at times inadequate may be surmised from the following excerpt regarding exceptions

"None of the rules are absolute, but all are subject to exceptions which may vary according to local usage"

We might well ask which determines whether the woman died of childbirth—the statement of the attending physician, the personal decision of the vital statistician, the international code of rules or the exceptions to these rules It is, therefore, difficult to see how any system of rules could effect a consistent classification of causes of death from information ultimately available

* Read by invitation at the April 1931, meeting of the New York Academy of Medicine Section of Obstetrics and Gynecology

to the vital statistician. And is it not logical to conclude that if two vital statisticians from two different states or countries were confronted with the same collection of death certificates, their death rates might well vary within wide limits? In fact, the League of Nations in their publications have shown a number of reasons why international statistics are not comparable. In spite of this highly probable disparity, the maternal death rate is computed to within one-tenth of one per cent, viz.: 2.6, 6.2, etc.

Is there not a better way of ascertaining the number of women who die of pregnancy and childbirth? If, in a given area there were 10,000 people alive at the beginning of an interval of time, say one year, and if during that interval 125 of these individuals died, then we say that the crude or general—and therefore real, death rate per 1,000 is

$$\frac{125}{10{,}000} \times 1{,}000 = 12.5$$

The real death rate is then the fractional ratio giving the relation between the number dying during an interval of time (the numerator) and the number alive at the beginning of that *same* interval (the denominator). The real death rate per thousand in a given interval may be stated in general as

$$\frac{\text{No. dying during an interval}}{\text{No. alive at beginning of same interval*}} \times 1{,}000 \quad \ldots\ldots\ldots (1)$$

The maternal mortality rate, however, as noted above, is the number of maternal deaths per 1,000 live births, and may be written

$$\frac{\text{No. of maternal deaths during interval}}{\text{No. of live births in same interval}} \times 1{,}000 \quad \ldots\ldots\ldots (2)$$

(The interval referred to is usually one year.) For example, if to 100,000 pregnant women during a year in some area, there were 96,000 babies born alive and if 518 mothers died of causes primarily due to pregnancy and childbirth, then we say that the maternal mortality rate for that year was 5.4 per 1,000 live births, viz:

$$\frac{518}{96{,}000} \times 1{,}000 = 5.4 \ldots\ldots\ldots (2a)$$

In (1), the real death rate, note that the numerator and denominator refer to the *same* period of time and furthermore that all elements of the numerator are also contained in the denominator. In the case of (2), the maternal death rate, this does not hold true, for the numerator (maternal deaths) takes into account the whole period of gestation while the denominator (live births) necessarily refers to practically only the last third of the gestation period.

Let us refer to the example leading up to (2a). It is quite possible, for several reasons, that the proportion of "live births" be less and yet no more mothers succumb. This circumstance raises the rate for: suppose that because of more stillbirths, miscarriages, ectopics, and a greater number of maternal deaths with fetus in utero, the number of live births was only 92,000 instead of 96,000, and also that only 90% of the births were registered, then the maternal death rate from the *same* number of maternal deaths in the *same* number of women is

$$\frac{518}{82{,}728} \times 1{,}000 = 6.3$$

Hence, quite independent of the number of deaths in mothers, the maternal death rate as calculated by this method:

1. Increases with deficiency of birth registration.
2. Very probably increases where there is a high proportion of cases which do not terminate in "live birth," viz: stillbirth, abortion, miscarriage, ectopic, mole and maternal death with child not born.

Can we not discover a more accurate method of arriving at the maternal death rate? If during a widespread influenza epidemic we isolated in one group all individuals who had this disease and in another all those who did not have it, and if it was found that the death rates per 1,000 in the influenza and non-influenza groups were 25 and 10 respectively, then we could rightly say that the mortality rate due to influenza was 15 per 1,000. Let us see if we can not utilize this simple principle in the computation of the rate of maternal mortality.

In order that the reader may not become too involved in the mathematical equations these are placed in the appendices and only the results with sufficient explanation to preserve the sequence of events will appear in the body of the article.

Registration of *non-viable pregnancies* (gestation under 28 weeks) abortions, miscarriages, etc.—is woefully incomplete and the number of women in whom these occur is not definitely known.

In our problem we shall consider women pregnant 28 or more weeks (*viable pregnancy*); these we shall arbitrarily call the *childbearing group*. Women having a non-viable pregnancy and those in the age group 15-44 not pregnant will be arbitrarily designated as the *non-childbearing* group.

Bureaus of vital statistics have record of births

* In population statistics the mid-year population is used as the denominator in this ratio.

but not of the number of women giving birth The number of women in the childbearing group may be found from the number of registered live births* (Appendix) This appears in column 3 of Table I As the number of women giving birth outside the age limits 15-44 is relatively small no appreciable error is incurred by assuming all pregnancy cases to be in the 15-44 group

We recall from (1) above that the general death rate was the relation between the number alive and the number dying within a given interval of time If we think of this definition in terms of women bearing children, and deaths in this group to the end of one month postpartum, from *any* cause, then the death rate in the childbearing group is

TABLE I

New York City 1930

(1) Live births registered	(2) Live births corrected for a deficient registration of 1 per 1000	(3) Childbearing group, i e , women with viable pregnancy	(4) Females ages 15-44 inclusive	(5) Non-childbearing group 1 Women with non-viable pregnancy 2 Women in age groups 15-44 not pregnant Column (4) less Col (3)
122,811	122 934	124 146	1,664,639**	1 540 493

The number of deaths in pregnant women is of course found in the corresponding number of death certificates By virtue of some extra work on the maternal death certificates for New York City, 1930, these have been classified into viable and non-viable deaths, and are entered in Table II as columns (1) and (5) respectively

Practically all maternal deaths which are primarily caused by pregnancy or childbirth have occurred by the end of one month after birth The proposed method of computing the death rate excludes, for purposes of standardization, those very few postpartum deaths taking place after one month

$$\frac{\text{No of women in childbearing group}}{\text{No of deaths in childbearing group}} \times 1{,}000$$

The numerator is column (1) of Table II and the denominator is column (3) of Table I Hence the death rate per 1000 in the childbearing group is

$$\frac{515}{124{,}146} \times 1{,}000 = 4\,15 \qquad (4)$$

TABLE II

New York City 1930

(1) Deaths in childbearing group to end of one month after birth	(2) Deaths from all causes in females ages 15-44 inclusive	(3) Deaths in non-childbearing group Column (2) less Col (1)	(4) Deaths in women with viable pregnancy who died with child not born	(5) Deaths in women with non-viable pregnancy
515***	7 299	6 784	68	152

* As the number of stillbirths is usually in excess of the total of multiple births there are always more mothers than there are live births

** Obtained from the relation of number of females 15 44 shown in the 1920 census to the total population as given by the 1930 census

*** This figure includes deaths beyond one month after birth as the records available did not always indicate the time elapsing between parturition and death The effect of this is therefore to overstate slightly the rate which would apply to a one month postpartum limit

This means that in this series of cases, of every 100,000 who had a viable pregnancy, 415 succumbed either during pregnancy or within one month postpartum. But in how many of these women was death caused or hastened by heart disease, tuberculosis, pneumonia, etc, etc.—diseases from which they might have died even if not pregnant?

The death rate in the non-childbearing group refers to the whole year while that of the childbearing group, by our definition, applies to only 16 weeks, namely the last 12 weeks of pregnancy and the first four weeks after birth. Therefore, if we are to compare these rates we must multiply the former by that fraction of the year through which the childbearing rate applies. The death rate in the non-childbearing group is the relation between the number of women not bearing children (Col. 5 of Table I) and the deaths in this group (Col. 3 of Table II) and is

$$\frac{16}{52} \times \frac{6{,}784}{1{,}540{,}493} \times 1{,}000 = 1.35 \quad \ldots\ldots\ldots (5)$$

We now have the death rates of two groups of women in age class 15-44 who, in general, differ only as to pregnancy or status in pregnancy. Is not the difference between their death rates the mortality due to pregnancy or childbirth per se? Combining (4) and (5) in the form of a difference, that is, indicating that (5) is to be taken from (4), and placing underneath the computed rates per 1,000 we have:

$$\frac{515}{124{,}146} \times 1{,}000 - \frac{16}{52} \times \frac{6{,}784}{1{,}540{,}493} \times 1{,}000 \quad \ldots\ldots\ldots (6)$$

$$\frac{4.15}{1{,}000} - \frac{1.35}{1{,}000} \quad \ldots\ldots\ldots\ldots (7)$$

$$\frac{415}{100{,}000} - \frac{135}{100{,}000} = \frac{280}{100{,}000} \quad \ldots\ldots\ldots\ldots (8)$$

The interpretation of (8) is: *"In this series,* of every 100,000 who entered the period of viable pregnancy, 415 died either during pregnancy or within one month after birth; and of these 415 there were 135 whose death could not be attributed to pregnancy or childbirth, but rather to some other condition or disease associated with it. The remainder, 280, are those women whose deaths were due primarily to pregnancy or childbirth, other conditions as heart disease, tuberculosis, etc., if present, merely playing a secondary rôle.

We now see that in our series of cases, out of 415 deaths in women with viable pregnancy only 280 or 68% of these deaths were due to pregnancy or childbirth per se. In the 152 deaths in women with non-viable pregnancy (Col. 5 of Table II) were only 68 per cent of these caused by pregnancy or childbirth? If so, then the number of maternal deaths for all periods of gestation was 68% of (515 + 152) or 451. Hence the maternal death rate, based on the number of maternal deaths per 1,000 live births, is 3.7. The maternal death rate for New York City, 1930, as reported by the Bureau of Records is 5.43.

Our series of cases is sufficiently large and heterogeneous to be representative, and 1930 is probably little different from any other year. Is the maternal mortality rate of New York City being nearly one-third overstated? Is the maternal death rate of the whole United States overstated?

The true mortality rate in women pregnant under 28 weeks cannot be computed because of the faulty registration of abortions, miscarriages, ectopics, etc. We do the next best by relating the number of deaths in this non-viable group to the number of women in the non-childbearing group. In our series of the total 667 deaths, 152 of these (Col. 5 of Table II) were in women pregnant under 28 weeks. The number of women in the non-childbearing group from Column 5 of Table I is 1,540,493. Hence

$$\frac{\text{Deaths in women with non-viable pregnancy}}{\text{Women in non-childbearing group}} \times 1{,}000 \quad \ldots\ldots\ldots (9)$$

$$= \frac{152}{1{,}540{,}493} \times 1{,}000 \quad \ldots\ldots\ldots (10)$$

$$= 1 \text{ per } 10{,}000 \text{ (approximately)}$$

This means that in New York City in 1930 for every 10,000 women in the non-childbearing group there was one who died while pregnant under 28 weeks. Note that the mortality in this group bears no particular relation to that in the childbearing group.

Maternal Death Rates Based Upon Small or Unrepresentative Samples.—Hospitals, maternal welfare or visiting nurse organizations, etc., sometimes quote their maternal death rates. The primary object in computing a death rate is to compare it with that of some other institution or area. If the series of cases are relatively small, or if there are gross differences as to the types of patient, circumstances under which medical and nursing care was rendered, etc., then comparison of death rates may lead to unwarranted conclusions.

In Table III is shown the maternal death rates (uncorrected) for certain periods of consecutive months or years in the ten years 1921-30 at the Manhattan Maternity and Dispensary, New York City. This Maternity institution in addition to having a private patient service (about

25%) serves a tenement house area. The majority of the mothers are clinic or dispensary patients and during the years 1921-30 approximately 30% of the confinements took place in the homes.

TABLE III

Maternal Death Rates Over Long and Short Periods

Period of consecutive months or years	No. of live births	For any period of gestation: No. of mothers who died	For any period of gestation: Maternal death rate per 1,000 live births	Line
Jan., 1927, to July, 1930	5,029	9	1.8	1
Year 1927	1,437	1	0.7	2
Sept., 1926, to Oct., 1928	2,955	2	0.7	3
May, 1926, to Feb., 1929	3,844	9	2.3	4
Jan., 1921, to July, 1922	2,200	11	5.0	5
Years 1921-30 inclusive	13,505	34	2.5	6

From Table III (line 2) it is observed that the maternal death rate in 1927 was 0.7. This is roughly one-ninth of the rate for the whole United States in the same year; but how erroneous it would be to assert that if the childbearing women of the United States could avail themselves of the services typical of this institution, then eight out of nine maternal deaths could be prevented. Note that in the series of 2,955 births (line 3) with two deaths, the death rate was 0.7, but if the period be enlarged by only 7 months, or from 2,955 to 3,844 cases (line 4) then there are 7 deaths added, bringing the rate from 0.7 to 2.3. Hence an increase of 30% in the number of cases raises the maternal death rate 334%. In 19 months there were 2,200 cases with 11 deaths, a rate of 5; though the personnel of the institution would be rather reluctant to admit that a rate of 5 was an index of their efficiency. The rate of 2.5 for the whole ten years is undoubtedly a just showing for this hospital. Rates based upon a short series may or may not represent the whole story. Hence the fallacy of generalization from a mere handful of deaths.

In regard to maternity organizations, a certain number of patients who register drop out of the antepartum clinic and are cared for elsewhere. Others are confined by the service on which they registered but remain under observation for only a brief period of time. Again, maternity services very often transfer to gynecological services cases such as ectopic, mole, abortion requiring operative interference, etc. Sometimes for economic reasons, or because of lack of facilities to handle pathological or septic cases, a patient may be transferred from either hospital or home to a large charity hospital. Physicians, visiting nurses and social workers interested in follow-up work are well aware of the fact that there is always a group of patients whose record as to their status—alive or dead—on the 30th day after birth does not appear on the records of the institution originally responsible. From what has been said above, a certain number of the group not followed up are known to have died; in others this may eventually be surmised. These deaths, however, appear on the roster of the Board of Health of the community, and of the state or country of which the series of cases under study comprise a mere sample. Patients with pathological conditions of early pregnancy such as abortion, ectopic, mole, and those requiring sterilization, may be cared for on gynecological or surgical services without first applying to any maternity organization. Here again a certain number of deaths are added to the record of the country or community, but do not appear of that of any maternity institution.

From what has been said, it can be seen that the country or community has an *unselective* death rate, while the relatively small sample presented by the maternity organization gives rise to a *selective and necessarily lower death rate.* The degree of selectivity depends upon many different factors and cannot be exactly measured. Because of the number and variability in the effect of these factors, comparison of the selective with the non-selective rate may lead to error. An instance of this is seen in the comparison of the low maternal mortality rate in New York City in a group of women who had highly specialized prenatal and visiting nurse care, with the corresponding rate for the whole United States. It is granted that if every childbearing woman in the country at large had good prenatal and visiting nurse care, the number of deaths would be definitely less; but, for the country in general, the majority of women in childbirth would still be short the advantages of the telephone, the ambulance, the elaborately equipped maternity hospital, the highly trained obstetrician, the blood transfusion, etc., etc., all of which operate to save life. Therefore the contention that, given a type of prenatal or visiting nurse care, two-thirds of the maternal deaths of the United States could be prevented, is based on theoretical considerations and still awaits proof.

Sphere of Application of Proposed Method.—Our study was limited to the period of viability and one month postpartum. Other limits of gestation, six months, eight months, etc., for which we can compute the number of women, and other limits postpartum—ten days, twenty-one days, etc., could have been chosen and a similar problem worked out.

The population census lists for the separate age groups 15-19, 20-44, etc., the number of persons, deaths, and births. Hence the maternal mortality rates in the various groups can be computed and if desired, compared with other countries.

Is it not possible that one could secure samples from different areas throughout the country and from these obtain an aggregate or average sample which would be fairly representative of the whole country? The proportion of fatal viable cases, as well as the time of death in relation to delivery or expected delivery could possibly be obtained by inference from the total certificates which recorded the period of gestation, or by communication with the physician. Hence, just as we have done in New York City, we could very probably compute for the whole country the mortality due to pregnancy and childbirth per se.

The proposed method of computing the mortality due to pregnancy and childbirth is impersonal and mechanical. The precise allocation of deaths as to whether or not they were caused primarily by pregnancy or childbirth is *inherent in the method.* The personal equation of the physician or the vital statistician, and the errors incident to the absence of uniform application of the International Code are almost entirely removed. Cold figures of population, births and deaths are the predominating elements. These are a matter of definite record in every country and the primary dependence of the new method upon standard data lends rigidity and uniformity to maternal mortality rates. The "measuring rod" for all is the same. It has just been stated that the personal equation is "almost" entirely removed. It is still possible, however, under the present regime of certification that the death certificate of a pregnant woman will not indicate the period of gestation, or whether death took place before or after delivery. The writer would like consideration by the Bureau of Vital Statistics of the following suggestions:

Birth Registration

1. The same certificate be used for live and stillbirths.
2. A direct question on the certificate as to whether the child was BORN DEAD or BORN ALIVE.
3. A direct question as to whether it was a *single, twin, or triplet birth.*
4. A statement on the certificate giving the period of gestation in weeks, or other standard units.
5. The completeness of registration of live births be checked up from infant deaths, at periodic intervals, as seems necessary.
6. In case of birth in an institution the name of this to be noted on the certificate.

Death Certification

1. In case of females in age group 12-50, a query on the certificate as to whether or not pregnancy was present, or whether deceased had "given birth" during the month immediately preceding death.
2. In case of death in an institution, the name of this to be on certificate.

By following the various steps shown in Tables I and II, equations (3) to (8), and the Appendix, the death rate in any area may be worked out. The general formula for the death rate due to pregnancy or childbirth per se is also developed.

Summary

The employment of the proportional algebraic equation to determine the number of childbearing women from a given number of live births, and the method of expressing the death rate in pregnancy and childbirth per se as the difference between the mortality rates in the child and non-childbearing groups, I believe to be new and original.

The present method of computing the maternal mortality rate—number of maternal deaths per 1,000 babies born alive—it is thought, is subject to two main sources of error, the first due to the inability of death certification to separate causes of death into primarily maternal and non-maternal, and the second due to the variation of the element of "live births." These two factors *always* come to mind in the comparison of maternal mortality rates of different countries, states, etc. I have utilized the proportional algebraic equation in conjunction with the principle of sampling to ascertain from a given number of live births the corresponding number of women *with viable pregnancy. This, divided into number* of deaths in women with viable pregnancy gives the death rate in the childbearing group of women. If from this rate the rate in the non-childbearing group be deducted, the difference, I believe, is the true mortality due to pregnancy and childbirth per se. The method, depending mainly on fixed quantities—population figures, births, deaths and time, can be used for *standardization* of the rate so that for all countries there is a common yardstick. The method may also be used to test the accuracy of the present method of calculating the rate—maternal deaths per 1,000 live births—in so far as this rate de-

pends upon the estimate of maternal deaths The translation into algebraic symbols gives the mathematical formula, though obviously this formula must be used only in fairly large communities, countries, states, etc It was further observed that there was no way of arriving at the true death rate in women pregnant in the period of non-viability, but that only a rate in terms of population could be given

Sweeping generalizations from the rates in small samples usually lead to misinterpretation It has been pointed out that the death rate of a country, state or large center is the true representative or non-selective rate while that of the maternity organization—hospital visiting nurse service, etc—is necessarily the selective rate, and one which does not represent conditions in general A low maternal death rate directly attributable to specialized prenatal and visiting nurse care given in a large metropolis does not imply that the maternal death rate in the whole United States could be reduced to the same level The point must be stressed again that many factors should be taken into account before comparisons are made between any two rates Prompt and accurate certification of not only the fact—but also the gestation period—of births and deaths is of paramount importance

Appendix

Bureaus of vital statistics of local boards of health have record of births but not of the number of women giving birth The latter figure we must know in order to obtain the real death rate in women bearing children If registration of stillbirths were sufficiently complete, then the number of women in the viable or childbearing group would be the number of viable live and viable stillbirths plus the number of women dying with viable child not born, *less* one and two respectively for each set of twins and triplets Unfortunately under our present system of registration these ideal figures are not available

An institution, such as a maternity hospital, can have complete record not only of the total of births but also of the period of gestation of each Furthermore, to a given number of live births of any period of gestation there corresponds a certain number of women in the childbearing (viable) group The ideal conditions possible in a maternity hospital tend to save life On the other hand, the difficult cases from which the bulk of mortality arises are liable to find their way into the institution Hence two factors exist, the one tending to raise and the other to lower the number of live births I think that we could say that the proportion of live births in the average maternity hospital is comparable, within reasonable limits, to that of the community which it serves Hence on the assumption that we can get from the records of the institution a sample representative of the community, we may say that the number of childbearing women per 1,000 live births in the community is approximately the same as the corresponding ratio for the sample

In Table IV are shown two series The large or New York City series is for the year 1930 The sample series refers to consecutive live births at the Manhattan Maternity and Dispensary, New York City

TABLE IV

Source	Women bearing viable children	No. of live births corrected for deficient birth registration*
New York City Series	W	122,934
Sample Series	5,640	5,588

From what has been said above about proportion we may apply the *proportional algebraic equation* to the data of Table IV and write

$$\frac{W}{5640} = \frac{122\,934}{5,588}$$

$$W = 5640 \times \frac{122\,934}{5,588}$$

$$= \frac{5,640}{5,588} \times 122,934$$

$$= \frac{1,009\,3}{1,000} \times 122,934$$

If now we add to this the number of women with viable pregnancy who died with child not born (68), we have

$$W_c = \frac{1,009\,3}{1,000} \times 122,934 + 68 \qquad (9)$$

$$= 124,146 \qquad (10)$$

= No of women with viable pregnancy *corresponding* to 122,934 live births in New York City in the year 1930

This result is Column 3 of Table I

In 1930 in New York City the ratio of childbearing women per 1,000 live births was 1009 3 for the 4 029 cases at the Manhattan Maternity, Nursery and Childs, and the City Hospital Doubtless other samples would yield a comparable ratio *Hence the maternal death rate of 2 80 per 1,000 women is representative*

* A correction of one per 1000 for deficient birth registration affects the end result very little The correction is made to demonstrate the routine of the proposed method of computing the number of women in the childbearing group The sample series from the institution of course needs no correction

FORMULAE

If in (9) we designate 1,009.3 = W_1 = the No. of childbearing (viable) women per 1,000 live births in a representative sample series; 122,934 = L = No. of live births (corrected if necessary for deficient birth registration) in the area from which the sample is taken; 68 = Df = No. of childbearing women who died with child not born, then

$$Wc = \frac{W_1}{1{,}000} \times L + Df \quad \ldots\ldots\ldots\ldots\ldots\ldots (11)$$

= No. of women with viable pregnancy in area corresponding to L live births.

Equation (6) may be written:

$$\left\{\frac{515}{124{,}146} - \frac{16}{52} \times \frac{6{,}784}{1{,}540{,}493}\right\} \times 1{,}000$$

Refer to (1) above also to Tables I and II and designate as follows:

Wc = 124,146
= No. of childbearing women in an area, as obtained by (II) above.

Dc = 515
= No. of deaths—from whatever cause—in Wc, obtained from death certification.

Wnc = 1,540,493
= No. of women in non-childbearing group, i.e., women in the age group 15-44 inclusive less those in the childbearing group.

Dnc = 6,784
= No. of deaths in women in the non-childbearing group, i.e., the total of deaths from *all* causes in women of ages 15 to 44 inclusive, less the number of deaths in the childbearing group.

$f = \frac{16}{52}$
= fraction of the year—last 12 weeks of pregnancy plus the first 4 weeks after birth—over which Dc applies.

Then

$$\left\{\frac{Dc}{Wc} - f\,\frac{Dnc}{Wnc}\right\} \times 1{,}000 \quad \ldots\ldots\ldots\ldots\ldots\ldots (12)$$

is the mortality due to pregnancy or childbirth per se. Obviously the method of computation might give erroneous results if applied to a small number of cases. It has its greatest use in the computation and standardization of rates in countries, states, and reasonably large communities.

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* The material of this survey has been especially compiled by the writer for use in the present article. It is as yet in manuscript form.

IDIOPATHIC CHOLEDOCHUS CYST: REPORT OF A CASE*

By FRANCIS M. O'GORMAN, M.D., LOUIS CHELY, M.D., and CLARENCE F. HEYDEN, M.D., BUFFALO, N. Y.

NEARLY all textbooks and systems of surgery mention idiopathic cyst of the common bile duct, but it is very rarely encountered in the practice of even large clinics, as may be seen from the fact at the Mayo Clinic where there have been over 17,000 operations on the biliary tract in the last twenty years or so, a true cyst of the common duct was encountered but once and in the literature of the whole world from 1830 down to the present day there have been only 93 case reports.

We believe that we have here a case of true

* Read at the monthly meeting of the Staff of the Buffalo Hospital of the Sisters of Charity, in March, 1931.

idiopathic cyst of the common duct in a girl of 8 years She was admitted to the Sisters' Hospital on Sept 4, 1930, and for four days we studied the case

History

Until April of this year (1930) she was a perfectly normal girl except for mild attacks of measles and scarlet fever earlier in childhood Two things happened to her at this time, and so gradually that friends of her mother noticed that the girl was getting jaundiced, and that her abdomen was getting a bit distended As this grew more noticeable and the stools became clay-colored, a doctor was called and a diagnosis of acute catarrhal jaundice was made She improved a little and her parents sent her to the country to get more fresh air and sunshine Instead of improving, her jaundice became more marked, the abdominal distention increased and the stools which had regained their normal color during her early stay in the country again became clay-colored

Physical Examination

At no time during the entire period of observation at home had the child shown any evidence of constitutional disturbance Her nutrition was good and the girl was as active as any other normal youngster of 8 years So that during the four days that we observed her we see a little girl anxious to get out of the hospital in time for next Sunday's picnic She has a normal temperature, pulse and respiratory rate The mucous membranes and skin are only moderately jaundiced, the abdomen is enlarged quite unmistakably, and we could palpate what felt to us like the right lobe of the liver filling the right upper quadrant It seemed quite firm, moved with respiration, and was flat on percussion The spleen was also definitely palpable No free fluid was present There was an increased tracery of subcutaneous veins over the abdominal wall, but no evidence of purpuric spots or petechiae All other systems were normal

Laboratory

The Wassermann was negative A von Pirquet tuberculin test was negative With the dye given by mouth there was no visualization of the gall bladder whatever The test was repeated with negative results There was a shadow that extended below the right costal margin that the roentgenologist, interpreted as an enlarged liver There was nothing abnormal about the bleeding the clotting or the fragility of the blood There was no anemia and the stained smear showed no abnormal red or white cells She had nearly 15,000 white cells but the poly percentage was only 63% The Van den Bergh gave the usual biphasic reaction seen in an obstructive jaundice During her four days in the hospital her stools were at all times clay-colored, and pulse and temperature remained on the normal line

Pre-Operative Notes

She was allowed to go home with the impression that this was a low-grade cholangitis and she was put on KI A week later, however, the signs had changed, and the mass in the right side of the abdomen became so large that an exploratory laparotomy was decided upon at once Going over the child before operation we were impressed first by the total absence of all constitutional disturbance She was still moderately jaundiced perhaps a little lighter than a week before One thing stands out, however even on inspection and that is the marked protuberance in the right upper quadrant extending even into the lower When we come to feel of the child's belly we no longer wonder whether we are dealing with an enlargement of the liver, for this is a tumor the size and shape of an infant's head It is smooth, firm but not hard, and has the tense elastic feel of a cyst It is not very tender and can be displaced from side to side giving the impression that it is anchored by some sort of short mesentery to the posterior parietal wall It definitely did not move with respiration, and there was a definite limit of the tumor upwards so that we doubted that it was part of the liver The spleen was felt as before An enema just before operation returned a dark brown normally colored stool A physician that limits his practice to children, saw the girl just before the operation and upon the above findings made a diagnosis of hypernephroma of the kidney

Operation

A right rectus incision was made and the abdominal cavity opened in the usual way Immediately a large cystic mass the size of a grapefruit popped into the incision Omentum adherent to it was easily separated The duodenum was pushed to the left and adherent being separated with a little difficulty The liver was a little enlarged and definitely cirrhotic The gall bladder was so intimately surrounded by liver substance that only the fundus was visible, lying medial to the cyst The hepatic flexure of the colon was pushed downward so that the upper part of the cyst lay beneath the liver edge A trocar was now inserted into the cyst and a quart of dark green fluid bile was aspirated The sac was now opened a little wider and sponged out The lining was smooth and the walls very thin while bile was seen to flow from two openings in the upper pole With the finger, adhesions were broken up all around until finally there seemed to be two rather large ducts coming from the hilum of the liver and entering the upper pole

of the cyst. When the gall bladder was squeezed, the bile in it entered the cyst by way of one of the ducts. No common or cystic duct could be found and the gastro-hepatic ligament seemed to convey the hepatic trinity in a normal manner so that it was judged that the junction of the hepatic and cystic ducts was anomalously deep in behind the liver. The next procedure was to ligate these ducts, remove the cyst, and drain the gall bladder. A cigarette drain was placed against the ligated ducts and the belly closed in the usual way.

Post-Operative Notes

Immediately after operation the child began to get more and more deeply jaundiced, the stools became clay colored and remained so, the urine became darkly stained with bile pigment, and the dressings were saturated with blood and bile, until on the seventh day post-operatively, the biliary fistula was established, the dressings needed changing every four hours, her jaundice cleared, and the stools remained grey. At the end of two weeks she was out of bed, however, and was sent home with a biliary fistula. After another two weeks she was brought back to the hospital and a small catheter inserted into the fistula for about two inches. Pyelographic sodium iodide under pressure was injected and *x*-rays taken which clearly outlined a tract about four inches long leading into the fundus of the gall bladder. which drained a dilated cystic duct and many ramifications of the hepatic ducts in both lobes of the liver. As a result of these pictures we felt sure that the hepatic ducts drained into the cystic, and so into the gall bladder and fistula, and that when we removed the cyst we ligated the two ends of the common duct on either side of a congenital dilatation of the middle segment of the choledochus.

Her blood at this time contained 5,000,000 red blood cells, still showed 15,000 white cells with 80% polys. Platelets were normal. Only two and one-half minutes for coagulation. A Duke's bleeding time of 4 minutes was only slightly prolonged over the normal.

Second Operation

One month and a half after the first operation, the child returned to the hospital and was operated the next day. The fistulous tract was easily separated and dissected back to the normal upper part of the common duct although the junction of the hepatic, common and cystic ducts still could not be seen. Bile was flowing from the fistula constantly. The duodenum was easily mobilized in its first portion. The gall bladder fundus was opened and it was found that it extended well up behind the liver and was completely surrounded by liver. There was no bile in it, only a white mucoid material, and for this reason in making our anastomosis we included the fistula along with the gall bladder, sewing both into the duodenum. A Mikulicz drain was inserted and the belly closed. From the very first day, however, the wound drained bile and blood quite profusely. The child grew weaker and her stools became black and tarry, giving a 4 plus occult blood test. Peritonitis set in and the child died.

Necropsy

The operative incision was opened and enlarged, only a partial post mortem being permitted. Between the liver and the abdominal wall was a solid mass of fibrinous exudate containing both blood and bile, and ranging in thickness from ½ inch to 1½ inches, and extending upward as far as the coronary ligament of the liver. No bile was free in the peritoneal cavity, although the intestines were matted together with this plastic exudate. The capsule of Glisson was not thickened and a mild degree of the biliary type of cirrhosis was present. In size and weight the liver was slightly above normal. The spleen was a little enlarged and fibrous. The other organs were not remarkable and showed no other anomalies. The pancreas was normal and emptied into the duodenum through several small ducts but no prominent papilla of Vater. The anastomosis of the fundus of the gall bladder was in perfect shape, but the fistulous tract had slipped out of the duodenum, accounting for the immediate and profuse biliary drainage right after operation. On opening into the gall bladder it was found to be filled with solid blood clot, twice the normal size, with thick, indurated, chronically infected walls, draining through a short cystic duct into the hepatic duct, high up and behind the liver. The hepatic branches were traced into both lobes of the liver and were slightly dilated but not anomalous. The upper part of the common duct was found connecting with the fistulous tract. The lower portion of the common duct in the gastro-hepatic ligament could not be found, nor could we find the ampulla of Vater. The intestinal contents were black and tarry but no fresh blood was present. The entire intestinal mucosa was very hyperemic. Microscopically the gross findings were confirmed but nothing of interest added.

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Next Annual Meeting, Buffalo, May 23, 24, 25, 1932

DISTRICT BRANCH MEETINGS

The Medical Society of the State of New York has always recognized the importance of the meetings of the District Branches throughout the twenty-five years of their existence. The parent society prints and mails the programs, provides a substantial sum of money for the expenses of each District, and assists in making and carrying out the programs. Also the officers of the State Society consider the assemblies to be opportunities for meeting the members socially and on intimate terms, thereby promoting an interest in Medical Society affairs both locally and state-wide. The example of the New York State Society in conducting the meetings of the District Branches is a model which other State societies are emulating and following.

INDEX TO REFERENCES TO THE GOVERNOR'S HEALTH COMMISSION

The NEW YORK STATE JOURNAL OF MEDICINE has carried all the news that was available regarding the Health Commission that was appointed by Governor Franklin D. Roosevelt on May 1, 1930. The Commission has held monthly meetings, and made extensive studies of public health matters in the State, with special reference to legislation for an increased participation of the State and local communities in assisting to provide medical service to all the people. The Commission decided to withhold publicity of its deliberations until it had reached some definite decisions. The Journal has therefore given the Commission but few notices, and these of only a general nature. For the sake of ready reference to the records of the Commission, the following index has been prepared, giving the notices which have appeared in this Journal:

1. Governor's conference on Public Health Education, Journal May 15, 1930, page 611.
2. Appointment of Health Commission by Governor Franklin D. Roosevelt, May 15, 1930, page 612.
3. Editorial note by President Ross, October 1, 1930, page 1167.
4. Appointment of Subcommittees of the Commission, January 1, 1931, page 39.
5. Preliminary statement of conclusions of the Commission, January 15, 1931, page 106.
6. Governor's Annual Message, January 15, 1931, page 109.
7. Abstract of Preliminary Report of Governor's Commission, February 15, page 230.
8. President Ross' Editorial comments on the Wicks-Hutchinson bill embodying recommendations of the Commission, March 15, page 355.
9. Legislative note on Wicks-Hutchinson bill, March 15, page 366.
10. President Ross' comments, April 1, page 415.
11. Another note, April 1, page 427.
12. Protest of Genesee and Rensselaer counties, April 1, page 428.
13. Governor's comments on the opposition, April 15, page 477.
14. Attitude of Speaker McGinnies and Senator Knight, April 15, page 499.
15. Opposition of Cattaraugus County, April 15, page 500.
16. Annual Report of President Ross, May 1, page 521.
17. Legislative Committee, note on Wicks-Hutchinson bill, May 1, page 584.
18. Discussion in the House of Delegates, July 1, page 826.
19. Meeting of Joint Committee on the Commission, October 1, page 1208.

AMERICAN COLLEGE OF SURGEONS

The Clinical Congress of the American College of Surgeons will hold its annual session October 12-16, 1931, in the City of New York. This is the fourth time the Congress will have come to New York, the others years being 1912, 1916, and 1924.

The story of the American College of Surgeons begins in the year 1910, when a number of prominent surgeons from all parts of the United States met in Chicago and held a Clinical Congress. A similar Congress was held in 1911 in Philadelphia. Those attending the 1912 Congress in New York discussed the problem of standards in two phases:

1. What constitutes a hospital?
2. What qualifications should a surgeon possess?

The Congress appointed a committee for the purpose of formulating standards of qualifications for both hospitals and surgeons. The need for the supervision and maintenance of the standards was so obvious, that the American College of Surgeons sprang into existence almost spontaneously, so that now even the smaller hospitals seek to conform to three standards:

1. All pathological material shall be examined by a competent pathologist.
2. A record of every case shall be kept in such a form that its full history is available.
3. Staff conferences shall be held at least monthly for the discussion of both morbidity and mortality.

The program of the annual Congress this year includes clinics in all the leading hospitals of Greater New York and Nassau County. The Congress will also hold evening meetings which will be addressed by leading surgeons from all over the United States. One feature will be exercises on the sixteenth when candidates for fellowship in the College will be received and initiated.

The headquarters of the Congress will be the new Waldorf-Astoria Hotel, on Park Avenue, between 49th and 50th Streets, New York, where also the evening lectures, demonstrations, exhib-

its, and dinners will be held. All the meetings are open to physicians, but admission to the clinics will necessarily be by card, for which a fee of five dollars will be charged. Dr. Charles Gordon Hoyt, President-elect of the Medical Society of the State of New York, is Chairman of the New York Sommittee, and Dr. John E. Jennings is Chairman of the Brooklyn Committee.

Any physician may obtain programs, admission cards, and other information by addressing the College at Room 501, in the Waldorf-Astoria Hotel.

GRADUATE FORTNIGHT OF THE NEW YORK ACADEMY OF MEDICINE

The Fourth Graduate Fortnight to be conducted by the New York Academy of Medicine during the two weeks beginning October 19, is an opportunity open to every physician in New York State. The subject this year is "Disorders of the Circulation." The program includes three features daily:

1. Afternoon clinics in thirteen hospitals of New York City, by ninety-three teachers
2. Exhibits and pathological demonstrations in the Academy building, with formal programs in the early evening.
3. Evening lectures by twenty speakers.

The features of the Fortnight are free, and every member of the Medical Society of the State of New York is welcome. A copy of the official program may be obtained by addressing the New York Academy of Medicine, 2 East 103rd Street, New York City.

LOOKING BACKWARD

This Journal Twenty-five Years Ago

Dr. Didama: This Journal of October, 1906, contains an address by Dr. J. L. Heffron in memory of Dr. Henry Darwin Didama of Syracuse, who died October 4, 1905, aged 82 years. Dr. Didama was a recognized medical leader in Syracuse and throughout New York State. He served as President of the Medical Society of the State of New York, and was the first president of the New York Medical Association when it was founded in 1883.

Dr. Didama was a general practitioner—an internist he would be called today. He speaks of the alkaline treatment of rheumatism as follows:

"I read a paper on the use of acetate of potash in its treatment. It was entirely new to the Syracuse fellows. They had been using calomel and jalap and things of that kind and their patients never got well under six weeks, the time in which the disease would, in any event, have run its natural course. I told them of several patients who had gotten well under the acetate of potash treatment in a few days and they proceeded to bait me. 'What effect did it have on his pulse?' asked one; 'Did you look at his tongue?' asked another; 'How were his bowels affected?' asked a third. I saw that their purpose was to confuse me and I finally said, 'Gentlemen, there is no use asking me these questions for the only thing that I observed at all accurately was that the patient got well.'"

MEDICAL PROGRESS

Some Clinical Observations on Cancer.—W. B. Cosens, writing in the *Practitioner,* August, 1931, cxxvii, 2, states that in a practice of over forty years two special clinical facts have come under his observation: (1) That an increased pulse rate occurring with a cancerous growth, regardless of the locality or size of the growth, is a symptom denoting a bad prognosis; (2) He has noticed that in 85 per cent of cancer cases there is a slightly tender left pelvic colon. The colon is the neglected cesspool of most individuals. Its contents eventually find their way on to the land or into the sea. Is it not a possibility that this method forms the carrier by which our food, animal world, fish, and ourselves become infected? Some day the large intestine will receive as much attention as the mouth. In the hygiene of the colon aperients are useless. The author has found in many cases of obscure ill-health that if the colon is washed out on alternate days with two or three pints of iodine solution, 1 dram to the pint, much of it is readily absorbed and eventually finds its way into the urinary bladder, thus cleansing the lymphatics of the intestine. The improved condition of the patient becomes obvious within two or three weeks. The procedure can be carried out by the patient himself with no special armamentarium other than a douche can and a few feet of rubber tubing. The colon requires the same care as the teeth. The middle portion of the alimentary tract being selective takes care of itself. The small intestine sorts out what is necessary for life. The débris is collected in the large intestine, where if it is not soon evacuated, it undergoes rapid decomposition and lymphatic absorption. It is possible that in this way cancer virus is absorbed, and by a simple method of treatment the lymphatic absorption of the virus may be controlled. Cosens hopes that within another century all human and animal dead bodies will be cremated, and the application of manure to the land will be regulated, as a means of preventing contamination of water and food supplies.

Diathermy Treatment of Nephritis.—In the opinion of R. Gantenberg acute nephritis offers a peculiarly appropriate field for the threefold beneficial action of diathermy, which consists of (1) production of hyperemia and increased capillary circulation of the deep tissues, (2) stimulation of a specific glandular function, and (3) a relaxing effect upon spasms of a smooth muscle organ. In comparison with decapsulation, diathermy presents the advantages of simplicity and complete safety. It is easier to carry out than deep roentgen irradiation, which equally presupposes the use of apparatus and whose action is not without danger of possible sequels. At all events, diathermy as a treatment for acute nephritis deserves more attention and more general use than it apparently has had. The author cites a case of postscarlatinal nephritis with extreme edema in a girl of 15 in whom *x*-rays had produced no effect. Diathermy of both kidneys was prescribed for 15 minutes each day. At first there was no improvement, the intense edema in the surrounding tissues making it difficult to produce hyperemia in view of the weak heart action. After skin drainage of both legs was instituted, however, the effect of the diathermy was startling. Within a week the anasarca had been reduced by 15 liters. The kidney function was promptly reestablished, and albumin and sediment disappeared from the urine in an astonishingly short time. In order to gain increased experience with regard to the influence of diathermy upon kidney function, its effects were studied in a number of persons with healthy kidneys. No difference was found either in the amount or in the specific gravity of the urine after diathermy had been used 15 minutes before the obtaining of the first urine. If, however, in the course of such a test, diathermy was applied at just the time when the maximum excretion was over, it produced a renewed excretion. It is therefore evident that diathermy is capable of increasing urinary excretion also in healthy kidneys. The method has not been found applicable in chronic nephritis, where it has a distinctly inhibiting effect upon excretion. Possibly there is an optimal mean dosage, adherence to which will avoid injury. Further observation in this direction is desirable.—*Deutsche medizinische Wochenschrift,* July 3, 1931.

The Nature of Certain So-Called Essential Hydroceles.—Pierre Cartier, writing in the *Bulletin de l'Académie de Médecine* of June 30, 1931, says that he has carried out studies on 86 hydroceles in 81 patients. The cases were limited to those in which there was no accompanying lesion of epididymis or testicle, and in which it was impossible clinically to determine the pathogenesis of the condition. In every case the liquid was pale yellow, fluidic, and transparent. There was always a fibrinous coagulum, but as a rule this was less abundant than that of hydrarthrosis. There were leucocytes in all but one case, but in none were they very numerous. Erythrocytes were found in 29 per cent of cases,

in one case reaching 14,400 per cu. mm. The bacteriologic findings constitute the interesting part of the author's results. In every case he carefully examined the coagulum for microbes, and found these in 40 per cent. In two cases he identified the gonococcus; in six, the type of diplococcus of which he gave a description in an earlier paper on so-called tabetic arthritis. Twice the liquid contained bacilli which could not be identified. But the most significant point in his findings was the presence in 24 specimens of morphologically recognizable tubercle bacilli (27.9 per cent). Of 24 inoculations made into guinea-pigs only 8 were positive, but the time is past when tuberculization of the guinea-pig need be regarded as necessary in order to establish the tuberculous nature of an acid-resistant bacillus. The presence of tubercle bacilli of low virulence in the content of these hydroceles tends to show that there exist in man very benign forms of surgical tuberculosis which are easily cured. The author inclines to think that such forms are more frequent than statistics indicate. He bases his belief on the fact that in 10 specimens obtained from 5 patients suffering with double hydrocele, only 1 specimen contained bacilli capable of tuberculizing guinea-pigs, all the others remaining sterile. This showed that in one and the same patient the specimen from one hydrocele contained tubercle bacilli while the other contained none. It is impossible to suppose that in such a patient one hydrocele was tuberculous and the other not. Rather must it be assumed that in one of the hydroceles the bacilli were so few that they eluded examination, or else that the pathogenic agent was present in such a form that it was not recognizable morphologically. It seems probable that a considerable number of these hydroceles are due to non-microbic forms of tuberculosis, and that many other surgical serous effusions are due to the same cause.

The Treatment of Habitual Abortion with Wheat-Germ Oil (Vitamin E).—P. Vogt-Möller, writing in *The Lancet*, July 25, 1931, ccxxi, 5630, states that as yet the importance of vitamin E to the organism has been elucidated only in rats and mice. It has been shown that the sterility occurring when this vitamin is lacking is of different pathogenesis in the two sexes. In the male it seems to play a part in spermatogenesis, its lack resulting in more or less marked degeneration or even complete disappearance of the spermatogonia. In the female on food free from vitamin E, ovulation and implantation take place normally, but the implanted ova are reabsorbed at an early stage of the pregnancy. Having confirmed these findings of Evans and Burr, Vogt-Möller succeeded in obtaining favorable results in the treatment of sterility in cows with wheat-germ oil. He then applied the treatment to habitual abortion in women. The first patient, a woman 24 years of age, had aborted four times after absence of menstruation for seven or eight weeks. She came under treatment six weeks after the last menstruation, when a diagnosis of pregnancy was made and confirmed by the Zondek-Aschheim reaction. Treatment with wheat-germ by mouth was instituted, 5 c.c. being given once daily during the first fortnight, then the same dose every second day for a fortnight, and then 5 c.c. every sixth day. The patient went through pregnancy and was delivered of a healthy girl. The second patient, aged 25 years, had aborted five times in the third or fourth month. Under the same treatment she went to term and gave birth to a healthy infant. Both patients tolerated the treatment well. The diet of these women had not differed from the ordinary food taken in Denmark, so that it could scarcely have been poor in vitamin E, but possibly the need of this vitamin varies in different individuals, so that a hypovitaminosis E may have been present in these two patients. While the material is too scanty to allow of any decisive statement, it suggests that vitamin E may be of therapeutic value in the treatment of habitual abortion.

Diabetic Coma with Unusual Complications.—It is well known, says Giuseppe Pellegrini, in the *Riforma medica* of June 8, 1931, that diabetic coma may be a complication of a true renal insufficiency, which may give to the entire picture the appearance of a uremic coma; and also that at other times evident signs of hepatic insufficiency may be observed in diabetic coma, of which the characteristic feature is the absence of ketogenesis with a marked reduction of the alkaline reserve. In the author's case, diabetes mellitus was accompanied by severe changes in the liver, and at the time of death the coma supervening was of a complex nature. There existed an hepatic lesion of long duration, probably of alcoholic origin, and there could be no doubt that the gravity of the case was partly the expression of this; but it is probable that in addition an hepatic factor had combined with a pancreatic factor to produce glycemia and acidosis. Hence it was practically inevitable that there should be a coincidence of edema and of icterus, of aggravation of the latter, accentuation of the oliguria, and a simultaneous appearance of coma. In the final picture the hepatic factor seemed to predominate. The explanation of the case seems to be as follows: The complete absence of any clinical signs of degenerative or inflammatory lesions of the kidneys leaves a doubt as to the possibility of such lesions. One may therefore take the view, though with some reserve, that the diminished renal capacity for eliminating water is comparable to the similar behavior that often takes place in connection with diuresis in cirrhous and hepatic cases. Such changes of renal function are generally attrib-

uted to portal hypertension, of which the ascites would be the expression; but it has already been demonstrated that such retention is not a disturbance of the circulation but rather a functional insufficiency of the liver, which has an influence upon the functioning of the kidney. Thus it is clearly possible for hepatic factors to interfere in diabetic coma, and to impress upon the syndrome a particular clinical character and course which differentiate it evidently from a diabetic coma that is due purely to acidosis, and also from diabetic coma with a nephritic complication.

Present Status of the Classification, Pathology, and Etiology of Chronic Rheumatic Disease.—Joseph L. Miller finds that much of the literature on chronic arthritis is unintelligible on account of the failure to specify the particular type of disease under discussion. Very frequently no attempt is made to differentiate the two types. At the recent congress at Liége it was decided that at least for statistical purposes a uniform nomenclature should be adopted for English, German, and French writers. In English the two terms recommended were rheumatoid arthritis (infective periarthritis) and osteoarthritis. Some of the terms which have been used synonymously with rheumatoid arthritis are atrophic arthritis, chronic infective arthritis, and arthritis deformans. Hypertrophic arthritis is synonymous with osteoarthritis. Pathologically, the joint changes in rheumatoid arthritis are inflammatory; in osteoarthritis degenerative. Etiologically, rheumatoid arthritis is usually and probably always due to infection. Etiologically trauma, in the broad sense of the word, is the chief, if not the sole, factor in osteoarthritis of the extremities. It is probably the most frequent factor in osteoarthritis of the spine. Here, however, the pathologic changes are quite different from those observed in the extremities, and the possible rôle of infection in certain types cannot be ruled out. There appear to be several types of lesions in osteoarthritis of the spine. By far the most frequent form is the so-called senile type, which shows an increasing incidence with years, though it may develop at any age following acute trauma. A second type of change may be seen in osteomyelitis of the vertebra. The cartilage here is usually destroyed. It is yet to be determined whether infection is responsible for the growth of osteophytes, or whether they arise as a direct response to infection. The "poker spine" has a different pathology. Here the cartilage is destroyed and replaced by bone, giving rise to a perfectly rigid spine. It is thought that these changes are directly due to infection. The presence of both rheumatoid and osteoarthritis in the same individual has been a stumbling block to everyone who has attempted to classify chronic arthritis. Many of these mixed forms may be explained if we accept acute trauma, long-continued mild trauma, age, and strain as etiological factors in osteoarthritis. The presence of osteoarthritis in combination with the rheumatoid types does not necessarily mean that the osteophytes are directly due to infection. Rheumatoid arthritis at any age may have been preceded by a localized osteoarthritis from acute trauma. For the non-infective type "osteoarthrosis" is a more fitting term that "osteoarthritis." *American Journal of the Medical Sciences,* August, 1931, clxxxii, 2.

Two Cases of Prolonged Regular Tachycardia.—From a clinical point of view, says L. Langeron in the *Archives des maladies du coeur, des vaisseaux et du sang* of May, 1931, tachycardia may be classified as regular or irregular, according as the intervals between cardiac contractions with accelerated rhythm are the one or the other. Either type may be permanent or paroxysmal, according as the acceleration of rhythm apears as a persistent phenomenon or merely as an episode. The two bases of classification are relatively independent. From a physiopathologic point of view, regular tachycardias are characterized by the appearance of a normal sinus rhythm or of another rhythm of an auricular, auriculoventricular, or ventricular nature. Irregular tachycardia is due to auricular fibrillation or to fibrillo-flutter; extrasystoles may occur, according as there is an association of a tachycardia that is now regular, now irregular. Not all types of tachycardia, however, lend themselves to schematization of this kind. There are abnormal and exceptional cases, and it is for this reason that these two personal observations are published with their electrocardiograms. In the first, a youth of 17 with various malformations, including scoliosis and spina bifida occulta, had a prolonged regular tachycardia of 200 per minute, which had resulted in an enormous cardiac hypertrophy and in slight signs of insufficiency. The tachycardia, which was presumably of an auriculoventricular nature, was reduced gradually by means of digitalin and pilocarpine. The second case, in a young man of 20, was one of regular tachycardia accompanied by palpitation, with cardiac hypertrophy but without insufficiency. The condition was of recent appearance at a definite time, and the pathologic rhythm was now habitual, with the normal rhythm the exception. This condition too yielded to digitalin and pilocarpine treatment. There were alternations of pseudobradycardia with polymorphism of complexes and of normal rhythm. The pulse exhibited a very unstable character of reduction of rhythm. The initial pathologic rhythm was of an auriculoventricular nature. These cases show a certain similarity, but in the first the rhythm remained identical during the phase of restoration, while in the second there appeared instead contractions of a polymorphous nature. The cure was more stable

in the first than in the second Both serve as examples of a transition between permanent regular tachycardia and paroxysmal tachycardia In both the value of digitalin-pilocarpine treatment was alike demonstrated

Heart Disease and Pregnancy—Following the plan of Standen, Duncan and Sisson, Cecil Young classifies pregnant cardiac patients into four groups: (1) Cardiac neuroses, (2) doubtful heart disease, (3) rheumatic valvular disease, (4) serious heart disease Patients of the first two groups can be depended upon to go through pregnancy with no ill effect on the heart They need reassuring more than anything else, if they can be convinced that their symptoms are purely functional they do very well Rheumatic valvular disease of the heart without enlargement of the organ or any history or sign of heart failure, need not be greatly feared Aortic regurgitation, even without enlargement of the heart, is a trifle more serious In the fourth group are placed all cases of serious heart disease, such as frank mitral stenosis or aortic regurgitation with definite gross enlargement of the heart, myocardial degenerations congestive failure, and auricular fibrillation In the management of these conditions every case should be assessed on its own merits In mitral stenosis, if the response to effort is good, the patient may be allowed to proceed to term, but with poor response to effort and in the other types of cases of this group, except in the actual presence of heart failure, therapeutic abortion is the safest procedure Other types of cardiac disease in which pregnancy is obviously contraindicated are acute myocardial disease, thyroid hearts, specific heart disease, paroxysmal tachycardia and coronary disease In acute hyperthyroidism it is extremely dangerous to interfere with pregnancy The hyperthyroidism should be treated first, taking a chance on dealing with the pregnancy later In cases belonging to the first three groups the only precautions necessary are careful supervision in order to avoid undue strain and the institution of hygienic measures In cases of serious heart disease, interruption of the pregnancy should be advised prior to the fourth month After the fourth month it is safer to wait for a few months, provided the patient's condition will permit Induction of labor mechanically or by other means at the thirty-sixth week is usually a rational and comparatively safe procedure In the fifth and sixth months cesarean section may be done as an emergency measure During the waiting period the cardiac reserve should be built up In the actual management of labor, ether is the most satisfactory anesthetic during the second stage Preparation should be made for all emergencies The patient should be digitalized before labor, oxygen, intravenous saline, a venesection outfit and loaded syringes should be available As soon as the head is on the perineum, an episiotomy should be done and forceps applied The actual delivery of the child should not be too hurried Morphine and atropine are useful after the placenta has been expelled The patient should be kept in bed under careful observation for a month after labor Many women with apparently severely diseased hearts come through repeated pregnancies with very little additional damage.—*Canadian Medical Association Journal*, August, 1931, xxv, 2

Circumscribed Scleroderma—Writing in the *Riforma medica* of June 15 1931, Gino Murero discusses the pathogenesis and etiology of circumscribed scleroderma There has been a tendency of late to regard the origin of this disease as an exclusively endocrine problem Its greater frequency in women than in men may be attributed to the instability and the greater importance of the sexual function in the former In women scleroderma develops nearly always at an advanced age with reference to ovarian function (menopause, hysterectomy, or ovarian tumors) or else in the years of early youth preceding menstruation There are not yet sufficient data to confirm the genital element as a fundamental etiological factor, but the earlier interpretation based exclusively on thyroid dysfunction cannot be supported It is worth while to investigate the theory that a dysfunction affecting all the principal endocrine glands in their complex synergetic activity leads to a functional dystonia of the scleroderma victim, of a constant, uniform and accentuated character In the author's case the affection appeared on the neck, abdomen, and both arms of a girl of 16 who had never menstruated, and who had been suffering for 4 years with articular rheumatism, from which she had been free only 2 months when the scleroderma began Thyroid preparations were unavailing, but after about 1 month of ovarian treatment menstruation made its appearance—at first scanty and irregular, but well established after 8 months of treatment During this period no new spots appeared The large spot on the abdomen showed a tendency to heal, while those on the neck and arms became stationary with no tendency to spread The author concludes that the articular rheumatism might well be an etiological element in this case, and that it found a subject well adapted for its development by reason of her condition of hypo-ovarism The correlation of the endocrine glands is so intricate that endocrine treatment must not be understood as a true causal therapy for scleroderma but solely as a corrective treatment for that trophoneurotic state which lies at the bottom of the process In view of the relations existing between sympathetic and glandular function we must not forget that in many cases the endocrine factor plays a secondary role

LEGAL

A DANGEROUS PRECEDENT

By LORENZ J. BROSNAN, ESQ.
Counsel, Medical Society of the State of New York

It has long been one of the fundamentals of our system of law and government that an attorney is an officer of the Court. Logically it would seem to follow that the Court should have the inherent power to deal with the admission and disbarment of lawyers. In this State there is no question that the Courts have such power. They not only possess the power, but time and again they have exercised it to disbar, suspend or reprimand attorneys for acts clearly demonstrating the unfitness of a particular individual to remain in a learned and honorable profession. This power is, of course, wholly apart from the statutory provision automatically disbarring an attorney convicted of a felony.

In the City of New York a few years ago the Bar Association conducted an inquiry, colloquially known as "the ambulance-chasing investigation." The result of such investigation was that the Appellate Division disbarred, suspended or reprimanded a large number of attorneys. The investigation was welcomed by all honorable members of the Bar and resulted not only in expelling a large number of unfit from the profession, but served as well as an effective deterrent to those who might be inclined to transgress against the rules of ethics. Both logic and common hense dictate that the Bench should have inherent power over the conduct of the Bar. The right to practice law in this State is a license extended to those who have met the necessary qualifications for admission to the Bar, and subject at all times to be revoked when the holder thereof has demonstrated his unfitness to remain in the profession.

These observations are preliminary to a discussion of a very curious and extraordinary situation that has arisen in one of our Western States. A so-called ambulance-chasing investigation was recently conducted there and proceedings were taken to disbar a certain lawyer. The order of the Court, after his case had been thoroughly investigated, was that he should be suspended from the practice of law for a certain period of time "and for such period thereafter as shall expire before his license to practice law is restored and he is reinstated a member of the Bar by this Court, upon the presentation of proof that the expenses of this proceeding have been paid, and upon the further condition that he shall before being reinstated, satisfy the Court both by his conduct from this time forward and by assurances then given the Court that he will not, if reinstated, be guilty of such conduct as that involved in the charges made in the complaint in this action."

In the opinion rendered by the Court in this case the Court commented on its own power to discipline attorneys, stating in part as follows:

"The power to protect Courts and the public from the official ministration of persons unfit for practice in them, was fully established in the former decision of the Court in this case, where it was held that when the people by means of the constitution established Courts, they became endowed with all judicial powers essential to carry out the judicial functions delegated to them. The Courts established by the constitution have the powers which are incidental to or which inhere in judicial bodies, unless those powers are expressly limited by the constitution. But the constitution makes no attempt to catalogue the powers granted. It is the groundwork upon which the superstructure of government is raised by the exercise of those powers which are essential to carry out the functions imposed upon each department of government. These powers are known as incidental, implied, or inherent powers, all of which terms are used to describe those powers which must necessarily be used by the various departments of government in order that they may efficiently perform the functions imposed upon them by the people."

The Court continued:

" . . . the courts are not powerless in the absence of legislative tests of eligibility, to protect themselves, and the people whom they serve, from those members of the Bar whose conduct has been such as to forfeit their right to longer act as ministers of justice in the Courts. 'It is well settled that a Court authorized to admit an attorney has inherent jurisdiction to suspend or disbar him for sufficient cause, and that such jurisdiction does not necessarily depend on any express constitutional provision or statutory enactment.' "

Subsequent to this lawyer's suspension and prior to the time within which he could petition the Court for reinstatement pursuant to the provisions of the order suspending him, a bill was introduced in the State Legislature for the sole purpose of readmitting him to practice and restoring to him all the rights to practice as a member of the Bar. The bill was passed. It came be-

fore the Governor for veto or approval. The Governor refused to veto the bill. In approving the bill, the Governor wrote a long memorandum in which he argued that neither the constitution of the State in question nor of the United States limited the power of the Legislature to regulate admission to the legal profession. He also held that the Legislature possessed the power to reinstate this lawyer despite the fact that he had been disbarred by the order of the Court.

The anomalous situation created by the approval of this bill admitting the man to practice who had been previously disbarred by the Court and never reinstated by it, is clearly shown in the events transpiring subsequent to the approval of the bill. What happened thereafter, as reported by the *American Bar Association Journal* was as follows:

"Passage of the legislative act was soon followed by efforts on the part of Mr. A. to secure recognition of his status as an attorney by the Courts. According to one newspaper, 'two circuit judges, B and C, have acknowledged his status by signing legal papers in which he appeared as attorney. Circuit Judge D has refused to sign any of A's papers and Circuit Judge E has refused to recognize him in open court.'

"On the refusal of Judge E to recognize Mr. A, the latter asserted the Court was prejudiced, and was instructed to file affidavits to that effect if held that opinion. The case was thereafter scheduled for a hearing before Judge F. The first matter taken up in the proceeding was the motion of opposing counsel to quash the summons, on the ground that Mr. A is not entitled to practice. Mr. G, who made the motion, pointed out that it was for the purpose of testing the constitutionality of the claim of the legislative act that the Legislature rather than the Supreme Court has the power to control admission to the practice of the law. The Court stated that the motion required much research and that he preferred that some one else hear it as he was already behind in his calendar due to the illness and death of his mother. Judge H. was thereupon requested to act and consented to do so. He held a hearing later, at which counsel presented arguments, and took the matter under advisement. When this was written his decision had not been announced."

Happily, such a situation could not arise in our State. Many years ago one of our Courts said:

"The general power over attorneys is . . . confined to or exclusive in the Supreme Court. It is through that Court that they obtain admission and it is by that Court they can be disbarred, or reached for any general misconduct, not immediately connected with actions or proceedings pending in other Courts."

Wholly apart from the question as to whether or not, under the constitution of the particular State in which this question arose, the Governor was correct in approving the bill, it seems to us most unfortunate that such a bill was introduced. A lawyer is an officer of the Court. In this case the Court in question had suspended the lawyer after a full hearing on the merits, but if by legislative enactment an attorney may nullify the action of the Court, it means, of course, that the Courts have no control over their own officers.

The precedent is an extremely dangerous one. For example, a physician whose license was revoked for fraudulent practices after a full hearing might, under the ruling in question, secure the passage of a bill reinstating him to practice although he has clearly demonstrated his unfitness to remain a member of the great healing art. Special legislation providing privileges and immunities to individuals who have proven themselves unable or unwilling to comply with established professional standards tis vicious in principle, is contrary to public policy and works a hardship not only upon the honorable members of the profession but upon the public as well.

ALLEGED NEGLIGENT REMOVAL OF UVULA DURING TONSILLECTOMY

In this case a young colored man consulted the defendant, a physician specializing in general surgery, with respect to the condition of his tonsils. On examination they were found to be diseased and hypertrophied. The doctor suggested their removal and the patient returned a few days later and in the doctor's office, under a local anesthesia of novocaine the tonsils were removed by the snare method. There was very little hemorrhage and the operation was uneventful. The patient was able to leave the office about three hours subsequent to the operation.

The patient saw the doctor on several occasions thereafter and at the time of his last visit to the defendant complained that the doctor had cut something out of his throat which he would not have removed. The doctor on examination found that the novocaine had caused the end of the uvula to slough, but that no harm had been done to the organ.

The next that the doctor heard of the matter was when a summons was served on behalf of the patient, commencing an action for damages based on alleged negligence which caused injury to the uvula. When the case came up for trial, the defendant was ready with his witnesses to defend the action. The plaintiff's attorney submitted to the court an affidavit to the effect that he was unable to locate his client. A motion was made to dismiss the case for the plaintiff's failure to appear which was granted, finally closing the matter in favor of the doctor.

NEWS NOTES

JOINT COMMITTEE ON THE GOVERNOR'S HEALTH COMMISSION

Two standing committees of the Medical Society of the State of New York, the Committee on Public Relations and that on Public Health and Medical Education, were instructed by the House of Delegates, on June 1, 1931, "to study the report of the Governor's (Health) Commission, and to make recommendations upon all or any of the subjects presented; and that the said Committee report its recommendations to the House of Delegates, not later than January 1, 1932; and that the Council, in its wisdom, refer this (report) to the House of Delegates, either by a special meeting or by referendum of the House." (See this Journal, July 1, 1931, page 828.)

This Joint Committee on the Governor's Health Commission met in the rooms of the State Medical Society, 100 State Street, Albany, New York, on Friday, September 11, 1931, there being present: Dr. T. P. Farmer, Syracuse, Dr. M. B. Tinker, Ithaca; Dr. E. G. Whipple, Rochester; Dr. M. H. Atkinson, Catskill; Dr. W. A. Groat, Syracuse; Dr. J. E. Sadlier, Poughkeepsie; Dr. A. J. Hambrook, Troy. Dr. O. W. H. Mitchell, Syracuse.

There were also present: Dr. W. D. Johnson, Batavia, President of the Medical Society of the State of New York; Dr. J. S. Lawrence, Executive Officer, and Dr. Frank Overton, Executive Editor.

The Joint Committee formally organized by electing Dr. T. P. Farmer, Chairman, and Dr. J. S. Lawrence, Secretary.

The Committee discussed the scope of its work, and decided that it would first consider the Preliminary report of the Governor's Health Commission, which was issued on February 16, 1931. The recommendations contained in this report were printed in the NEW YORK STATE JOURNAL OF MEDICINE of February 15, 1931, page 230.

It was reported that the following provisions were enacted into law during the Spring:

1. The construction of three tuberculosis hospitals by the State.
2. Provision for the treatment of venereal diseases at public expense.
3. Divisions of cancer control and orthopedics be established in the State Department of Health.

The recommendation for the compulsory establishment of a department of health in every county failed to be adopted by the Legislature, but a similar bill will probably be introduced in the next Legislature.

The Joint Committee expressed its desire that every county society should express the opinion of its members in regard to each of the recommendations of the Governor's Health Commission. The full report is printed in this Journal in order that every member may have the opportunity to act intelligently upon its recommendations.

PRELIMINARY REPORT OF THE GOVERNOR'S SPECIAL HEALTH COMMISSION

1. LETTER OF TRANSMISSION

February 16, 1931.

His Excellency
THE HONORABLE FRANKLIN D. ROOSEVELT
Governor of the State of New York

SIR.—The Special Health Commission, appointed by you on May 1, 1930, has the honor to submit herewith a preliminary report in which is contained a summary of what the Commission believes to be important health problems requiring legislative action before any real progress can be made toward their solution.

Your favorable consideration is urged for the recommendations presented herein, and their submission to the legislature for action during the present session.

In addition to the topics requiring legislative action which are presented in this preliminary report, the Commission has embraced within its deliberations studies of a number of equally important subjects, and will present a final report later in the year covering the whole field of its study.

Respectfully submitted,

Livingston Farrand, *Chairman.*
George W. Cottis
Simon Flexner
Homer Folks
Edward L. Keyes
John A. Kingsbury
Agnes Leach
Henry Morgenthau
Matthias Nicoll, Jr.
John M. O'Hanlon
Thomas Parran, Jr.
William H. Ross
Katharine Tucker
Linsly R. Williams.

2. SUMMARY OF HEALTH PROBLEMS, 1931

The Commission finds that the pressing immediate needs are:

(1) Effective local health departments with qualified personnel;

(2) More effective service in the control of tuberculosis, cancer and the venereal diseases;

(3) More comprehensive measures to reduce infant deaths and deaths among mothers from causes incident to childbirth;

(4) Further coordination of school hygiene with other health services,

(5) Better organization for the discovery and cure, rehabilitation and care of crippled children;

(6) The extension of public health nursing throughout the state to reach the standards now in effect in a few areas;

(7) Protection of the public health through additional safeguards in the purification of water supplies and the prevention of stream pollution;

(8) More attention to the growing problem of industrial hygiene.

The most outstanding of these needs without which results in these and in all aspects of public health cannot be secured, is a reorganization of the whole system of local health service on a county rather than the town and village basis, with provision for qualified personnel, both in counties and cities.

3. MAJOR RECOMMENDATIONS

1. *County Board of Health.* That county boards of health be organized in all counties to provide for the rural areas and villages more effective control of tuberculosis, the venereal diseases, and other communicable diseases; protection of maternity and infancy; safeguarding of public milk and water supplies; more effective public health nursing service, and other elements of a modern public health program.

2. *Local Health Administration.* That in cities of more than 50,000 population and in the large counties, health commissioners hereafter appointed be required to devote their entire time to the duties of their office.

3. *Tuberculosis.* That the state establish three additional state tuberculosis sanatoria, primarily to receive patients from counties which are too small in population and wealth to maintain suitable sanatoria, the counties reimbursing the state for maintenance of their patients; that the administration of the State Sanatorium at Ray Brook be placed under the Department of Health, and that provision be made for early diagnosis and more effective home supervision and assistance of tuberculous patients through county health departments.

4. *Venereal Diseases.* That provision be made for the diagnosis and treatment of the venereal diseases as a public health problem.

5. *Cancer.* That a division of cancer control be established in the Department of Health.

6. *Maternity, Infancy and Child Hygiene.* That adequate measures for protecting the health of mothers and children be included in the program of every city and county health department.

7. *Public Health Nursing.* That public health nursing service be extended, particularly in the rural areas, as an integral part of the program of county health departments.

8. *Crippled Children.* That the administration of the State Reconstruction Home at West Haverstraw be placed under the Department of Health, and that state and local services be extended for the discovery and care of crippled children.

9. *Industrial Hygiene.* That the inspection of certain industrial establishments in villages and towns be performed by the Department of Labor instead of by local health officers.

10. *Public Water Supplies.* That the approval of plans for proposed new and extensions of existing public water supplies, in so far as the sanitary quality is concerned, be vested in the Department of Health.

11. *Stream Pollution.* That the pollution of streams by industrial wastes dangerous to the public health be regulated in the same manner as pollution of streams by sewage.

12. *Public Health Personnel.* That the present authority of the Public Health Council to establish qualifications for certain public health personnel be extended to include other positions in the public health field.

4. INTRODUCTION

The Commission was asked to study and report to the Governor upon the administrative and legislative aspects of public health in New York State. It was requested to take into consideration the activities of state and local health authorities and their relations one to another; the recent progress in public health in other states and abroad; and to examine the extent to which the needs of the people of the state were being met in the vital field of public health, in order that scientific knowledge may be utilized more fully for the prevention of disease.

The Commission has carried on its investigations in accordance with this request. Information on many special features of health service has been gathered from abroad and from other states by personal visits of Commission members and by examination of official records and reports. In particular, the division of responsibility between state and local health authorities, and their relation to the medical profession and to the volunteer health associations throughout the state has been given careful study.

The Commission has been fortunate in having available for its consideration also the recent reports from the White House Conference on Child Health and Protection, which represent a complete statement of the status and needs in child health throughout the country. In the Commission report covering this field, the conclusions and recommendations are in harmony with the national findings, adapting them to fit the specific needs of New York State. An example is the fundamental recommendation that the whole system of rural health service in the state be reorganized on a county basis to replace the present inadequate town and village system.

After outlining the scope of its work, subjects were assigned on a topical basis to the fourteen members of the Commission, each of whom served as chairman of one or more committees for the study of a specific public health problem. With each such committee was associated a group of persons having special knowledge of the particular subject. In all, a total of eighty-six persons thus participated directly in the work of the Commission, and an even larger number contributed indirectly by furnishing valuable information and assistance. The facilities of the Department of Health have been utilized by the Commission, and a number of other state departments together with a large group of cooperating organizations have contributed to the value of the studies.

Inasmuch as the administration of public health in New York City is entirely separate from that of the rest of the state and as many of the health problems of that city are peculiar to it, the Commission after consideration determined to exclude from its deliberations and recommendations matters concerned with health administration in New York City, as did the Commission of 1913.

That New York State is in an enviable position among the forty-eight states in the standing of its health work is due in large measure to the revision of the Public Health Law made by legislative enactments in 1913. This vital legal revision was grounded upon the recommendations of a State Health Commission of which the late Dr. Hermann M. Biggs was chairman.

The major recommendations of the Commission of 1913 were the following:

> The creation of a Public Health Council with authority to enact sanitary regulations; security of tenure of office and satisfactory compensation for the State Health Commissioner to secure the most efficient man for that position; state supervision over local health officers and the enforcement of the public health law; division of the state into sanitary districts; increased salaries and added duties for local health officers; more efficient birth and death registration; authority for employment of local public health nurses; more complete reporting and supervision of tuberculosis; provision of county tuberculosis sanatoria and additional state provision for incipient cases; creation of bureaus of child hygiene and public health nursing in the Department of Health; adequate laboratory facilities readily available for all local health authorities; regulation of midwifery; extension of health education work; and encouragement of courses in sanitary science in educational institutions.

Almost all of these recommendations have been translated into law and practice, and have resulted in many improvements in the extent and quality of health service to the people of the state. This is particularly true of the organization of the Department of Health on an efficient basis.

Eighteen years' additional experience, however, has shown that to carry into effect a modern health program dealing with such vital problems as tuberculosis, the venereal diseases, public health nursing, and maternity and infant hygiene, further steps are necessary, and that for this purpose the town and village is too small an administrative unit in point of view of population and wealth.

In addition to the topics which are presented in this preliminary report, the Commission has embraced within its deliberations studies of the important subjects of: Mental Hygiene, Medical Care, Control of Communicable Diseases, Laboratory Service, Dental Hygiene and Public Health Education. The Commission is formulating a series of administrative recommendations in regard to many of these problems. There is no pressing need at this time, however, for legislative action on these subjects, and they are, therefore, excluded from this preliminary report.

5. PRESENT STATUS OF THE PUBLIC HEALTH

Public Health in New York State compares very favorably with that of other states in the marked improvement which has occurred in recent years.

In 1900 the expected span of human life was forty-seven years. By 1930 the span of life was increased to fifty-seven years. In 1913 the death rate in the state for all communicable diseases was 419.3 per 100,000 population; in 1930 it was 196.4. Tuberculosis mortality has declined more than one-half since 1913; and the general death rate has declined 14 per cent during the same period. Typhoid fever, once very prevalent, is now a rare disease. Diphtheria has declined about two-thirds since 1913. Infant mortality likewise has been reduced 50 per cent.

If the death rates of 1913 from these several causes had continued to prevail, there would have been in 1930, 43,478 more deaths from all causes; of children under one year of age now living 10,961 would have died; 12,304 additional deaths from tuberculosis, 1,184 from typhoid fever, and 2,091 from diphtheria would have occurred in New York State.

In addition to the measurable direct benefits from these lower death rates there has been an even larger reduction in sickness from preventable causes and from their many complications and end results. These indirect benefits in improved health, while not accurately measurable, have none the less added to individual efficiency and prevented the economic waste of sickness among the citizens of the state.

This notable progress in the prevention of sickness and of death has been due to a variety of factors. A greater knowledge of the causes, and consequently the cure or prevention of disease, a better quality of medical service, the general education of the public in matters of health, the improvement in standards of living, as well as more efficient health administration, all have contributed.

What has been done in the improvement of public health is only a small part of what can be done if available knowledge were translated into concerted action for the prevention of sickness and death throughout the state.

Through improved individual and community care it is possible again to cut in half the death rate among babies. Through further improvement in water and milk supplies, and the control of typhoid carriers, typhoid fever should disappear entirely. Diphtheria can be marked off the list as a cause of death if all babies are protected by toxin-antitoxin. Tuberculosis is still the most frequent cause of death between the ages of twenty and forty. Here the death rate can be cut in half once more by the earlier diagnosis and better care of patients, and by general measures to improve the individual health. There are far too many deaths of mothers during childbirth, when better medical and nursing care would reduce materially this needless loss of life.

Among the diseases in which less progress has been made, syphilis, with its many and serious end results, continues almost unabated as a major health problem, yet syphilis is one of the few diseases which can be wiped out completely if well known methods for the discovery and treatment of cases were used everywhere. Cancer now ranks second only to heart disease as the most frequent cause of death. It can be cured in many cases if recognized earlier and properly treated.

Even in the fields where the gains have been greatest, accomplishment has been uneven in the different localities of the state. Any further progress will depend upon strengthening the weak links in the chain by the establishment of a satisfactory system of local health administration.

6. THE STATE HEALTH ORGANIZATION

The Commission believes that in the organization and functioning of its Department of Health, New York stands second to no other state in the Union. In face, the state itself has been obliged to assume a larger measure of responsibility and to develop a more extensive organization than would have been necessary except for the inadequacy of local health machinery.

Public Health Council. One of the most far-reaching results of the work of the Commission of 1913 was the creation of the Public Health Council, having no executive or administrative function but authorized to enact a sanitary code dealing with the security of life and health in the state and having the force and effect of law. The value of this flexible health code has been amply demonstrated. Through its authority to prescribe qualifications for certain personnel the Council has had great influence in promoting uniformity and in improving the standards of health service.

The support of successive state administrations and legislatures has made possible the development of many highly efficient health department services. The salaries

of the major professional and technical personnel in the Department of Health, however have not kept pace with positions of comparable responsibility in other state departments and with salaries for similar positions in other states Deplorable also is the lack of a compensation policy for this personnel

The Commission makes no specific recommendation at this time regarding salaries but desires to call attention to this situation which menaces the standards of the department

State Health Activities The activities of the Department of Health have been the subject of critical scrutiny and detailed analysis and will be discussed in the final report

The Commission has no recommendation for any major change in the essential structure or policies of the State Department of Health itself

State and Local Responsibility Consideration has been given by the Commission to the future logical division of responsibility between the state and local authorities Certain health problems particularly those of a statewide character, and those which require highly technical training must be handled by the state In the rural districts experience has shown also that it is necessary for the state to stimulate the development of modern health service through professional advice and financial aid Throughout the report it is recommended that the local authorities assume all responsibility for public health which they can handle for the major part of the direct health service to the people is primarily a local responsibility and should be rendered by the communities themselves

Careful consideration has been given by the Commission to the policy of state aid in public health which has been in operation for ten years The conclusion has been reached that state aid is a necessary policy particularly in the rural areas and in the development of new health activities Sound precedent for it is to be found in other phases of community welfare. In fact the Commission is of the opinion that the only alternative of state aid for rural health service is operation by the state itself of direct health services to the people Those who believe that state aid is undesirable must concede that its inevitable alternative is even less desirable

Under the present conservative policies of granting state aid for local laboratories for the rehabilitation of handicapped children, for county nursing services county health departments, county general hospitals in rural areas and similar health services much has been accomplished in promoting the public health which would not otherwise have been done.

The Commission recommends therefore, that state aid be continued for the development and operation of local health activities

7 LOCAL HEALTH ORGANIZATION

The primary responsibility for health protection always has been vested in cities villages and towns In recent years, however, permissive laws have been passed which enable counties to create boards of health and to conduct health services which obviously were possible only on a county basis

Present Local Organization There are now in the state 1 099 local health jurisdictions consisting of four county 59 city 293 village, 597 town and 146 consolidated (village and town), boards or departments of health Excluding county and city health units there is a total of 1 036 local health units, with a population ranging from a few hundred to a few thousand persons In towns the town boards and in villages the trustees constitute the boards of health These boards appoint a physician as local health officer at an annual salary of not less than 15 cents per capita amounting usually to from $150 to $200 per year

Present System Inadequate Designed to meet conditions of 1850, the present system of town, village and small city boards of health fails utterly to meet needs of 1931 because these units of population are too small to provide the services which modern public health demands Public health as a science had its origin, and has had its remarkable development since these local boards of health were established Advances which have been made in laboratories and research centers throughout the world in knowledge of the methods for the prevention of disease necessitate the employment for this purpose of trained personnel who will devote their entire time to protecting community health In the modern health program, qualified health officers nurses, engineers laboratory directors, and other professional personnel are essential if satisfactory service is to be expected Moreover, better methods of communication by reason of the telephone improved highways, and the automobile make it easier to serve the larger territory of a county than it was to serve a single town a half century ago

Present County wide Health Services The recognition of the fact that the individual town and village is too small a government unit to support economically many health services has led in recent years to the general development on a county basis of several highly important services, such as tuberculosis prevention public health nursing and laboratory activities In four counties county boards of health have been organized which are providing for the people a much more effective service than is secured in the other counties In each of these four counties the work of the county health departments has been very satisfactory

Need for County Health Unit The present system of town and village boards of health, upon which there are usually superimposed a number of county services for public health results in a confusion of responsibility lack of coordination, waste of effort and excessive costs for the services rendered The imperative need therefore is to seek out the most effective governmental units and impose upon them the needed powers and full responsibilities The county is the only available unit for this purpose. In New York State county boards of health have been endorsed by the State Medical Society the State Sanitary Officers' Association and many other organizations interested in public health That the county with full time personnel is recognized as the best possible unit for satisfactory local health administration is evidenced also by the active sponsorship of the United States Public Health Service, and by the fact that there are now in 35 states more than 500 county health departments some of which have been in successful operation nearly 20 years *The Commission feels that this is the most vital matter it has had to consider and urges that legislation be enacted substituting the county as the unit of local health administration in place of the town and village*

8 ADVANTAGES OF COUNTY HEALTH UNIT

1 The unit of population is sufficiently large to permit the employment of trained personnel

2 One responsible board will be substituted for the many town and village boards of health, the county nursing committee county milk inspection committee county clinic committees and boards of managers of county laboratories

3 A plan of continuing health service can be developed for the whole county and all the health personnel can be mobilized to meet emergency conditions in any part of the county

4 Duplication and overlapping of effort which now exist will be prevented and better health protection can be furnished for present expenditures

5. The relative needs for various types of health service in the county can be determined and available public funds allotted in proportion to these needs.

6. School nursing activities now lacking in many rural schools can be furnished by nurses employed by the county board of health.

7. If school medical inspection is made a function of county boards of health, this important activity can be conducted more efficiently on a county-wide basis with trained personnel than under the present system.

8. Through the permissive provision under which tuberculosis control activities may be administered by the county board of health, this activity can be directly coordinated with other health services. This is particularly desirable in the smaller counties.

9. Under the permission granted to cities to join the rest of the county for purposes of health administration, further coordination of health work on a county-wide basis is made possible. Such a union is desirable for cities of less than 50,000 population.

10. New and much needed health activities can be undertaken which are not now carried out and not possible under the present system.

11. Vitally important maternity and infant hygiene measures can be organized and efficiently conducted.

12. Treatment facilities for the control of the venereal diseases can be provided.

13. The sanitary quality of milk can be assured through a county-wide inspection service.

14. The sanitary quality of water supplies can be supervised through a county sanitary engineer.

15. Modern epidemiological methods can be applied for control of the communicable diseases in place of the present ineffective system. Toxin-antitoxin, smallpox vaccination and other activities can be conducted by personnel provided for these and other services.

16. Less intimate state supervision and fewer direct services from the Health Department will be required because of the better local organization.

9. RECOMMENDATIONS

1. That county boards of health be appointed in all membership of the county board of health.

2. That the county health commissioner devote his entire time to the duties of his office in counties having a population under the jurisdiction of the board of health of more than 30,000; and that for smaller counties there be available without cost the services of a district health officer or other member of the state staff who, with the approval of the State Commissioner of Health, will act as county health commissioner for one or more of these counties.

3. That local health officers now in office be continued as assistants to the county health commissioner for the term for which they previously have been appointed, and thereafter at the discretion of the county board of health.

4. That at least three physicians be placed on the membership of the county board of health.

5. That cities be excluded from the county health districts except by vote of the city authorities, and that villages of more than 5,000 population be permitted to retain their boards of health as now provided by the county health district law.

6. That the effective date for the appointment of county boards of health be not later than September 1, 1931, and the appointment of county health commissioners be not later than December 1, 1931.

7. That the county board of health be authorized to delegate to the county health commissioner its present authority to abate nuisances affecting the public health.

10. HEALTH ADMINISTRATION IN CITIES

Although emphasis has been placed on the urgent needs in the rural areas and smaller municipalities for better health services, the Commission has been impressed also by the failure of many cities in the state to provide adequately for the health of their citizens.

Ideally, cities of less than 50,000 population should combine with the surrounding county for purposes of health administration. There are also instances where a city of larger size, particularly if the city contains the greater part of the county population, could join the county advantageously in a combined health administration unit.

The basic reason for shortcomings in city health service is the lack of an adequate salary and security in tenure of office for the city health officer with the frequent result that a part-time, poorly-trained official is appointed. There is needed for the position of health officer in all cities of over 50,000 population full-time service by qualified personnel not engaged in the practice of medicine. Similar qualified service for the smaller cities should be provided on the county basis with a deputy county health officer assigned to the city areas.

Because of inadequate budgets, such vital health activities as maternal and infant hygiene, venereal disease control and tuberculosis service are not receiving sufficient attention in many city health departments.

11. RECOMMENDATIONS

1. That in cities of more than 50,000 population health officers hereafter appointed be required to devote their entire time to the duties of their office.

2. That cities of less than 50,000 be encouraged either to employ qualified health officers at adequate salaries or to include themselves in a county department of health for purposes of health administration.

3. That more adequate budgets be provided in cities in order that basic health activities may be effectively conducted.

12. TUBERCULOSIS

Since 1907 the tuberculosis death rate has been reduced by 53 per cent in upstate New York, and by 50 per cent in New York City. This represents an annual saving of nearly 9,000 lives from this cause alone, and tuberculosis has dropped from first to sixth place as a cause of death.

The success so far gained should give an incentive for more direct application of successful experience; an increased effort will be peculiarly opportune in the next few years.

The fact must be faced squarely that the tuberculosis situation in the state is still far from satisfactory.

1. In 1930 there were approximately 9,000 deaths from tuberculosis in New York State, of which nearly 4,000 occurred upstate; by a conservative estimate there are 45,000 active cases of the disease, of which 20,000 are upstate. If modern facilities for the prevention of tuberculosis could have been provided in all parts of the state for all classes of people, a large proportion of these cases and deaths could have been prevented.

2. The tuberculosis death rate in the rural areas is not declining satisfactorily. This apparently is due to the inadequate facilities for prevention and care of this disease in rural districts, ordinarily considered more favorable to a low prevalence of the disease.

3. *There is a need for more sanatoria.* This is regarded by the Commission as of extreme practical importance at the present time. Since 1909, when the County Tuberculosis Hospital Law was passed, nearly all of the larger counties have created sanatoria. Many

of the smaller counties, however, most of which have populations of less than 35 000 have not found it possible to create such institutions It is not economical for such counties to maintain sanatoria As a result there are twenty five counties in upstate New York having a total population of nearly one million, without public sanatorium facilities Moreover the state and counties together have only about 60 per cent of the hospital beds necessary for the adequate treatment of tuberculous patients Further, a number of the smaller counties which have constructed sanatoria find it increasingly difficult to maintain proper standards because of cost In these counties without sanatoria and in small counties with sanatoria that cannot meet the accepted standards of medical and other care, there seems to be no alternative except the provisions of modern sanatorium facilities by the state

4 In many counties field services for the discovery nursing care, sanitary supervision and social welfare and relief, are not provided for tuberculous patients Although early diagnosis treatment and care are essential in the success of the control of this disease, 53 per cent of all the patients admitted to public tuberculosis sanatoria of the state are in the advanced or moderately advanced stages of the disease

5 Tuberculosis still takes largest toll among children and among men and women of twenty to thirty five years of age the period of their greatest economic and social value and the period when their responsibility to their families is greatest

The Commission has considered practical ways in which this situation can be met

(1) *The possibility of wider and more efficient application of existing knowledge* Actual experiments and demonstrations have shown that *further reduction can be effected* by the use of available methods of combating the disease These methods include (a) more adequate facilities for the early discovery of active cases as sources of infection, (b) protection of persons particularly infants and children against infection from active cases in the family (c) the hospitalization of cases in the early stages which serves the double purpose of protecting others from infection and providing the best opportunity for cure of the individual patient

(2) *The development of efficient city and local health departments is essential to effective tuberculosis activities* The experience of twenty five years has clearly shown that tuberculosis prevention and cure can be brought about most effectually only when integrated with well organized local health programs, when there is active cooperation with the medical profession and when proper facilities are available for hospital and social service relief But it is almost useless to attempt to coordinate state and other antituberculosis activities with *ineffective* local health administrations which are unable to discharge the responsibility for the discovery diagnosis reporting, and sanitary supervision of cases of the disease in the areas where they occur For this reason, the Commission regards the more rapid development of well rounded city and county health departments throughout the state as basic to the further development of the anti tuberculosis work of all agencies during the coming decade

(3) *The quality of services now rendered in the prevention and care of the disease and in the care of tuberculous patients should be improved* This involves better equipment for diagnosis qualified sanatorium superintendents assured by standards to be prescribed by the Public Health Council, more effective methods in tuberculosis clinics and sanatoria, better supervision of private nurses' homes for the care of tuberculous patients special instruction in tuberculosis for nurses and social relief personnel a further coordination of activities relating to tuberculosis as carried on by the Departments of Health Education and Social Welfare better facilities for the wider information of the public as regards the disease, more effective health teaching in the schools, uniform records of cases and of tuberculous families, and a marked improvement in the vocational training and rehabilitation of cases

These improvements are necessary if the facilities and services which the state has already undertaken to provide are to keep abreast of modern methods of preventing and treating the disease There is no new policy involved here rather it is the application of the sound principle that the state should do efficiently what is has set out to do

(4) *Social welfare and relief are an essential part of an effective anti tuberculosis program* The serious social consequences of tuberculosis to the affected individual and his family make it necessary that adequate provision should be made for the efficient administration of social welfare and relief Provision is already made for some welfare and relief activities but at present they are in adequate, poorly coordinated, and not well supervised The Commission is of the opinion that adequate provision should be made by new legislation to supplement the existing laws, that state, county and city tuberculosis hospitals and sanatoria should be authorized to employ hospital social workers, and that administrative improvements should be effected better to utilize the provisions in the Public Welfare Law and the Child Welfare Act for charitable relief in tuberculous families

At the present time a portion of the state is excellently served by a group of county tuberculosis sanatoria On the other hand there are twenty five counties with a total population of nearly one million in which there are no public tuberculosis hospitals and six counties in which existing institutions are not suitable for continued use The areas of the state not adequately served by public tuberculosis hospitals at present are in general the following (1) The Central Western area (2) The Central area (3) the Catskill area, and (4) the Adirondack area The twenty five counties without public sanatoria are each too small to build and furnish such services for themselves and in practice it has been impossible to secure combinations of counties for joint sanatorium service

It is clear therefore that a need exists for additional state sanatorium facilities to supplement the State Tuberculosis Hospital at Ray Brook This institution in the Adirondack area should be considered as a unit in a system of state sanatorium service with three new state district sanatoria in the other areas designated above The entire administration of the Ray Brook institution should be centralized in the Department of Health in place of the present divided responsibility in several state departments, except for this there should be no change in its present status until the three other district sanatoria are in operation When these become available incipient cases now sent to Ray Brook should be hospitalized nearer home in the nearest available sanatorium

A study of the annual average number of resident deaths from the tuberculosis in the three districts would warrant in each an adult bed capacity of 175 and in addition 75 beds for children The present bed capacity reserved for New York City cases at Ray Brook should continue to be utilized for such cases After needed alterations are provided the remaining beds would be available for patients in all stages of the disease from the nearby counties Except for the costs of construction for the state sanatoria the costs of maintenance, care and treatment of patients should be borne by the county from which the patient comes

The scientific facilities and technical services of the Department of Health and district state sanatoria should be made available for full cooperation with local authorities in providing field facilities for diagnosis, nursing and social welfare services Provision should be made also for epidemological clinical and other needed studies in tuberculosis

13. RECOMMENDATIONS

1. That the state provide three additional state district tuberculosis sanatoria of not less than 200 beds each for all types of tuberculosis cases to be located geographically with reference to the unmet needs of sections of the state; and that the cost of maintenance of patients in these sanatoria be borne in large part by counties served.

2. That legislation authorize the establishment of these sanatoria, and funds be appropriated as soon as possible for the purchase of sites and the preparation of plans.

3. That the administration of the state sanatorium at Ray Brook be centralized in the Department of Health and that when the other district sanatoria are constructed the facilities at Ray Brook be available as at present for incipient cases from New York City, and also for all types of cases from surrounding counties.

4. That the state provide through the Department of Health and the district state sanatoria facilities for: (a) cooperation with local health departments in the diagnosis, instruction and followup of patients; (b) scientific studies of tuberculosis; (c) instruction of physicians and nurses in tuberculosis diagnosis treatment and care; (d) a uniform system of records for use by local health authorities.

5. That field activities for the control of tuberculosis be co-ordinated with other local health activities under county departments of health with the consultative assistance of the state; and with an adequate social service and relief program of local public welfare authorities.

6. That the Public Health Council be authorized to prescribe the qualifications for the position of chief medical officer of all public tuberculosis sanatoria in the same manner as qualifications now are prescribed for other public health positions.

14. THE VENEREAL DISEASES

The venereal diseases constitute a great menace to public health by reason of their wide prevalence and the frequency with which they are followed by serious complications and disastrous end results. In its final report the Commission will deal with the whole subject of Social Hygiene, but will limit this report to the medical aspects of venereal disease control.

Prevalence. The Commission has reviewed critically information submitted by the Department of Health as to the number of cases of syphilis and gonorrhea constantly under treatment and the annual number of new infections. In addition to current reports and checks of laboratory examinations a special census was made of cases under treatment in 1927 and again in 1930. From these data the Commission finds that in upstate New York more than 15,000 cases of syphilis and nearly 11,000 cases of gonorrhea are constantly under treatment; that approximately 25,000 new cases of syphilis and 40,000 new cases of gonorrhea are diagnosed each year; and that between 1927 and 1930 the number of gonorrhea cases under treatment did not decline, while the number of syphilis cases under treatment increased by nearly 3,000. Present public health methods do not seem to be reducing the prevalence of these diseases.

Economic Importance. Syphilis ranks with cancer and tuberculosis as a chief cause of illness, death and economic loss. More than 2,000 patients in state mental hospitals are suffering from general paralysis of the insane, a syphilitic disease. This represents 10 per cent of the total admissions to these institutions, and it costs $8,000,000 to provide beds now occupied by these patients. In other words, if syphilis were eliminated as a public health problem, and the Commission believes this to be possible, $8,000,000 of the recent $50,000,000 bond issue for state institutions could have been saved. The cases of general paresis constitute only a small part of the total economic loss from syphilis, practically all of which can be saved for the state by well organized control methods.

For the control of syphilis accurate methods are available for prompt diagnosis and remedies are at hand which will speedily sterilize the infectious case. In these two facts lie the possibility of a marked reduction in prevalence and even the virtual elimination of syphilis as a public health problem. The Commission has reviewed data from European countries, particularly Great Britain and Denmark, which show that a marked reduction has occurred in the prevalence of this disease, due apparently to the utilization of diagnostic and treatment centers where modern facilities are freely available for the control of this disease.

Success may be expected in smaller measure in the control of gonorrhea by better facilities for diagnosis and treatment, and while gonorrhea is less serious in the individual case, in the aggregate it is almost as much a source of disability and economic loss as is syphilis.

There are fifty-four local clinics in thirty upstate counties which treat more than 6,000 new patients annually. There are twenty-seven counties, however, in which there are no organized public treatment facilities whatever. In many of the thirty counties with clinics the services are provided by cities and are not available to patients from the surrounding villages and rural areas. In standards of service these clinics vary widely Some are now functioning satisfactorily, while others are not meeting the minimum needs.

Another important service being rendered by the state and approved local laboratories is in the diagnosis of the venereal diseases. Nearly half a million Wassermann tests are made annually to diagnose or to control the treatment of syphilis.

The treatment of the venereal diseases at present is seriously handicapped by provisions of law which require that the patient be in an infectious stage and that he be indigent before being entitled to public treatment. In the many borderline cases, it is difficult to decide whether a given case is in fact infectious or is indigent. In consequence many cases in need of treatment do not secure such treatment from clinics or private physicians, and continue to be a source of infection or later become a charge upon the state by reason of general paresis, heart disease or other disabling end results. These restrictions of the law, therefore, should be removed.

15. RECOMMENDATIONS

1. That present laws be amended to provide for treatment of the venereal diseases as a public health problem, irrespective of whether or not the individual case be indigent or infectious.

2. That the county and city boards of health be required to provide facilities for the diagnosis and treatment of the venereal diseases which meet the standards prescribed by the State Commissioner of Health.

3. That provision be made in the programs of county boards of health for the diagnosis, treatment and follow-up of cases of the venereal diseases. If county boards of health are not generally established with state aid, then it is recommended that state financial aid be given to encourage local boards of health to establish satisfactory facilities for the diagnosis and treatment of these diseases.

16. CANCER

With more than 15,000 deaths from cancer in New York State in 1930, this disease ranks second among the causes of death. It is a public health problem, since by early diagnosis and proper treatment this mortality can be reduced.

For many years New York State has interested itself

in this problem through the State Institute for the Study of Malignant Diseases at Buffalo at which intensive research is being conducted and diagnostic service and treatment rendered to many people Last year approximately $300 000 worth of radium was purchased for this Institute, giving it the largest single supply of any institution in the world

During 1930 a total number of 1 697 new patients presented themselves for examination This was an increase of 247 over the figure for 1929 and is the largest number on record at the institution Of this total 1 392 were accepted for treatment Although many patients with cancer apply for treatment only when the disease is in the more advanced stages the record of cases which have been cured demonstrates the possibility of doing much to prevent deaths from this disease One such cancer center fails to meet the needs of the state

Local Diagnostic and Treatment Facilities Complete facts as to the number, location and efficiency of tumor diagnostic clinics, and the number of hospital beds for cancer patients are not available to the Commission at this time although sufficient information has been collected to show that many parts of the state are not provided with this needed service The Commission has been impressed by numerous reports of the lack of qualifications on the part of pathologists who make tissue diagnoses of cancer This is a serious matter, since an error on the part of the pathologist will result either in a needless operation or in the failure to operate when the patient is in need of it The Department of Health and the Public Health Council have done much to improve the quality of bacteriological service in public health laboratories throughout the state through a system of approval issued to such institutions The same principle should be extended to include pathological laboratories and pathologists

Services Needed The Commission has considered the suggestion that the state establish additional treatment centers for malignant disease but has refrained from making such a recommendation at this time in the hope that individual communities can be induced to provide themselves with the needed services in the diagnosis and treatment of cancer These services should include

(a) Special hospitals for the treatment of advanced cases of cancer

(b) Special departments of general hospitals where surgical and radiation therapy can be given by qualified experts

(c) Out patient services at these hospitals for the early diagnosis of cases

(d) Intermittent clinics in the smaller centers of population where expert diagnostic skill can be made available

County and city health departments can do much to follow up patients who have been treated to see that they return for the necessary continued treatment Local health departments also should organize diagnostic clinics and carry out a campaign of popular education Another important part of the program is to keep the medical profession fully informed as to what progress is made in the diagnosis and treatment of cancer

Division of Cancer Control The Commission is convinced that the organization of the Department of Health should embrace a division of cancer control, of which the State Institute for the Study of Malignant Diseases would be a part Through this division the present studies of malignant disease should be extended to include inquiries as to the nature and extent of the facilities available in the state for the diagnosis and treatment of cancer, and co operation should be given to county and city health departments, hospitals, medical societies and volunteer agencies in the development of such facilities The information which would be collected by such a division of cancer control during the next few years and the status of scientific knowledge concerning cancer at that time would enable a decision to be made as to what, if any, further activities should be undertaken by the state in regard to this important cause of death

17 RECOMMENDATIONS

1 That a division of cancer control be established in the Department of Health of which the State Institute for the Study of Malignant Diseases will be a part

2 That existing studies now being conducted at the State Institute in Buffalo be extended to include field studies of the nature and extent of facilities available in the state for the diagnosis and treatment of malignant disease

3 That the Department of Health conduct general public and professional education concerning the diagnosis and treatment of cancer and that it cooperate with local authorities and agencies in the development of needed services for diagnosis and treatment of this disease

4 That the present system of approval by the Public Health Council of the laboratories and of bacteriologists be extended by the Department of Health to include pathological laboratories and pathologists

18 MATERNAL AND INFANT HYGIENE

Among the most vital public health problems of the present day is that of adequate protection for the health of mothers and infants

During the past fifteen years the infant mortality in New York State has been cut in half, although among infants under one year of age there are still 60 deaths per 1 000 births There has been no corresponding reduction among mothers from causes incident to child birth and from these causes there are about 600 deaths annually upstate Added to this loss of life also, are about 3 400 stillbirths

Adequate care during pregnancy and childbirth will save the lives of many mothers as well as reduce materially the deaths among infants in the first months of life

A large proportion of pre school children are suffering from physical defects and disabilities which later lead to more serious conditions impairing normal growth and development An analysis of examinations made by the Department of Health of 5 000 rural children in its pre school clinics shows the following

Defects of ears nose and nasopharynx	44 per cent
Defects of mouth and teeth	35 per cent
Rickets	32 per cent
Definitely underweight	27 per cent
Orthopedic defects	23 per cent
Behavior difficulties	15 per cent
Visual defects	7 per cent
Defects of heart and lungs	4 per cent
No smallpox vaccination or toxin antitoxin immunization against diphtheria	90 per cent

These facts indicate roughly the great need of health protection for the pre school child

Health Department Activities Since its organization in 1914 of the first state unit for child hygiene in the United States the Department of Health has been deeply concerned with this problem In order to stimulate local child health activities, the Department has conducted nursing demonstrations, educational clinics and family health conferences particularly in the rural areas In addition, a field laboratory and teaching center for physicians and nurses has been operated for several years At present the Department of Health, at the request of the New York State Conference of Mayors, is engaged in a survey of existing facilities available for the protection of maternal and child health in the cities

Preventive work for saving the lives of mothers and children has been built up slowly by local health authorities. The need is being met in part by volunteer health effort in urban communities, but the activities of various groups are poorly coordinated. In the rural areas very little is being done.

Data from child hygiene stations and other public health studies indicate that less than 50,000 infants and children and less than 10,000 expectant mothers enjoy the benefits of health supervision. Comparing these figures with the child population and the number of births, it is apparent that a wide zone exists between the number of mothers and children needing care and those actually receiving it.

In addition to its own studies of this problem, the Commission has reviewed the findings of the White House Conference on Child Health and Protection and will incorporate in its final report many of the Conference recommendations which are particularly applicable to child health problems in New York.

The White House Conference stated: "Prenatal care is poorly organized and inadequately done and in the country as a whole only a small proportion of women receive adequate prenatal care." Throughout the entire report attention is called to the need for applying more widely the well established principles of health protection for mothers and babies. The findings of New York State support these views.

Special activities for conserving the health of mothers and children are inseparable from the health activities for the whole population and for best results must be integrated with other essential elements of a community health program. In the urban and rural areas alike, health authorities should assume leadership in and responsibility for health-conserving activities for mothers and children, under the general guidance of and with technical advice and assistance from the State.

The special services and facilities needed for maternity care include: Hospital services during confinement for all women in need of them; qualified medical care throughout pregnancy and during and after confinement; prenatal educational clinics; home nursing care; laboratory service and dental care. Medical care should be available similarly for infants and pre-school children not only during illness but for the prevention of illness. For those unable to pay private physicians, clinic services should be provided, and educational and diagnostic clinics (well baby clinics), should be available for all children.

Public health nursing is perhaps the most essential element of any program of maternity and infant hygiene. In rural areas the home nursing care is particularly inadequate and should be furnished by county health departments.

Real progress in providing the needed services for reduction in maternal and infant deaths can best be made through the organization of adequate county-wide health services, through county health departments in which maternity and infant hygiene is an integral and important part.

19. RECOMMENDATIONS

1. That activities for saving the lives of mothers and children need to be made a vital part of a general health program for the community. For rural and village areas this can be done best through the organization of county health departments.

2. That more extensive health measures for mothers and children should be organized and carried out in all local health departments.

20. SCHOOL HYGIENE

The Commission has given careful study to the complicated health problems presented by children of school age. It seems certain that under the present organization of health and educational services, both in the state and locally, adequate provision for the health of the school child must receive consideration both by health and by educational authorities.

This requires a close cooperation and a sharing of responsibility by these two agencies rather than a disassociation of the problem of services, or the administration of these services in their entirety by one agency alone.

It is generally recognized that health authorities cannot relinquish the responsibility for the protection of the health of school children, since they have a responsibility for the health of all citizens regardless of age, and for the best results there must be a continuity of program planning and of service through the different age groups.

It is likewise recognized that certain aspects of health promotion can be achieved only through education of the individual, and that for the school child the school system is the best agency to plan and carry out this service.

The responsibility of the two departments as indicated above can be met by activities organized under three main divisions:

(1) *Medical service* should provide for control of communicable diseases for periodic physical and mental examinations and correction of handicapping conditions; and for guidance of the educational program for health teaching.

Many communicable diseases are very prevalent among school children and the school offers an opportunity to detect cases in the early stages and to control such diseases.

The discovery of physical defects is of value only when steps are taken for their correction. Whenever inadequate treatment facilities exist in a community it should be the responsibility of the local health department either to provide such facilities or to see that they are made available through other local agencies.

The present provisions of law which require that each public school child receive a medical examination annually should be changed so as to provide for possibly less frequent and for more thorough examination. The importance of dental hygiene in the school health program warrants special attention.

Medical examinations should be the starting point of school health service both for correction of defects and for health instruction, and should be conducted so as to develop in pupils sound hygienic practices. A consulting medical service should be available to principals and teachers in the development of the general program of health education, and in dealing with specific problems as they arise in training the individual child.

(2) *School nursing* should assist in the correlation of health services of the school with the home and family in the interest of the school child. School nurses can translate the health teaching of the school into practice in the home, and are invaluable instruments in carrying to the home the needed encouragement for parents to have the physical defects of their children corrected.

(3) *Health instruction and training* should aim to equip each child to carry the full load of responsibility for his personal health by the development of sound health habits and practices as well as by the imparting of actual health information. The most important, but until recently the most neglected side of school health service, deals with the appreciation of personal and community health on the part of the pupil. This needs the services of the teaching staff and of physicians, nurses, dentists and physical education directors, all properly trained and working toward a common goal.

In three cities of the state, school medical and nursing services are administered by the city health departments. In other cities, villages and rural areas this is a function of the local boards of education. Examples can be cited of satisfactory administration under each

of these plans In the smaller villages and rural areas however, the present school units are too small to provide for these needed services by the employment of trained full time personnel Without discussing in detail the present inadequacies in the rural areas it can be stated that the problems are essentially the same as those discussed at more length under the general subject of local health administration

In rural areas it is obviously wasteful to maintain specialized nursing services and there is universal recognition of the desirability of a generalized nursing service which should include all of the special phases of public health nursing In a number of counties public health nurses now employed by county boards of supervisors or county boards of health are rendering a satisfactory generalized service which includes the school nursing

In the larger cities the Commission will make further studies as to the general efficiency of the two methods of school health administration now being followed

In the rural areas and small villages the Commission is convinced that school health services should be administered on a county or other comparable basis in order that the unit of population will be sufficiently large to permit the employment of full time personnel

In its final report the Commission will present a more detailed review of this problem At the present time it wishes to call attention to the desirable principle involved in school health administration but believes that the passage of legislation to change the administration of school medical and nursing service in the rural districts and smaller centers of population could well wait until county boards of health have been organized and are functioning

21 ORTHOPEDICS

The rehabilitation of the crippled child is far from being adequately secured throughout the state in spite of the participation of many authorities and agencies in this problem Both urban and rural surveys show that a considerable proportion of crippled children have not been discovered and that many others are not receiving proper treatment

Following the epidemic of infantile paralysis in 1916 the Department of Health organized traveling orthopedic clinics for after care in order to minimize the development of deformities in those who had been stricken with the disease

In 1924 a temporary State Commission was appointed to inquire into and report upon the number distribution and condition of the crippled children throughout the state, the existing facilities and legal provision for promoting care treatment education and general welfare of such children and to recommend methods to meet the needs

The Commission approved the orthopedic work of the Department of Health but stressed the necessity of extending widely the state's service for the treatment, education and rehabilitation of the handicapped Following its recommendation laws were enacted providing the present state program for the medical care and education of the physically handicapped

The law defines physically handicapped as any person who by reason of physical defect or infirmity whether congenital or acquired by accident injury or disease is or may be expected to be totally or partially incapacitated for education or remunerative occupation The state departments have limited their services to children with orthopedic and special malformations, severe defects of eye, ear nose, throat and speech, heart lung and nervous conditions Furthermore it is provided that the state may reimburse a county for one half the cost of treating and educating the handicapped upon the order of a children's court judge, with the approval of the Commissioner of Health for medical care and of the Commissioner of Education for education Substantial appropriations are made each year to meet these costs

Through the annual school census the Department of Education is expected to record all handicapped children between birth and 18 years of age and is also required to meet the educational needs of crippled children by providing special education and a placement service for the handicapped over the age of 14

Present Status of Orthopedic Services The orthopedic services of the Department of Health are now organized under the direction of one full time orthopedist, with four *part time* assistants and thirteen field nurses The nurses made a total of 11 833 home visits to orthopedic cases in 1930, and more than 400 clinics in about 170 centers were held, where approximately 10 000 examinations were made.

Number of Cripples The State Departments of Health and Education have records of approximately 18 000 active cases The White House Conference on Child Health and Protection concluded that there are in the country 2 5 cripples to each 1 000 of the population This estimate is too low for New York State Several intensive surveys in various areas warrant the conclusion that there are at least 40 000 cripples in the state one half of that number being outside of New York City The present problem is to make available adequate service for the cases now requiring care and steadily to extend that service until all children who need advice or help are found

Finding of Cripples Through the annual school census of crippled children through medical inspection in the schools through the records of clinics for infants and preschool children held by the state and local departments of health, and through reports from private physicians methods are available for the early discovery of orthopedic defects Instruction as to crippling conditions and the possibilities of correcting them should be given in training schools for physical instructors teachers and public health nurses The discovery of adult cripples is largely dependent upon the extent to which the physicians and the general public become conversant with the corrective methods available

Public Education The success of any continued effort for the early discovery of conditions which may lead to deformities depends upon the knowledge of the general public concerning these conditions and what can be done for them There should be developed a public education service to secure the help of all the various groups which can contribute to the early discovery of orthopedic conditions While local hospitals generally can be used only for the correction of the less serious forms of orthopedic conditions it is desirable for the state clinics to be held in local hospitals schools and health centers wherever accommodations make it possible, so that they may become educational centers

The experience of the Department of Health indicates that while county and local hospitals are useful for the treatment of some types of cases better results in major orthopedic adjustments and operations can be secured by using orthopedic hospitals or hospitals having a distinct orthopedic service The Department of Health has found no difficulty in securing beds for all patients in hospitals so equipped

Except for the additions planned and recommended at the New York State Reconstruction Home at West Haverstraw there is no immediate need for additional orthopedic beds in the state

There are several small privately organized reconstruction or convalescent homes in the state all receiving public funds for the care of cripples Such institutions should be organized only when they meet a proven local need

Private Agencies Many private agencies are interested in one way or another in the welfare of cripples

Some of these have been leaders in directing the attention of the public to the needs of cripples, and their initiative has been invaluable. The Commission believes, however, that the state has been wise in developing a program for the discovery, treatment and education of cripples under governmental leadership. It believes that private agencies will be useful only to the extent to which they direct their energies toward the common objective. It is suggested that no private agency should undertake work for cripples without definitely considering the relation of its proposed program to that of the state.

The administration of the rehabilitation home at West Haverstraw is now divided between the Health, Social Welfare, and Executive Departments. The Department of Health should be made entirely responsible for the administration of this institution.

Its work may be definitely integrated with the field services for crippled children, and should be affiliated with several of the medical schools as a training center both for physicians and nurses in the orthopedic field. The additions to this institution already authorized should be constructed as soon as possible.

Unimprovable Cripples. There is no provision in the state for cripples who cannot be further benefited by medical, surgical or nursing care and who have no means of self-support. A separate building should be provided at the State Reconstruction Home, with suitable facilities to care for such cripples.

County Health Units. As county health units are organized, it will be desirable for the larger counties to set up local services for the handicapped. Similar services should be available in the larger cities. The Department of Health should approve the plans for local orthopedic units and supervise this work.

Legal Recognition of Orthopedic Division. In the early days the orthopedic work of the Department of Health was technically assigned to the Division of Maternity, Infancy and Child Hygiene. Later the Commissioner of Health created a Division of Orthopedics. This division should be perpetuated by recognition in the Public Health Law.

22. RECOMMENDATIONS

1. *New York State Reconstruction Home.* It is recommended that the State Department of Health be made entirely responsible for the administration of the Reconstruction Home at West Haverstraw, in order that its work may be integrated with other health services for crippled children.

2. *Unimprovable Cripples.* It is recommended that a separate building be provided at the Reconstruction Home with suitable facilities to care for such cripples.

3. *Legal Recognition of Orthopedic Division.* It is recommended that the designation "Orthopedic Division" be legally authorized in the Public Health Law.

23. PUBLIC HEALTH NURSING

Public health nursing is generally recognized as one of the most essential factors in any health program and the people have come to regard the public health nurse as an indispensable aid. She is expected to give health guidance and assist in carrying out the instructions of the family physician and health officer.

There are approximately 1,400 public health nurses employed in the state, exclusive of New York City, by various agencies as follows:

County Boards of Supervisors	128
County Tuberculosis and Public Health Committees	15
Local Boards of Health	334
Local Boards of Education	353
American Red Cross	34
Industrial Corporations	146
Visiting Nurses' Associations	227
Other Private Organizations	53
Insurance Companies	72

Exclusive of school nurses, there are 640 nurses paid entirely from public funds, 555 from private funds, and 94 paid jointly from public and private funds.

Public health nurses are most unevenly distributed, large sections being poorly provided with this service. This is particularly true of the smaller communities and rural districts in which few private organizations are functioning and in which local authorities are not meeting their responsibility for a nursing service.

Many public health nurses have been appointed without special training or experience and the qualifications of the Public Health Council often are disregarded.

Nurses frequently are appointed for specialized fields such as tuberculosis, infant welfare, communicable disease nursing, tuberculosis control and school nursing, all working in the same territory. Sometimes three or four nurses meet in the same home for different branches of work. One instance is recorded where six nurses met in a home to the obvious disgust of the members of the family. A generalized plan of public health nursing is needed to replace present extravagant and uncoordinated efforts.

There is a lack of adequate nursing supervision of local nurses by a qualified local supervisor or by the nursing staff of the Department of Health. The efficiency of the service being rendered by the local nurse frequently cannot be determined because inadequate records are kept and no reports of work required.

There is urgent need for more and better qualified nurses engaged for a general nursing program with competent supervision, so that public health nursing may be developed to reach the standards now in effect in more favored areas. For all of the state outside of the larger cities this can best be accomplished through a county health department functioning under a full-time health commissioner with a qualified supervising nurse.

24. RECOMMENDATIONS

1. That county departments of health be developed throughout the state with a qualified supervising nurse under the direction of the health officer, who will supervise and coordinate the work of all public health nurses employed in the county.

2. That the Department of Health be given facilities to continue and extend its efforts to promote the qualifications of public health nurses in the state.

25. INDUSTRIAL HYGIENE

An important phase of the health-conserving activities of the state is assurance of safe and sanitary workshop conditions for industrial workers. If the growth of industry in the future continues as in the past this problem will assume even greater importance as a larger proportion of the population finds employment in industry.

The State Labor Law clothes the Industrial Board with broad powers of investigation and rule-making to safeguard employees in "any trade, industry, occupation or process" involving danger to their lives, health or safety. The board may make special rules to guard employees against elements of danger by "establishing requirements as to temperature, humidity, the removal of dusts, gases or fumes; by requiring licenses to be issued upon application to the Department of Labor as a condition of carrying on any such industry, trade, occupation or process; by requiring medical inspection and supervision of persons employed or applying for employment; and by other appropriate means." The rules made under the authority thus given the Industrial Board have the force and effect of law. The customary

method of preparing and adopting such rules is by appointment of advisory committees, composed of representatives of employers and employees and qualified experts, to advise the Industrial Board, which holds public hearings on the draft of the proposed rules before proceeding to their formal adoption. To conduct the scientific research necessary to enable the preparation of these protective and remedial rules, a bureau of industrial hygiene has been organized in the Department of Labor, and this bureau in the performance of its functions frequently seeks and secures the cooperation of the Department of Health and other agencies.

By these means several health-conserving codes already have been promulgated which are supplementary to the general and specific provisions of the State Labor Law *designed to "protect the health and safety of employees."* These codes require the removal of dusts, gases and fumes from contact with workers; regulate operations under compressed air and in tunnels; and regulate lighting in factories and mercantile establishments. The Industrial Board is now formulating a code to remove the hazards to employees engaged in the spray painting of automobiles.

The operation of the Workmen's Compensation Law since its enactment in 1913 has also contributed greatly to safeguarding the life and health of employees. It has stimulated active and successful cooperation between employer, employee and the state to reduce the sources of disabling accidents. Although insufficient occupational diseases are named in the law as compensable, yet the effect is substantial in minimizing the causes of the scheduled occupational diseases. It is evident that if the restricted schedule of acknowledged disabling diseases were replaced by a more general provision bringing under the terms of the law any disabling disease which in fact arises out of employment, the field of source-prevention cooperation would be extended, and a further reduction accomplished in the sum of personal disability and loss of productive service.

The Commission has not yet had an opportunity to study in detail the operation of the Workmen's Compensation Law in all of its aspects, since its presents complicated medical and legal problems.

Health Officers Enforce Labor Law. The Labor Law now provides for the inspection of certain manufacturing establishments and business offices located in cities, by the Department of Labor, but inspections of similar establishments located in villages and towns are made the duty of local health officers. This is not a duty which the local health officer is equipped to perform, and the inspection of these establishments wherever located should be done by the Labor Department.

Industrial Accident Prevention. Factory management and employees' safety shop committees have demonstrated a mutuality of interest in the application of preventive and first aid measures for the reduction of accident and disease causes which greatly aid the state in promoting the health of industrial workers. In this work local public health authorities should join by providing the scientific workshop surveys needed and by helping to draft safeguarding regulations.

Many new chemical compounds are constantly being developed and are finding industrial use. Frequently little or nothing is known of their toxic effects on the workers engaged in their manufacture or handling. The state has an important responsibility in investigating the effects of these substances and processes. This requires research facilities and a collaboration of chemists, pharmacologists, physicians and other scientists to ascertain the facts and to devise practical methods for protecting health.

The facilities of the Departments of Health and Labor should be available for such joint studies. In this way the duplication of laboratory and other facilities can be avoided.

Further Problems for Study. The health and medical services now provided by industries in the state, the relation of the general problem of medical care to wage earners, and the broader health influences of factory employment, including hours of labor, special industrial processes, wages and other factors—are subjects which the Commission will discuss in its final report.

26. RECOMMENDATIONS

1. That the present requirement of the labor law which makes it the duty of local health officers in villages and towns to inspect certain business offices and factories be changed so that this duty is performed by the Department of Labor as now provided by law *for business offices and factories located in cities.*

2. That the present limited schedule of occupational diseases be extended to include all diseases arising out of employment; and that the Industrial Board be given authority to make awards in cases of such occupational disease when it is established that the particular disability in fact arose out of the employment.

3. That the Department of Labor be given additional facilities to conduct investigations of health hazards in industry with a view to their prevention and that facilities be made available in the Department of Health for participating in joint investigations.

27. SANITATION

Greater progress than among any other group of diseases has been made in reducing typhoid fever and other infections caused by contaminated water and food. Most of the municipalities of the state have improved the quality of water supplies in recent years. The safeguarding of these supplies, however, requires the skillful operation and laboratory control of complicated purification proceses, and close state supervision of these methods.

Water Supplies. The Department of Health now supervises 620 public water supplies through periodic visits of engineers and constant checking of results by regular laboratory examinations. Although this supervision is exercised with good results over the operation of these plants, existing laws do not give the Health Department definite authority to approve plans for construction of new plants. The authority to pass upon the sanitary quality of proposed new water supplies is now lodged in the state water control board under the Conservation Law. This is an undesirable division of responsibility and should be remedied by giving to the Department of Health authority to approve the plans and proposed methods for purification of public water supplies as related to sanitary quality.

Sewage Disposal. The growth in population results in an increased pollution of the streams of the state and vigorous steps are necessary to insure better purification of sewage. Existing laws give the Department of Health authority to require that municipalities install and operate sewage treatment plants in accordance with approved plans. In practice the limitation on the allowable debt of the city and the difficulty in securing the affirmative action by municipalities, sometimes results in continued pollution of the streams. The Commission has considered a recommendation that authority be given to the state to abate the nuisance created by a municipality through the pollution of a stream in the same manner that nuisances on private property now are abated by public health authorities. This, however, is not now recommended since the Commission believes continued attempts during the next several years should be made to secure adequate purification of sewage under existing laws. If these attempts are unsuccessful, the Commission would recommend future strengthening of these laws by the legislature.

Industrial Wastes. The rapid growth of industry also adds sources of pollution to streams. At present the Department of Health has authority to require purification of industrial wastes when such wastes are combined with sewage but not when the industrial waste alone is discharged into the stream. This situation should be corrected by a change in the law to bring the control of stream pollution by industrial wastes not containing sewage under the same provisions of law which govern industrial wastes which do contain sewage.

Qualifications of Operators of Water Purification and Sewage Treatment Plants. A modern water purification plant or sewage treatment works requires competent local supervision. Without it, such an installation becomes worse than useless because a false sense of security is engendered. Conditions may be cited where the inefficient operation of water treatment plants has resulted in epidemics. Many properly designed sewage treatment works have been constructed but as a result of absolute neglect or improper operation, have failed entirely to carry out their function. In order that the money expended for such works may not be wasted and that the public health may be conserved, all operators of water purification plants or sewage treatment works should be required to meet qualifications prescribed by the Public Health Council.

State Parks. The state parks are being increasingly utilized for recreational purposes by citizens of this and other states. The presence of large numbers of people in these areas makes it important that all necessary sanitary safeguards be provided. Local health authorities are not in a position to exercise control and it therefore becomes the duty of the Department of Health to supervise the sanitary conditions of these areas and of the Department of Conservation to see that these requirements are met.

Milk Control. State-wide survey of the milk supply made by the Department of Health during the past year shows that although milk control in larger cities and a few county health districts with qualified milk inspectors was relatively satisfactory in the smaller communities milk control was very unsatisfactory and most of the milk below accepted public health standards. Improvement in local milk supplies cannot be expected so long as supervision is in the hands of poorly paid part-time local health officers with no special training, with no assistants, and with inadequate funds. The Commission is convinced that the safeguarding of milk supplies outside of cities, should be placed on a county basis with trained and experienced milk inspectors as a part of the county health department.

28. RECOMMENDATIONS

1. That the laws be amended so as to give the Department of Health specific authority to approve of plans for proposed new and extensions to existing public water supplies, in so far as the sanitary quality of the water supply is concerned.
2. That the pollution of streams by industrial wastes not containing sewage be regulated in the same manner as such wastes which do contain sewage.
3. That the Public Health Council be given power by law to prescribe the qualifications of and grades for operators of water purification plants and sewage treatment works.
4. That specific authority be given and sufficient facilities provided for supervision of the sanitary conditions of state parks.
5. That milk inspection services, outside of cities, be organized on a county basis as a part of county health departments.

29. PUBLIC HEALTH PERSONNEL

The efficiency of any effort depends upon the competence of the persons administering it. This is particularly true in public health, where a high degree of technical knowledge is essential, and the principle should be recognized by appointing officials and the public generally that physicians without additional special training are not qualified as health officers. The public health officer is a specialist comparable to other specialists in medicine, and needs as thorough postgraduate training and as sound a background of experience as does a competent surgeon.

During recent years the Department of Health has conducted short courses of instruction for local health officers and nurses. The courses for health officers embraced the problems of the average small village and town. Residence study has been limited to short periods and has been supplemented by correspondence courses for the benefit of the practicing physicians, who are the present part-time town and village health officers.

The courses of instruction and practical training for public health nurses have been particularly profitable, since the earlier public health nurses had been appointed with little or no special training. Others had received their training in large cities where very different problems exist. Utilization of nurses on the staff of the Department of Health as instructors has stimulated advanced study by these nurses and has made possible better state guidance of local nursing programs.

Health officers to be properly qualified for major administrative positions in public health need in addition to a good basic medical training, postgraduate training and experience in the theory and practice of public health.

Throughout the deliberations of the Commission and of its several committees, the necessity of securing qualified personnel for the conduct of modern health activities has been the subject of frequent discussion. The Commission has considered the measures which will be necessary to provide the considerable number of full-time county and city health commissioners who will be needed in this state during the next few years. The most likely applicants for these positions will be the present able local health officers. Their background of good medical education and their experience as local health officers, with an intensive course of instruction over a period of a few months, should give the minimum qualifications necessary. This should be followed by subsequent courses in succeeding years in special subjects. Later, at least one full resident year of study plus several years of public health experience on a whole-time basis, should be required for the position of county and city health officer.

In addition to instruction in the sciences underlying public health, field training stations should be established so that actual experience and supervised instruction can be acquired under model conditions.

The Department of Health should assume responsibility for leadership and should utilize its excellent facilities to conduct intensive training courses in public health which will enable otherwise qualified local men to do effective work in public health positions. The Department should cooperate also with one or more medical schools in the state in the development of courses in public health.

Courses comparable to those for general administrative health officers should be organized for other professional and technical personnel in the public health field.

The practical training of public health personnel is one of the most important functions which the Department of Health can exercise.

For a number of years the law has authorized the Public Health Council to establish qualifications for directors of divisions in the Department of Health, district state health officers, county health commissioners, local health officers, directors of approved laboratories, and public health nurses.

In a number of sections of this report attention is called to the necessity of extending the list of positions for which qualifications and grades are prescribed to include such personnel as pathologists in charge of approved laboratories, medical superintendents of public tuberculosis sanatoria and operators of water purification plants and of sewage treatment works

Career Service Regardless of the efforts to provide training and standards for qualified personnel it will not be possible to obtain for such training or to retain in public health positions persons of the needed professional and executive ability, unless appointment to and retention in office is placed solely upon the basis of efficient service. There also must be provided for the qualified health officer satisfactory compensation for the various positions, and an opportunity for advancement

30. RECOMMENDATIONS

1 That the present authority of the Public Health Council to establish the qualifications of public health officers, nurses and other personnel named in the law be extended to include operators of water purification plants and of sewage treatment works, pathologists in charge of approved laboratories, superintendents of public tuberculosis sanatoria and other professional and technical personnel as the needs arise.

2 That the existing activities of the Department of Health in providing special training for public health personnel be extended and that the Department cooperate with educational institutions in the development of courses in public health for health officers and other public health personnel

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CONFERENCE OF SECRETARIES OF COUNTY SOCIETIES

The Annual Conference of the Secretaries of the County Medical Societies of New York State was held on Tuesday, September 15, 1931 in the Hotel Ten Eyck, Albany, N Y Dr I J Landsman, Secretary of the Bronx County Medical Society, was chosen to preside The representatives of twenty-five societies were present, as follows

Albany, Dr H L Nelms, Bronx, Dr I J Landsman, Broome, Dr G S Lape, Chautauqua, Dr E Bieber, Delaware, Dr W M Thomson, Dutchess-Putnam, Dr H P Carpenter, Erie, Dr L W Beamis, Essex, Dr L H Gans, Genesee, Dr F R Hall, Greene, Dr W M Rapp; Jefferson Dr P E Thornhill, Kings, Dr A N Thomson, Montgomery, Dr W R Pierce, Nassau, Mr Louis Neff, New York, Dr D S Dougherty, Onondago, Dr E E Mack, Orleans, Dr R P Munson, Otsego, Dr A H Brownell, Rockland, Dr W J Ryan, Saratoga Dr H L Loop, Schenectady, Dr S F MacMillan, Schoharie, Dr H L Odell, Suffolk, Dr E P Kolb, Ulster, Dr F H Voss Washington, Dr S J Banker

Seventeen of these counties were represented at the Secretaries' Conference last year Reports on twenty counties represented this year had been printed in the Journal during the year 1930 It seems to be a fact that those counties whose secretaries attend the annual conference rank above the average in the amount and scope of their activities

There were also present at the Secretaries' Conference the following official representatives of the Medical Society of the State of New York

Dr W D Johnson, President, Dr Charles Gordon Heyd, President Elect, Dr D S Dougherty, Secretary, Dr John A Card, Speaker of the House of Delegates, Dr James F Rooney, Chairman of the Trustees, Dr Aranow, Chairman Committee on Legislation, Dr Richard Kovacs, Chairman of the Committee on Physical Therapy, Dr H L K Shaw, Chairman of the Advisory Committee on Poliomyelitis, Dr J S Lawrence, Executive Officer, Dr Frank Overton, Executive Editor

The Chairman announced that during the past year, two secretaries had died in office—Dr E E Smith of Queens, and Dr Frederick Terwilliger, of Tioga County

Thirteen county societies had chosen new secretaries during the year

The papers and discussions were unusually practical and interesting Probably the most valuable feature of the proceedings was that the expression of opinions was both open and fearless Those present came to know one another intimately as they shared the confidences regarding the difficulties of their work. One of the greatest incentives to action is a knowledge of the motives and outlooks of other workers Physicians work best under the stimulus of comradeship rather than authority

The program that was announced was carried out as follows "Erie County and Public Relations" by Dr L W Beamis Buffalo "The Health Examiner," by Dr Alec N Thomson, Brooklyn "A County Society Publication," by Mr J Louis Neff, Mineola, Executive Secretary, Nassau County

Dr Beamis dwelt particularly on three features of the work of the Erie County Society

1 The radio talks

2 The legal incorporation of the society

3 The relation to endowed health organizations (The paper of Dr Beamis will be published in an early number of this Journal)

Many practical points were developed in the discussion of Dr Beamis' paper Dr D S Dougherty spoke of the necessity of incorporating the county medical society as a defense of the officers, especially in libel He said that New York County was incorporated at the same time with the Medical Society of the State of New York

Dr. Landsman described the relation of the Bronx Medical Society to lay health organizations, saying that members were on the executive board of the Tuberculosis Association, which is the leading lay health organization of the county, and has a large budget. The doctors also had a large degree of control of the health centers, directly through the County Society, and indirectly through the Tuberculosis Association. The centers are conducted for diagnosis only, and the patients are sent to their family doctors for treatment.

Dr. Alec N. Thomson described the relation of the Kings County Medical Society to the Visiting Nursing Association. The doctors committee had cooperated with the nurses in developing a set of standing orders. While the doctors and nurses had found it difficult to agree on the duties of each in fields that overlapped, yet the rules were satisfactory for months until the poliomyelitis situation produced some disagreements which, however, were quickly adjusted.

Dr. Dougherty described the Coordinating Committee of the County Medical Societies of Greater New York, consisting originally of Doctors Dougherty, of New York, Thomson of Kings, Podvin of Bronx, and Boettiger of Queens. To these were added the presidents of the county societies. The Committee meets monthly and discusses such common problems as health centers, school medical inspections and visiting nursing, and similar activities in which lay organizations were active. The work of the Committee was satisfactory and effective.

Doctor Dougherty also spoke of the necessity of providing the secretary with funds for clerical assistance and supplies. Even the smaller societies can hire a clerk for the few hours required for writing letters and reports, and filing the records.

Dr. Alec N. Thomson said that so many state and county medical societies had engaged full-time lay secretaries that the American Medical Association held a conference for them at the annual meeting last June.

Doctor Thomson said that the title of his paper, "The Health Examiner," referred to a monthly publication, and not to a doctor. The Journal is issued by the Five-County Health Examination Committee of Greater New York. The Committee first issued weekly bulletins to all the doctors in New York City, and now gets out the monthly journal in their place and sends them to the same mailing list of doctors. In addition, the Monroe County Tuberculosis Association buys a large number of copies for its members, and includes a page applying especially to Monroe County. The welfare organizations of Nassau County also buy copies.

The Examiner contains scientific articles on periodic health examinations, and is intended principally for physicians. Its cost is borne by several lay health organizations, including the Tuberculosis Association. Advertisements also help to defray the expenses.

Mr. Louis J. Neff, lay secretary of the Nassau County Medical Society, discussed the monthly bulletins of county medical societies, and said that they were issued in seven counties—Bronx, Erie, Kings, Nassau, Ontario, Queens, and Suffolk. Nassau had started its Bulletin as the organ for a campaign to establish a county hospital, and had carried the referendum of voters at general election by a vote of eight to one. The Bulletin had proved so successful that every doctor is in favor of it, and a copy is sent to every lay health worker in the County. The mailing list contains 1,800 names. The cost is borne largely by the lay health organizations.

Dr. W. D. Johnson, President of the Medical Society of the State of New York, emphasized the fact that the community is the patient of the Medical Society; and that an important reason for the existence of county medical societies is that of giving advice how the community may do its part in making a medical service available to every person. The new Welfare Law is a great step in that direction. In contrast with the external outlook of the county society is the individuality of the family physician. Doctor Johnson quoted Kipling to the effect that the only individual from whom one cannot escape is oneself, and each of us should be good to it, and thereby be best able to give medical service to the public.

Dr. Charles Gordon Heyd, President-Elect of the State Society, gave an intimate talk on the necessity of considering well the actual need of a new activity before starting it.

Dr. John A. Card, speaker of the House of Delegates, asked the members of county societies to choose men of broad views and extensive experience, and to return such men year after year in order that the legislative body of the State Society may have a large number of members who are well versed in medical society activities.

Doctor Card also explained the new rates of indemnity insurance, and said that this year the rates were substantially lower than in the past. The Aetna Life Insurance bases its rates on the actual cost of defense and of payments for indemnity; and after a fixed charge is made for a minimum amount of insurance, all additional insurance is issued at a reduced rate.

The Aetna Insurance Company has also offered to accept a premium in installments if the doctor wishes to pay it in that way.

Dr. Henry Aranow, Chairman of the Committee on Legislations, outlined the course of action which the county societies should take in assisting the State Committee.

Dr. James F. Rooney gave the secretaries some interesting advice based on his extensive experience with legislators.

Dr. Richard Kovacs, Chairman of the Special Committee on Physical Therapy, gave the following report:

"The Committee on Physical Therapy urges a definite activity in physical therapy in every County Society for two reasons: (1) To furnish patients with full medical care by the medical profession itself. (2) To counteract abuses and ridiculous claims by technicians and drugless practitioners. Every County Society should have a paper on some phase of physical therapy at least once a year; and physical therapy cases should be presented at staff meetings of hospitals as often as possible in order to encourage intelligent discussion of the possibilities and limitations of physical measures.

"A committee on physical therapy, even it be only one man, should be appointed in each County Society. Members of such committees will be regularly invited to the meetings of the State Committee for effective cooperation. The Chairman and members of the State Committee on Physical Therapy will be pleased to address any County Society or District Branch. The Committee on Medical Education, on proper request, provides a lecture course in physical therapy to any County Society. Since there might not be enough men interested in physical therapy in one county, an attempt to combine the interested membership in several counties may be worthwhile."

In order to get more definite information from the counties which so far have not had any activity in physical therapy, a short questionnaire was handed out to the Secretaries present. The Secretaries of Broome, Delaware, Fulton, Saratoga, Schenectady and Ulster Counties signified their willingness to plan definite activities as suggested by the Committee.

Dr. Thomas P. Farmer, Chairman of the Committee on Public Health and Medical Education urged the county secretaries to send him information regarding the graduate courses that they wish. He expected that each lecturer would prepare an outline of his talk, to be mimeographed and sent to each member in advance of the meeting. He also said that his committee and the committee on Scientific work would be on call to assist secretaries in making up programs of county society meetings.

There was considerable discussion regarding the operation of the Welfare Law, it being developed that many county societies had not yet taken steps to enter into agreements with their County Welfare Commissioners regarding cases to be treated and the payment of doctors for giving medical service. Suffolk County was quoted as a county in which satisfactory agreements had been formed. (See this Journal, February 15, 1931, page 225; and April 15, page 476.)

The members and guests dined together at noon, and then continued in session until three o'clock, without a moment of dullness in the entire day.

THIRD DISTRICT BRANCH

The round of annual meetings of the eight District Branches of the Medical Society of the State of New York was begun by the Third, which held its meeting on Wednesday, September 16, 1931, in Sharon Springs, Schoharie County, with the President, Dr. H. L. Odell, of Sharon Springs, in the chair, and the Secretary, Dr. W. M. Rapp, of Catskill, recording. Fifty members were present.

The morning session was opened with a moving picture on "Infections of the Hand," produced by the Eastman Company of Rochester. The picture had a great value in that it visualized the spaces in which infectious matter collects, and the usual routes by which it travels. The picture also visualized the incisions to be made in order to open the spaces the most effectively, and with the least after-harm. One seeing the picture for the first time, realizes the complexity of the problem both anatomically and surgically.

The second number was an address on "Congenital Syphilis," by Dr. Thurman B. Givan, of Brooklyn. Dr. Givan has conducted a clinic on congenital syphilis in the Long Island College Hospital for twelve years, and has followed many cases through childhood and youth, and even to the prospective marriage of some of the patients. He lectured for half an hour on the pathology, signs, and symptoms of the disease, and then showed lantern slides illustrating its more common phases. He left an impression of hopefulness, for the patients respond well to treatment, even those threatened with blindness from interstitial keratitis. Dr. Givan said that congenital syphilis is more common than is usually supposed, and he closed with a plea for the early recognition and treatment of the cases.

A noon luncheon at the Mansion House was followed with brief words of greeting from some of the officers of the Society. Dr. W. D. Johnson, President, wished for the return of the old system of preceptorships, and quoted the poet, Robert Burns, on the influence of a leader on his fellowmen; and also Charles Darwin, who gave credit to Professor Henslow for his friendly inspiration while he walked the fields with his students.

Dr. John A. Card explained the newer developments in the indemnity insurance policy issued by the Aetna Life Insurance Company to the members of the State Society, including reduced rates, and provision for the installment payment of premiums.

Dr. D. S. Dougherty, Secretary, recalled the hospitality of one of the local doctors at the last meeting of the Third District Branch in Sharon Springs, when the day was exceedingly cold and the ride to the village had been long.

The afternoon program included two papers. Dr. Russell L. Cecil spoke on "Arthritis," drawing upon his extensive experience in both the research and clinical phases of the disease.

Dr. Smith Ely Jelliffe, of New York, gave a paper on "The Mental Apparatus and Internal Medicine."

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THE DAILY PRESS

Reg'lar Fellers — Cured for Life — By Gene Byrnes



From the New York Herald Tribune, September 4, 1931.

NATURAL ALCOHOL IN THE BODY

The New York Times of September 3 comments on the announcement of Dr. Gittler to the American Chemical Society, that alcohol is present in the brain and liver of every human being. The *Times* says:

"In an autopsy he has taken a half-drop of pure ethyl alcohol from the brain of a teetotaler. This leads him to the conclusion that the presence of the fluid in the human body does not necessarily preclude clear thinking.

"One of the arguments for prohibition is that it keeps alcohol out of the human system. But if nature, which in plant life and bacterial action has been indifferent to the Eighteenth Amendment, has decreed that even the human body cannot be surrounded by the law, the issue comes back to temperance, not prohibition. Dr. Gittler would admit that too much alcohol is bad for human creatures. That is what temperance advocates used to contend. The path leads from that to sensible regulation."

ADDISON'S DISEASE

Scientific societies other than medical frequently discuss diseases. *The New York Times* of September 4 has an editorial which says:

"Before the American Chemical Society session at Buffalo, Professor Frank A. Hartman read the last instalment of an exciting scientific serial that recounts the chemists' victory over Addison's disease.

"Here, for example, is a man so far ravaged by Addison's disease that he cannot retain food. Cortical extract is administered. Two days later he is eating a double portion of beefsteak. A woman debilitated to the point of death runs about in the hospital corridor five days after treatment.

"There are ninety such cases with many astonishing 'cures.' Physicians and chemists will not be misled by them. Thyroxin, pituitary products, insulin, cortin—none of the extracts of the ductless glands cures anything. We deal with hormones, a Greek name for minute quantities of chemicals carried by the blood stream to regulate organic processes in all parts of the body. One part of adrenalin in twenty million parts of blood is enough to keep the heart beating normally. But let one of the ductless glands fail in its duty and the body, even the personality, changes. The hypodermic needle must come to the aid of defective glands not once but always. So it is with insulin, which has shorn diabetes of its terrors; so it is with the new cortin; and so will it probably be with hormones which are still to be discovered, and which may make it possible to retain the vitality and the imagination of youth long after the biblical span of life."

MATERNAL INTEREST IN CHILD HEALTH

The New York Times of September 18 carries a news item on a survey of maternal interest in child health conducted by Dr W M Bomar of Teachers' College, Columbia University The findings of Dr Bomar confirm what every doctor already knows—that mothers in New York City have such great confidence in the supervision of public health matters by the Department of Health, that their interest in the sources of supplies of water, milk, and other foods is lax But Dr Bomar also reports a lack of interest in other civic affairs, and says

"Mothers rarely participate in community activities, Dr Bomar's survey shows There is much church work, she reports and next in importance is the care for dependent children and membership in parent-teacher organizations The activity in which there is the least participation is that of the Boy Scouts—only 1 2 per cent of the mothers are actively engaged in helping the movement

"Explaining that this is significant, Dr Bomar notes that in the collective reports from the 483 mothers interviewed many of them expressed interest in the Boy Scout work She concludes that

"The lack of participation in this activity, as contrasted with the relatively high rating in importance which it received, clearly indicates that the homemakers are content to wait for others to initiate and keep alive the activities which may vitally affect the health and happiness of members of their families

"There is no correlation between the activities receiving the highest rating in importance in any given city and those in which participation was greatest This clearly indicates that there exists on the part of homemakers in all parts of the country an attitude of complacency so far as participation is concerned, in regard to certain community activities, especially those more closely connected with civic and municipal government"

A rural community is criticized for its lack of civic interest, chiefly on the ground that it is rural The largest city is similarly criticized because it is too big to give heed to the protests of an individual Public health work in a great city is necessarily paternalistic

---

REVENGE

One of the items of policy of the NEW YORK STATE JOURNAL OF MEDICINE is that it shall not indulge in personalities, for explanations and apologies are seldom understood Moreover most writers of the criticisms sent to the JOURNAL are inspired by a sincere desire to be helpful Even if the criticisms should be spiteful, we subscribe to the closing lines of the following poem by James J Montague printed in the *New York Herald Tribune* of August 26

"When Franklin walked munching a loaf down
the street
He wasn't annoyed or embittered
When a pretty young damsel he happened to meet
Cast her bright eyes upon him and tittered
The future philosopher finished his bread
With never a pause nor a falter
And giving her ogle for ogle, he said,
'I shall lead you some day to the altar
You can't smile at me with impunity, kid,
As you later will learn,' and the young lady
did

"When Byron was turning out pages of rhyme—
Some of which will be never forgotten—
The critics who harried the bards of his time
Said all of his poems were rotten
But Byron filed points on the quills he employed
To give them the keenness of skewers
And then in a couple of lines he destroyed
The once over caustic reviewers,
Till the toplofty brethren agreed to a man
That George was one bird it was unsafe to
pan

'Revenge, gentle reader, is sweet to the taste,
But we seek for it swiftly and blindly,
At every affront we endeavor to paste
The person who's used us unkindly
Though a crushing retort fills the bosom with
joy
And acts as a balm to one's ire,
Too often the weapons we try to employ
When the trigger is tickled misfire,
It is fine to reply with attack to attack,
But only a genius knows how to come back

(*Continued from page* 1228)

Grievance Committee: The Committee on Public Policy, which has charge of legislation, asked for instructions as to whether or not it should introduce the Grievance Committee bill which was defeated in the Senate last year. The bill was as follows:

"The State health officer, the Secretary of the State board of medical examiners, and the attorney general or deputy attorney general are hereby constituted ex-officio a state medical grievance committee to investigate, hear, and act upon practices by persons licensed to practice medicine and surgery under section 147.17, that are inimical to the public health. The State health officer shall be chairman of the committee. Meetings of the committee shall be held at the call of the chairman. Any member thereof shall have power to subpoena and swear witnesses, and take evidence. The committee shall have power to warn and to reprimand, when they find such practice, and to institute criminal action or action to revoke license when they find also probable cause therefor under criminal or revocation statute, and the attorney general may aid the district attorney in the prosecution thereof."

Medical Defense: The Chairman of the Committee on Medical Defense, Dr. A. J. Patek, reported as follows:

"I am pleased to report that during the past year your Society has been unusually favored: The smallest number of cases in its history has been referred to it for defense. A total of seven cases compares very favorably with the large number which has, in the past, come to our notice. Of these seven, four are in the hands of other protective organizations, and will in all likelihood be conducted with our attorney as counsel only; one was settled at a very nominal figure through an insurance carrier; two have not been reported upon since first notice of suit was posted. In addition to the above seven, there were two who were threatened, but no further action taken.

"It has not yet been possible to publish letters of advice from our Counsel, or analyses of cases that should act as object lessons, as was promised our subscribers last year. We are, however, continuing our efforts to this end, and trust these proposed 'lessons' may be forthcoming during the coming winter." (This recommendation is in line with the policy of the New York State Journal of Medicine in which every issue includes reports of actual cases handled by the Legal Counsel.)

Undergraduate Medical Education: The Committee on Medical Education and Hospitals re-

(*Continued on page* 1232—*Adv. xxii*)

Definite dosage
Ease of administration
Sensible economy



Each pill contains 0.1 gram (1½ grains) of physiologically tested digitalis leaves. The finished pills, too, are biologically assayed, thus giving re-assurance of their activity.

Each pill represents 15 minims of the U.S.P. tincture and permits of more accurate dosage than do liquids, as drops may vary in size.

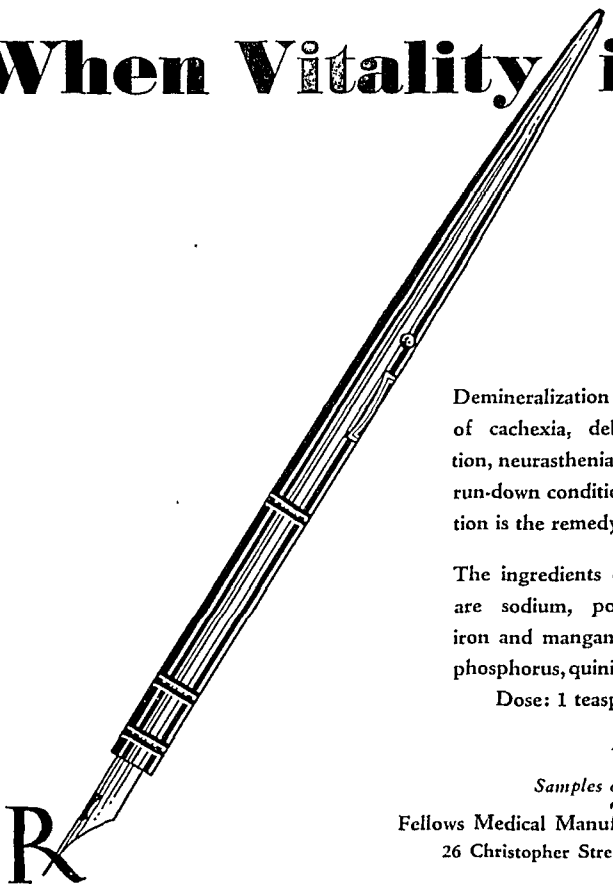
These pills contain digitalis in its completeness and not any separated or extracted part of it, therefore present the entire therapy of this valuable drug.

Physician's trial size package and literature sent free upon request.

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The ingredients of Fellows' Syrup are sodium, potassium, calcium, iron and manganese, together with phosphorus, quinine and strychnine.

Dose: 1 teaspoonful t. i. d.

▲

Samples on Request

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26 Christopher Street, New York, N. Y.

Fellows' Syrup

It supplies the needed Minerals

(*Continued from page* 1228)

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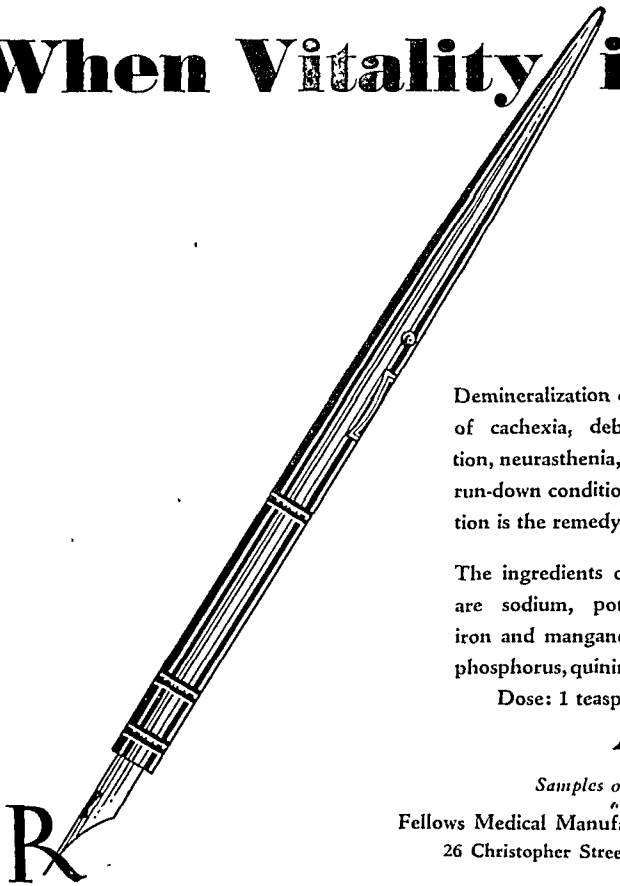
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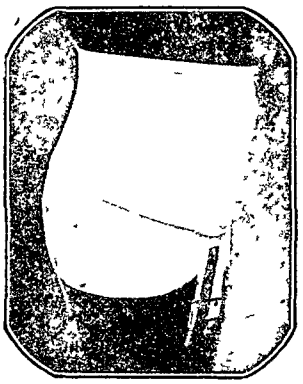
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(*Continued from page* 1230—*Adv. xx*)

ported the two important items of progres undergraduate medical education as follows:

"During the year 1930-31 orientation con ences for first and second year medical stud were inaugurated. These conferences are ur the direction of members of the clinical fac and are attended also by members of the fac of the basic sciences. The aim is to stress correlation between the basic sciences and c cal and preventive medicine.

"The State University is continuing its pre tor system for the instruction of fourth medical students. One-quarter of the fo year is now spent by each student in Milwau and this Milwaukee quarter under the prece plan has proved of great value in giving the dent insight into the medical problems prese by a larger city."

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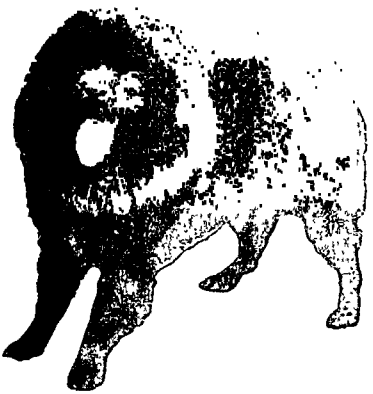
"Those who probably appreciate best the m cal library facilities are physicians listed as 'r ulars.' Physicians thus classified obtain each sue of a selected journal as soon as the libr receives it from the publishers; the only obli tion is five cents plus postage. For book pa ages the charge is postage both ways and wrapping cost.

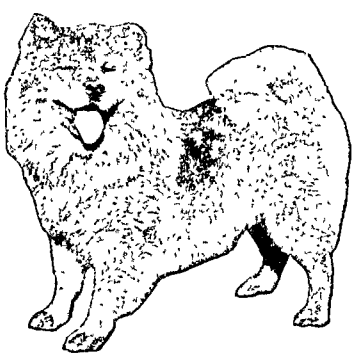
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A pedigreed chow, female, three months old with severe rickets. Note the bowed fore legs and splayed hind legs. Avitaminosis A also shows in the rough coat and an indica-

After this picture was
Cod Liver Oil Con
500 Vitamin A units





daily. This picture was taken at ten months of age. Note the extremely heavy, soft fur and splendid stance, general alertness and absence of any evidence of avitaminosis A or D.

DO THESE DOGS TALK?

Not in words perhaps—but their physical appearance, alertness and energy tell a story—all the more impressive, because it is purely objective—there can be no question of psychologic reactions.

The title of their story (as told in the captions) is

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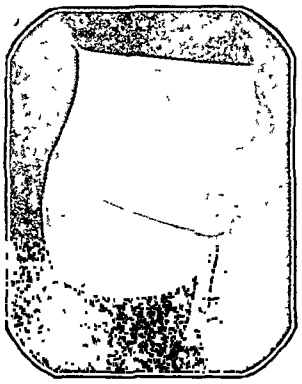
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"Having a record of the periodical desired regularly by the physician, the library sends it each week, month, or quarter, as the case may be, thus freeing the physician and the librarian of the trouble of handling a special request for each number. In the case of periodicals in much demand by many physicians, the library subscribes for enough copies to serve the group, thus reducing the waiting list to a minimum.

BUDGET IN MINNESOTA

The September issue of *Minnesota Medicine* ntains the minutes of the House of Delegates the State Association, in which the expenses of e past year are tabulated as follows

Public Health Education Committee	$ 5 899 06
Rent	300 00
Council	352 59
Miscellaneous	1 045 42
Minnesota Medicine	4 126 00
Bills Payable .$2,965, Interest $35	3 000 00
Annual Meeting	1 844 80
Secretaries' Conference	446 73
Furniture and Fixtures	22 61
Stenographers and Clerks	1 654 05
Secretary's Traveling Expenses	603 13
Legal Expenses	50 00
Treasurer's Salary $100 00, Expenses, $3	103 00
Secretary's Salary	3 600 00
Hospital and Medical Education Committee	215 10
State Health Relations Committee	3 29
Education Committee	5,117 03
Historical Committee	43 98
Printing	221 41
Auxiliary	57 37
Consultation Bureau	300 00
Refund in Dues	15 00
Transferred to Savings Account	6,000 00
"Total Disbursements	$29 020 57"

The dues at $10 amounted to $20 880 00
The Journal cost for 1930 is reported as follows

"Cash Receipts"

Display Advertising	$ 8 780 17
Illustrations	98 82
Member Subscriptions	4,106 00
Non member Subscriptions	310 48
Advertising Dividend	462 04
	$13,757 51

"Cash Disbursements"

Journal Expense		$14 023 37
Discounts Allowed		
"Advertising	$1 205 01	
"Subscriptions	22 25	1,227 26
"Total Cash Disbursements		$15 250 63
"Cash Deficit for the Period		1,493 12"



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from tuberculin tested cows, from dairy farms that have fulfilled the sanitary requirements of the City of Cleveland Board of Health, is used as a basis for the production of S. M. A. In addition, the milk must meet our own rigid standards of quality.

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MEDICAL EXAMINERS OF ARKANSAS

The July number of the *Journal of the Arkansas Medical Society* contains the following report of Dr. S. J. Allbright, Secretary of the State Board of Medical Examiners:

"Since the last report forty-four certificates of license to practice have been issued by this board. Twenty-five were issued by examination, one graduate of the University of Tennessee School of Medicine and twenty-four graduates of the University of Arkansas School of Medicine.

"Nineteen certificates were issued by reciprocity from other States coming from Missouri, Virginia, Tennessee, Louisiana, Illinois, Iowa, Kansas, Mississippi, New York, North Carolina, Oklahoma and Texas.

"Each applicant for license must have the approval of the Basic Science Board, whether he makes application for license by examination or by reciprocity; this has not disturbed our reciprocal relations with other States.

"Three licenses were revoked during the year. In one case the licentiate had been convicted and served a term in prison for forgery.

"Another had been convicted and served a prison sentence for violating the Narcotic Law. And the other was revoked because the license upon which his certificate was issued by reciprocity was revoked for cause in the original State.

"One license which had been revoked, 1926 was reinstated upon petition of a majority of the members of the County Society in which the applicant was a member.

"Thirty-seven licentiates have been certified to other States for license by endorsement. These have been accepted by Texas, Wisconsin, Kansas, New Mexico, Louisiana, Ohio, Missouri, Oklahoma, Michigan, New Jersey, California and Alabama.

"The board has been instrumental in securing the conviction of one man who has been practicing medicine in Arkansas for twenty years without license.

"There are more illegal practitioners in various parts of the State. In some places it seems difficult to get the district attorney to take action, in other instances the illegal practitioner moves when he receives a letter from the board and is not heard of again until he has been practicing in some other community six months or more.

"The only solution to this is annual registration of all physicians, as Colorado and several other States are now doing."

LIQUID PEPTONOIDS WITH CREOSOTE

COMBINES the active and known therapeutic qualities of creosote and guaiacol with the nutritive properties of Liquid Peptonoids and is accordingly a thoroughly dependable product of definite quantities and recognized qualities as shown by the formula:

Each tablespoonful represents

ALCOHOL (By Volume)	12%
PURE BEECHWOOD CREOSOTE	2 min.
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PROTEINS (Peptones and Propeptones)	5.25%
LACTOSE AND DEXTROSE	11.3%
CANE SUGAR	2.5%
MINERAL CONSTITUENTS (Ash)	0.95%

It acts as a bronchial sedative and expectorant, exhibiting a peculiar ability to relieve *Bronchitis—acute or chronic.* It checks as well a persistent winter cough and without harsh or untoward effect. It is agreeable to the palate and acceptable to the stomach—with merit as an intestinal antiseptic. Supplied in 12 oz. bottles.

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"Rent	300 00
"Council	352.59
"Miscellaneous	1,045.42
"Minnesota Medicine	4,126.00
"Bills Payable ..$2,965; Interest $35	3,000.00
"Annual Meeting	1.844.80
"Secretaries' Conference	446.73
"Furniture and Fixtures	22.61
"Stenographers and Clerks	1.654.05
"Secretary's Traveling Expenses	603.13
"Legal Expenses	50.00
"Treasurer's Salary ..$100.00; Expenses, $3	103.00
"Secretary's Salary	3,600.00
"Hospital and Medical Education Committee	215.10
"State Health Relations Committee	3.29
"Education Committee	5,117.03
"Historical Committee	43.98
"Printing	221.41
"Auxiliary	57.37
"Consultation Bureau	300.00
"Refund in Dues	15.00
"Transferred to Savings Account	6,000.00
"Total Disbursements ..$29,020.57"	

The dues at $10 amounted to $20,880.00.

The Journal cost for 1930 is reported as follows:

"Cash Receipts"

"Display Advertising ..$	8,780.17
"Illustrations	98.82
"Member Subscriptions	4,106.00
"Non-member Subscriptions	310.48
"Advertising Dividend	462.04
	$13,757.51

"Cash Disbursements"

"Journal Expense ..$		14,023.37
"Discounts Allowed:		
"Adverising ..$	1,205.01	
"Subscriptions	22.25	1,227.26
"Total Cash Disbursements ..$		15.250.63
"Cash Deficit for the Period		1,493.12"



Only Fresh Milk . . . .

from tuberculin tested cows, from dairy farms that have fulfilled the sanitary requirements of the City of Cleveland Board of Health, is used as a basis for the production of S. M. A. In addition, the milk must meet our own rigid standards of quality.

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New York and London

PUBLIC RELATIONS IN MAINE

The public relations of the medical profession were discussed in the July number of the *Maine Medical Journal* by the President of the Maine Medical Association, who said:

" 'Our Committee on Public Relations, with the assistance of our State Secretary, has made a medical survey of Maine, in order that we may intelligently state how well Maine is served by doctors.

" 'We find that our public has not been neglected. Many statements have been made loosely in regard to lack of medical care. For instance, as the committee chairman has stated to you, and contrary to newspaper reports, in Aroostook County only two and one-half per cent of the population are ten miles or more from a doctor. In eight other counties from four per cent to zero are ten miles from a doctor. We have now a basis for tabulation and comparison.

" 'Your Secretary has promoted cooperation between local, county, state and national associations and other health agencies. When he has been able by continued service to establish contacts with public lay audiences, he can accomplish more in extending the intelligent appreciation of health problems and thereby the influence of the State Association.

" 'It has been claimed publicly in this State that we need more doctors graduated, and that we suffer from the closure of our medical school. However much we lament the closure of our State Medical School and feel it a blow to our prestige, we resent any implication that we should be turning out a cheaper grade of doctors who would be satisfied with the rewards of a past generation. It is enough to say that it will never be. The United States is now absorbing 5,000 new medical graduates a year, which is faster than population growth. A partial payment subsidy by rural towns in order to have a twelve-months-in-the-year doctor is a generous gesture with apparent need, but is not a solution of the economic question. It is a temporary expedient and it is claimed that it increases the number of non-paying patients in such towns.' "

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...it is called a tonic—Guiatonic. And it lives up to its name.

Coughs due to colds give way to its unyielding influence because Guiatonic contains creosote and guaiacol.

Convalescence hastens to yield its place to Recovery, because Guiatonic stimulates lagging appetite, and supplies iron, manganese, calcium, potassium, phosphorus to replenish the depleted mineral supply of the body; while quinine and strychnine add their urge to the depleted cells to help themselves toward regeneration.

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WOULD you like to try Guiatonic just to see how well it lives up to its name and years of reputation? Surely; and two bottles await your name and address.

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EDUCATING THE HOUSE OF DELEGATES IN FLORIDA

The leaders of the medical profession in Florida feel the need to supplying the members of the House of Delegates with information regarding the questions before them. New York meets the problem by publishing the annual reports and the personnel of the reference committees in the Journal a month before the meeting; and by urging all those who wish to present resolutions to send them to the Journal for advance publication. The June Journal of the Florida Medical Association presents a plan of educating the delegates in the following editorial:

"At every annual session many questions are brought before it for consideration and action. It frequently happens that the individual members of this body are called upon to vote on matters which have only been brought to their attention a few moments before. Under such circumstances, careful consideration and thoughtful study of the problem are to say the least, extremely difficult. Decisions may be made which a calm second judgment, later on, would not support.

"The Journal feels that it would be of advantage if some of the questions which might be brought before the House of Delegates at the Sarasota meeting could be presented from time to time in its pages for consideration. In this way the subjects would be brought to the attention of all members of the Association, and not limited simply to that minority of our membership which attends the State meeting. Discussions between individual members and on the floors of the various county societies would go far toward crystallizing the sentiment of the membership on the questions involved and would also enable the individual delegates to vote more intelligently when these questions were considered at the annual session.

"With this thought in mind, this issue carries an editorial entitled 'Shall we have a President-Elect?' It is hoped that all members will read this article carefully. The Journal invites comments upon this plan from its readers. Letters received are to be published, in full if space permits."

PUBLIC RELATIONS IN MAINE

The public relations of the medical profession were discussed in the July number of the *Maine Medical Journal* by the President of the Maine Medical Association, who said:

" 'Our Committee on Public Relations, with the assistance of our State Secretary, has made a medical survey of Maine, in order that we may intelligently state how well Maine is served by doctors.

" 'We find that our public has not been neglected. Many statements have been made loosely in regard to lack of medical care. For instance, as the committee chairman has stated to you, and contrary to newspaper reports, in Aroostook County only two and one-half per cent of the population are ten miles or more from a doctor. In eight other counties from four per cent to zero are ten miles from a doctor. We have now a basis for tabulation and comparison.

" 'Your Secretary has promoted cooperation between local, county, state and national associations and other health agencies. When he has been able by continued service to establish contacts with public lay audiences, he can accomplis more in extending the intelligent appreciation o health problems and thereby the influence of th State Association.

" 'It has been claimed publicly in this State tha we need more doctors graduated, and that we suf fer from the closure of our medical school. How ever much we lament the closure of our Stat Medical School and feel it a blow to our prestige we resent any implication that we should be turn ing out a cheaper grade of doctors who would b satisfied with the rewards of a past generation It is enough to say that it will never be. The United States is now absorbing 5,000 new medi cal graduates a year, which is faster than popu lation growth. A partial payment subsidy b rural towns in order to have a twelve-months-in the-year doctor is a generous gesture with appar ent need, but is not a solution of the economi question. It is a temporary expedient and it i claimed that it increases the number of non-pay ing patients in such towns.' "

FOR THE WANT OF

...it is called a tonic—Guiatonic. And it lives up to its name.

Coughs due to colds give way to its unyielding influence because Guiatonic contains creosote and guaiacol.

Convalescence hastens to yield its place to Recovery, because Guiatonic stimulates lagging appetite, and supplies iron, manganese, calcium, potassium, phosphorus to replenish the depleted mineral supply of the body; while quinine and strychnine add their urge to the depleted cells to help themselves toward regeneration.

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HEALTH MAGAZINE OF KANSAS

We have just received the first number of *Folks,* a popular health magazine published by the Kansas Medical Society, as announced in our Journal of August 1, 1931, page 998, and of April 15, 1931, page 504. The new magazine consists of sixteen pages, of the size of an ordinary medical journal. It is divided into four departments: 1. Scientific; 2. Home Folks; 3. Editorial; and 4. Little Folks.

Six scientific articles are published. The first is an introduction of *Folks* to the people of Kansas, and says:

"It is the intention to present in this magazine problems in health, of particular interest to Kansas people, as this varies in different states; for instance, the problems in Arkansas or Mississippi are quite different in many respects from ours. We want this magazine to have a distinctive 'Kansas flavor.' "

"The Romance of Typhoid Fever," describes the discovery of the cause of a water borne epidemic in Pennsylvania.

"Get Well in Kansas," describes a county tuberculosis sanatorium.

"How a Doctor Lost His Practice," is the most interesting and well written. It tells how Dr. Brown cut his income in half by suppressing epidemics of typhoid, smallpox, and diphtheria.

"A Column on Things that You Should Know About Your Family Doctor," is a plea to find out whether or not he keeps himself up to date by promoting his county medical society, and says:

"In this day and age when matters pertaining to the welfare and treatment of the sick are changing, advancing almost as constantly and rapidly as are the styles of milady's bonnet, the layman who does not know about the way his doctor keeps up to date or, as is frequently the case, fails to keep up, is paying for service that he does not receive.

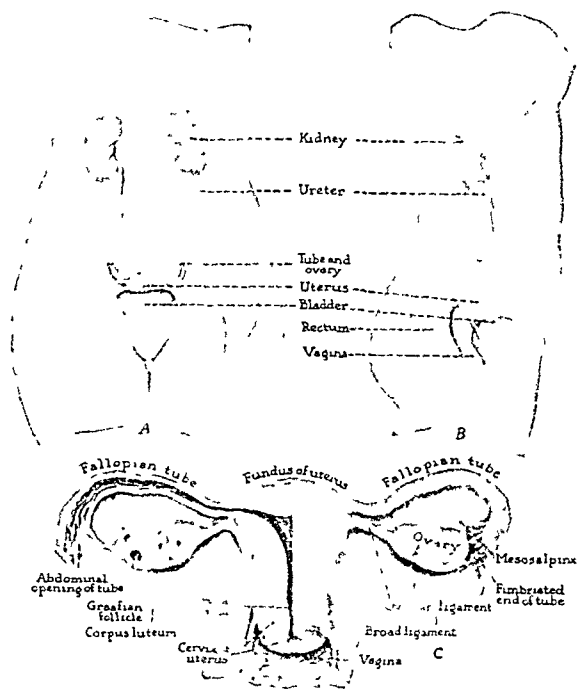
"You have every right to know these things. Learn if your doctor discusses medical matters with his colleagues at medical meetings as freely as he does with you, or perchance with the reporter for the local paper."

There are also articles on automobile accidents and cancer.

The department of "Home Folks" contains an article on ventilating the sick room and the use of cereals, and recipes from pre-Volstead days.

(*Continued on page 1239—Adv. xxix*)

ANATOMICAL STUDIES



GENITO-URINARY ORGANS IN THE FEMALE
A—Anteroposterior View, B—Lateral View; C—Uterus and Adnexa (at left with anterior one-half removed)

for the Practitioner

A Set of Anatomical Studies (in book form) furnished to physicians on request—upon receipt of 20c to cover mailing costs.

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(*Continued from page* 1238—*Adv. xxiii*)

There are also "Questions and Answers" on spinach, how much water to drink and heights and weights.

There are four editorials on the subject 1. No Secrets in Scientific Medicine; 2 Liver, A Remedy but not a Cure for Anemia; 3. Vitamins; 4 Mosquitoes—Some Prevalent Notions

The department "Little Folks" contains a few stories, with the usual "Lessons" appended.

Altogether *Folks* does credit to the Kansas Medical Society.

JUDGES AND COUNTY MEDICAL SOCIETIES IN MINNESOTA

The August issue of *Minnesota Medicine* records the reaction of county judges to the presentation to them of the roster of the State Medical Association, and says —

"Twenty-one out of forty-two reports from probate judges in Minnesota counties indicate that officials are wholly in favor of organized medicine and eager to cooperate with its membership

"This desirable state of things is revealed in the interesting reports that are coming in to the state office these days following the bestowal through members in the county seats, of the 1931 rosters of the association upon all county judges of probate in the state.

"Of the other twenty-one reported, only four seemed to the members concerned to be definitely indifferent or uninterested in the state association and organized medicine in general

"Many enthusiastic statements were quoted from the twenty-one friendly judges by reporting members.

"'Thank you. That is fine! said the Judge,' reports the Stillwater member. 'He thinks an M D. not belonging to a county society is like a lawyer not belonging to the bar association and NO GOOD.'

"Other emphatically friendly officials were discovered in Detroit Lakes, St James, Windom, Owatonna, Crookston, Little Falls, St. Cloud, Chaska, Wheaton, Ortonville, Glencoe, Cambridge, New Ulm, Marshall, Two Harbors and Worthington.

"Several judges in the various counties were not approached at all, mainly for the reason that, all of the physicians in the county being members of the association, the members felt sufficiently assured of official cooperation anyway.

"Two judges were reported in their dotage as a sufficient reason for lack of active interest in the matter. Another was rather astonishingly quoted as surprised to know that there was such a thing as a medical organization. Such a thing as expressing himself adverse to organized medicine was beyond the scope of his comprehension."

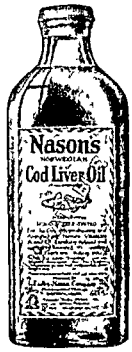


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But if you will recommend or prescribe Nason's Palatable Cod Liver Oil **by name,** he is sure to get a Cod Liver Oil—pleasant to take and of highest recognized vitamin potency.

The handling, preparation, testing and distribution of Nason's Cod Liver Oil from the Lofoten fishing grounds, and Nason's own plants in Norway to the finished bottled product is controlled by the Nason organization



Vitamin Potency Warranty
1000 "A" Units per gram of oil
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Accepted by Council on Pharmacy and Chemistry A M A

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Nason's
Palatable ~ Lofoten
Cod Liver Oil
The Better Tasting Kind

Send Coupon for Free Sample

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Gentlemen —You may send me (without charge) sample bottle of Nason's Palatable Cod Liver Oil

Name

Address . . . . . .

My Druggist's Name (N Y J 10 31)

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The Disturbances and
Hot Flashes of the Menopause**

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Functional disturbances of
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2% Solution

It stains, it penetrates, and it furnishes a deposit of the germicidal agent in the desired field.

It does not burn, irritate or injure tissue in any way.

Hynson, Westcott & Dunning

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PUBLIC RELATIONS COMMITTEE IN FLORIDA

The August issue of the Journal of the Florida Medical Association has an editorial comment on the newly formed Public Relations Committee:

"This committee has for its aim the educating of the general public regarding scientific medicine and the part the medical profession has played in advancing it, thus making this old world of ours a safer place in which to live. It will also instruct our public regarding facts in medicine in a positive and convincing manner, as contrasted with the fads and fallacies which arise from day to day flourish for an hour, but to fade and disappear.

"We believe its effect will be successful in curbing the rapid advance of state medicine and communistic ideas regarding medicine and will also lessen the influence of various cults on our gullible easily influenced public."

The editors comment on the difficulty of getting men to serve on the committee, but the committee itself meets it by providing for a rotation of appointments, each member to serve during five years. This plan is of doubtful value, for it may retain the indifferent and incompetent, and may exclude the qualified. It would probably be better to appoint all the members for one year, and reappoint those who show deep interest in the work.

The Journal reports the first meeting of the committee, at which four bureaus were authorized:

"The Speakers' Bureau would furnish to the medical societies topics to bring before the public; would furnish an already made talk which could be altered by each speaker according to his own ideas and general usage of the subject; would also furnish speakers to local societies when requested and also speakers and topics when requested to the Women's Clubs, Parent Teacher's Association, etc."

One section of the Radio Bureau planned twelve talks, as follows:

"(1) Some Interesting Medical History in Florida.—Edw. Jelks.

"(2) The Florida Medical Association; What It Is and the Value of Its Influence to the State.—Gerry R. Holden.

"(3) The Medical Profession.—G. H. Edwards.

"(4) The Medical Profession—Its Contributions to Charity in the State of Florida.—Ralph N. Greene.

"(5) The Medical Profession—Its Economic Contributions to the State of Florida.—H. C. Dozier.

"(6) The Medical Profession—Its Value to Society.—M. A. Lischkoff.

(*Continued on page 1242—Adv. xxxii*)

If the Patient Were Asked

Atophan

IN RHEUMATOID AFFECTIONS

Atophan is the original Phenylcinchoninic Acid... Trial supply gladly sent on request.

IN rheumatic affections the two most urgent symptoms that impress the patient are pain and ankylosis or inability to use the parts involved. From these he seeks relief.

That is why these manifestations demand first attention. When congestive swelling has disappeared, pain will be relieved and use of the organ will become possible.

ATOPHAN relieves pain, reduces congestion and fever, eliminates uric acid and inhibits its formation — consequently it accomplishes in rheumatic fever, arthritis and gout what constitutes the primary measure of relief.

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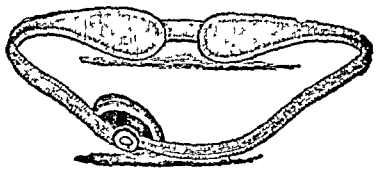
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You are safe in recommending a Pomeroy, for with us the welfare of your patient comes first—and this promise is backed by over sixty years of Pomeroy Service.

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SURGICAL APPLIANCES

16 East 42nd Street, New York

400 E. Fordham Rd., Bronx

Brooklyn Boston Detroit
Newark Springfield Wilkes-Barre

(*Continued from page* 1240—*Adv. xxx*)

"(7) What Surgery Has Contributed to Society.—Roy J. Holmes.

"(8) What Internal Medicine Has Contributed to Society—Robt. M. Davis.

"(9) The Value of a Hospital to a Community —Robt. B. McIver.

"(10) What Is a Class A Hospital—Its Security to the Patient and Its Value to the Doctor —J. Ralston Wells.

"(11) The Florida State Hospital Association —Its Aims and Aspirations for the Good of the Public.—John A. Bowman.

"(12) The State Board of Health (subject to be named).—Henry Hanson.

"Another radio section would be broadcast from four local stations once every two weeks on medical subjects. For example:

"(1) General, which would include health examinations, vaccine, diet, exercise, etc.

"(2) Specialties, such as Ear, Eye, Nose and Throat.

"(3) *X*-ray.

"(4) Pediatrics, and on through medicine and surgery.

"The Press Bureau would prepare fifty-two articles to put in the general press, starting with the larger presses such as Jacksonville, Tampa Miami, etc.

"It was decided to use as a basis for the program of talks, in so far as they would go, the subject matter as used by the Illinois State Medical Association."

CRIME DETECTION IN WEST VIRGINIA

An editorial in the September number of the *West Virginia Medical Journal* has the following reference to a report of Dr. W. C. Woodward Director of the Bureau of Legal Medicine and Legislation of the American Medical Association

"The committee has recommended, through the A.M.A. board of trustees, that each of the several states provide and maintain the equipment and staff necessary in this work for the service of all communities within its borders.

"Here seems to be another opportunity for the state university at Morgantown. During the past two years West Virginia University has established and maintained, through its various colleges and departments, a number of valuable services to promote the welfare of the state. The college of law, for instance, will draft municipal ordinances and codes for any city or town in West Virginia. The department of journalism has a routine system of news releases sent out regularly to every newspaper in the state. The college of agriculture fathers the extension de-

(*Continued on page* 1244—*Adv. xxxvi*)

DURING PREGNANCY

IN the preparation for motherhood  be the patient a young primigravida  or an experienced multigravida  slim and delicate  or generously built  besides the routine tests  among your urgent instructions  will be

"Regular bowel movements daily." That will prevent many a headache, feeling of lassitude, and perhaps hemorrhoids in the later months. You can prescribe AGAROL safely, because it exerts no effect upon the uterus nor does it interfere with lactation. Besides it is easily taken because it is palatable without artificial flavoring.

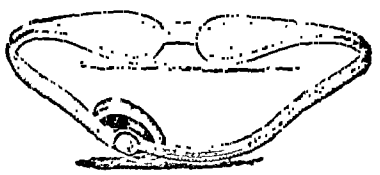
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Insist upon Pomeroy Quality
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(*Continued on page* 1244—*Adv. xxxvi*)

MEDICAL DEFENSE IN MISSOURI

The following annual report of the Committee on Medical Defense is contained in the July Journal of the Missouri State Medical Association:

"Disposition of Cases

"Cases pending May 1, 1930	14
"Threats pending May 1, 1930	4
"New cases during the year	11
"New threats during the year	6
"Cases settled during the year	5
"Threats which have not developed into suits during the year	1
"Cases pending May 1, 1931	20
"Threats pending May 1, 1931	9
"Financial assistance rendered during the year	$750

"As chairman of this committee I would like to make some remarks about this work which you as delegates should be familiar with and pass on to your colleagues. It would be impossible to go over all the cases, but some I will report.

"We lost two suits, both of them against one doctor, a case of injury to a leg in which it was claimed that he overlooked a fracture. The first suit was decided against the doctor and a verdict for $4,000. Both of these judgments have been appealed. A suit for $20,000 was defeated—a verdict for $1,000 for the defendant. One verdict of $2,500 against the defendant is still in the Court of Appeals. One suit was tried, and on demurrer was dropped. One suit was settled by the insurance company paying $150, and one suit for $100,000 was defeated and the verdict rendered for the defendant. Another suit was settled by the insurance company paying $100.

"Things are changing in this particular department, and instead of getting better they are getting worse. This little report I submit to you is merely a drop in the bucket compared with the number of malpractice suits filed and the number of threats in this State. We only have a very few of them, but when you figure that one company alone has had over 180 cases during this year, and taking into consideration the number of insurance companies in the State, you can imagine what it must amount to. Of course that includes dentists as well."

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MEDICAL PRACTICE ACTS IN TENNESSEE

The object of medical practice acts is well discussed in the following editorial from the September number of the Journal of the Tennessee State Medical Association:

"A large number of doctors misunderstand the purpose of the Medical Practice Acts. This is made evident to us by the communications which come to this office concerning violations, quacks, etc.

"The Medical Practice Acts were written for the purpose of protecting the public. They were written for the purpose of giving the public reasonable protection against crooks and quackery in medicine. They were never written for the purpose of protecting doctors against the inroads of quacks.

"When a lay person elects to take some patent medicine in the treatment of an ailment, he is exercising the privileges of his freedom. Such a practice in no way injures the medical profession. If penalty is to be paid, the person who takes the nostrum pays the penalty.

"So long as there are suckers there will be crooks. The burden that rests on the medical profession is that of making our professional services of the highest type possible.

"We injure ourselves and the cause of the profession when we attempt to use the Medical Practice Act to protect the profession of medicine against the influence of some quack. He does not injure us.

"If the science of medicine will not stand up before the public against all sorts of quackery it does not deserve to stand. The facts are it does stand—it will continue to stand."

(*Continued from page 1242—Adv. xxxii*)

partment to aid the farmers of West Virginia. Could not the school of medicine, under Dean John N. Simpson, interest itself in the establishment of a criminologic institute? We feel that it is an idea well worth thinking about, and we serve only as the middle-man to pass the idea from the American Medical Association to West Virginia University."

REPRINTS FROM THE KENTUCKY JOURNAL

Practically every author of an article in a medical journal orders reprints of his paper. The policy of the *Kentucky Medical Journal* is outlined in its August issue, as follows:—

"Immediately upon the appearance of an author's article in the Journal there is mailed a yellow reprint order by the Times-Journal Publishing Company, which contains the prices of from 100 to 1,000 reprints, with the notation that the type of this article will be kept until a certain date, usually about two weeks after the article has appeared in the Journal. The type is then 'pied' and melted, and is ready to use again for the next issue of the Journal. Many of our contributors have disregarded this reprint order entirely, until they have received requests for reprints, not only from the physicians in Kentucky but from many states in the Union. As this Journal has courtesy exchange with all of the State Journals, as well as many of the special Journals, it is not unusual in an especially interesting article, for the author to receive requests from ten different states,—then suddenly he realizes that he has not ordered reprints and must go to the expense of purchasing the Journal at 50c per copy, and is frequently not able to get all the Journals he requests, when for $2.00 he could have received 100 reprints.

"These reprint orders should be filled out immediately, and as is stated in the circular, mailed direct to the Times-Journal Publishing Company, Bowling Green."

"INTERPINES"

GOSHEN, N. Y.

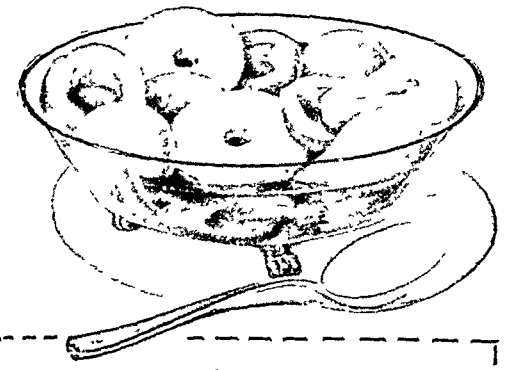
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CLARENCE A. POTTER, *M.D., Res. Phy.*



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MEDICAL DEFENSE IN MISSOURI

The following annual report of the Committee on Medical Defense is contained in the July Journal of the Missouri State Medical Association:

"Disposition of Cases

"Cases pending May 1, 1930	14
"Threats pending May 1, 1930	4
"New cases during the year	11
"New threats during the year	6
"Cases settled during the year	5
"Threats which have not developed into suits during the year	1
"Cases pending May 1, 1931	20
"Threats pending May 1, 1931	9
"Financial assistance rendered during the year	$750

"As chairman of this committee I would like to make some remarks about this work which you as delegates should be familiar with and pass on to your colleagues. It would be impossible to go over all the cases, but some I will report.

"We lost two suits, both of them against one doctor, a case of injury to a leg in which it was claimed that he overlooked a fracture. The first suit was decided against the doctor and a verdict for $4,000. Both of these judgments have been appealed. A suit for $20,000 was defeated—a verdict for $1,000 for the defendant. One verdict of $2,500 against the defendant is still in the Court of Appeals. One suit was tried, and on demurrer was dropped. One suit was settled by the insurance company paying $150, and one suit for $100,000 was defeated and the verdict rendered for the defendant. Another suit was settled by the insurance company paying $100.

"Things are changing in this particular department, and instead of getting better they are getting worse. This little report I submit to you is merely a drop in the bucket compared with the number of malpractice suits filed and the number of threats in this State. We only have a very few of them, but when you figure that one company alone has had over 180 cases during this year, and taking into consideration the number of insurance companies in the State, you can imagine what it must amount to. Of course that includes dentists as well."

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MEDICAL PRACTICE ACTS IN TENNESSEE

The object of medical practice acts is well discussed in the following editorial from the September number of the Journal of the Tennessee State Medical Association:

"A large number of doctors misunderstand the purpose of the Medical Practice Acts. This is made evident to us by the communications which come to this office concerning violations, quacks, etc.

"The Medical Practice Acts were written for the purpose of protecting the public. They were written for the purpose of giving the public reasonable protection against crooks and quackery in medicine. They were never written for the purpose of protecting doctors against the inroads of quacks.

"When a lay person elects to take some patent medicine in the treatment of an ailment, he is exercising the privileges of his freedom. Such a practice in no way injures the medical profession. If penalty is to be paid, the person who takes the nostrum pays the penalty.

"So long as there are suckers there will be crooks. The burden that rests on the medical profession is that of making our professional services of the highest type possible.

"We injure ourselves and the cause of the profession when we attempt to use the Medical Practice Act to protect the profession of medicine against the influence of some quack. He does not injure us.

"If the science of medicine will not stand up before the public against all sorts of quackery it does not deserve to stand. The facts are it does stand—it will continue to stand."

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A STUDY IN PEDIATRIC RHEUMATIC PROPHYLAXIS

Podolsky and Goldstein—Medical Journal and Record, Vol. CXXXI, No. 3, August 5th, 1931, page 139.

Along the lines suggested by Lee in his study of the prophylactic effect of acetylsalicylic acid in the prevention of the rheumatic syndrome in pediatric practice, the authors administered a combination of acetylsalicylic acid and magnesium to their series. In the group of nine potentially rheumatic children controlled by seven similar cases they found that acetylsalicyl acid probably exerts a prophylactic influence upon the rheumatic syndrome in children. They further found that acetylsalicylic acid with magnesium appears to be equivalent in such use grain for grain to acetylsalicylic acid alone. Calco Chemical Co., Inc., Bound Brook, N. J. See page xi.—*Adv.*

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NEW YORK STATE JOURNAL of MEDICINE

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THE PRESENT STATUS OF POST-OPERATIVE TREATMENT

By C. V. BURT, M.D., NEW YORK, N. Y.

From the New York Post Graduate Medical School and Hospital, New York City.

IN this paper I have made an effort to briefly summarize the immediate post-operative treatment, and to present practical procedures for the effective management of the complications that most commonly arise following operative interference.

Post-operative procedures for uncomplicated cases: It is no longer considered necessary to maintain the patient in a recumbent position or to withhold food for several days. As soon as the patient has reacted from his general anesthetic, he is placed in a sitting or semi-sitting position, and allowed to move about freely. In fact, we make it a practice to turn our patients from side to side every one to two hours. He is further permitted to take water in half ounce quantities in increasing amounts as soon as he has reacted from the anesthetic. The next morning he is given weak tea. Provided there have been no contraindicating sequellæ up to the morning or noon of the first day after the operation, we add full fluids, gruels, cereals, milk toast or other light foods. On the second day, potatoes, pureed vegetables, and, in short, everything except meat, are permitted. On the third day we allow a full diet. We feel that most patients may have practically anything they want to eat when they want it, except in gastro-intestinal anastomoses.

A water balance is maintained by the administration of 6 oz. of saline or tap water as retention enemas every four hours, or proctoclyses of 500 cc. of 10% dextrose in saline or tap water for the first 24 to 48 hours. If the patient is particularly dehydrated, hypodermoclyses of 1500 cc. of 5% dextrose in normal saline once or twice a day are given. These are discontinued as soon as the patient is retaining fluids by mouth.

Comfort is maintained by the hypodermic administration of morphine sulphate gr. 1/6 to 1/4 or pantopon gr. 1/4 every four hours as long as necessary. Morphine sulphate gr. 1/6 together with 2 cc. of 50% magnesium sulphate sometimes is very effective when the opiates alone fail. A combination of codeine sulphate gr. i with pyramidon gr. x makes a very effective preparation for less severe discomfort. After the second or third night, it is usually possible to obtain comfort with allonal, luminal, chloral hydrate or bromides.

In the uncomplicated cases, on the night of the second or third post-operative day, the patient is given a cathartic and on the morning of the third or fourth day, an enema. Where the site of the operation is above the colon, an enema may be given immediately after the operation, if desired. When the colon has been the site of an operation, as in resections of the cecum or sigmoid, one or two glycerine suppositories may be used very effectively.

Abdominal distention and gas pains are usually effectively relieved by the administration of soap suds, milk and molasses or alum (1 oz. to the pint of water) enemas. The injection of 1 cc. of pituitrin every 2 or 3 hours, with a rectal tube in position, very frequently provides relief from distention and gas pains. This is particularly effective where enemas have failed to produce desirable results. Where the distention is largely epigastric, the introduction of the small tube into the stomach, with evacuation of the fluid and gaseous contents very often provides great relief. Turning the patient on his abdomen helps considerably in the expulsion of gas. Fruit juices should be withheld for 3 or 4 days.

Not infrequently we are confronted with what we might call "nervous vomiting." In spite of the fact that these patients look well, present no distention and experience no undue amount of pain, they continue to vomit small quantities of clear or light green fluid. The insistence upon their eating solid foods and the administration of chloral hydrate gr. xx and sodium bromide gr. 50 by rectum every four hours will usually clear them up in the course of 24 hours. Often the ingestion of solid foods will serve the purpose.

Following spinal anesthesia, we place the patients on the transfer stretcher with the foot of the stretcher elevated 10 inches. We place them in bed with the foot of the bed elevated on 10

inch shock blocks, and keep them so for 12 hours. We give them water and other fluids immediately, even during the operation in some instances.

In cases of gastric resection, gastro-enterostomy and pyloroplasty, it is of considerable value to lavage the stomach every eight hours for the first 24 hours after the operation, in order to maintain alimentary tranquillity. These cases are given one to three ounces of water every hour, beginning two hours after they react from the anesthetic. Additional fluids are supplied by hypodermoclyses, proctoclyses and infusions where necessary. The water alone is continued orally until the second day, when fruit juices and sugar are added. On the third day, milk, gruels, thin cereals and pureed vegetables are given, and on the fourth day, solid foods are permitted.

It is very important to allow the family to see the patient immediately following the operation, in order that they may be reassured that the patient withstood the operative procedure. Visitors may be allowed up to the point of fatigue. They need not be restricted except in such conditions as hyperthyroidism.

Following abdominal operations, the dressings are not disturbed until the eighth day, unless the patient complains of pain in the wound or there is a temperature rise, thus indicating a wound infection. Ordinarily we remove skin and retention sutures on the eighth day, except in cases of carcinoma or debilitated or very obese patients, when the sutures are left in place until the 10th or 12th day. Cigarette drains are shortened on the 3rd day and entirely removed on the 4th or 5th day. Our patients are allowed out of bed on the 8th or 9th day and home on the 10th to the 12th day.

Post-Operative Complications and Treatment

Among the more important post-operative complications, and those which cause the surgeon the greatest concern and the patient the most discomfort are: shock, acute gastric dilatation, severe post-operative hemorrhage, leakage from imperfect intestinal anastomoses, sepsis, phlebitis, embolus, massive collapse of the lung, hiccough, starvation, dehydration, urinary suppression, acidosis and alkalosis. These require prompt and persistent treatment.

Shock

With the onset of shock, there is a collapse to a varying degree of the circulatory mechanism, the pulse rate rises, the blood pressure and temperature fall, cerebral anemia develops, and, as Heyd points out, hepatic detoxification is diminished. Of the measures most often employed to combat shock, Clark position or elevation of the feet, and the application of external heat rank uppermost. Practically, the most effective means of combating the lowered arterial tension and increased pulse rate is by the intravenous introduction of fluid. The fluid of choice is blood, though 800 to 1,000 cc. of normal saline or 10% dextrose in saline may be used with dramatic effect. Hot rectal instillations, such as black coffee, may be of value. Hypodermic stimulation, as caffein sodium benzoate (grs. viiss) or adrenalin may be used with some benefit.

Acute Gastric Dilatation and Dehydration

Within the first 24 hours after the operation, many patients become fatigued and nervous, and begin to hiccough, regurgitate or "spitup" small quantities of fluid. For several hours they have been unable to take or retain sufficient fluids orally, and are, as a rule, suffering from dehydration and acute toxemia. Frequently they present an acute onset of projectile vomiting of large quantities of fluid varying in color through white, green, yellow, brown and black, more commonly black. These are the most reliable indicators we have of an approaching acute gastric dilatation.

As soon as the patient presents any evidence of an impending acute gastric dilatation, we make it a rule to (1) deflate and empty the stomach and maintain it in a state of "rest," and (2) supply the system with adequate fluids.

1. *Gastric rest:* In order to place the stomach at rest and prevent the deleterious effect of the jejunal reflux, the stomach may be maintained in an empty state by the intra-gastric retention of a Levine tube, which is a soft rubber tube the size of a No. 16 French catheter. It is introduced through one of the nasal passages, after lubricating the tip of it, to the posterior pharyngeal wall. The patient is then permitted to drink water slowly. As he swallows, the tube is gently fed into the stomach, with practically no discomfort. The gaseous and fluid contents of the stomach are easily and quickly withdrawn through a syringe attached to the tube. If the quantity of fluid obtained is 15 ounces or more, or is very dark or foul, the tube is left in the stomach, and it is attached to the cheek by means of adhesive plaster. The free end of the tube is connected with a bottle attached to the side of the bed. The patient is then permitted to drink fluids as he desires them, or they may be introduced through the tube by means of a syringe.

Through syphonage, the stomach may be kept entirely empty or the tube may be clamped off any desired number of hours. Ordinarily, at first we allow the contents to run off for a few hours, in order to thoroughly empty the stomach and relieve it of the jejunal reflux. When the condition of the patient permits, we allow the contents to flow only during alternate hours. Gradually, we reduce the time during which the contents may escape until the patient retains all fluids, at which time the tube is clamped off constantly or is removed. The retention of the tube permits the

patient to satisfy his sensory and subjective sensations of thirst without endangering gastric tranquillity. This tube frequently is retained in the stomach for days. After the first 24 hours, there is practically no discomfort to the patient. Frequently he is fed through this tube. So great is the relief it provides that the patients not infrequently ask for its reintroduction.

It is very important to know how much of the fluid administered orally the patient is retaining. The evacuating capacity of the stomach provides this. We can determine this roughly by recording the intake by mouth and the output through the Levine tube. However, a more accurate estimation is desirable and available. The stomach is completely emptied through the tube, and at a certain time six ounces of water are given by mouth or through the tube, which is then clamped off. After a given period, say one hour, the contents of the stomach are aspirated. The difference between the amount given and the fluid obtained through aspiration represents the amount of fluid not exacuated by the stomach, or any excess over that given represents the reflux from the intestine.

Occasionally a surgeon is confronted with intragastric hemorrhage from an insecure gastroenterostomy. It is difficult to decide whether or not to reopen the abdomen to establish hemostasis. Aspiration of the gastric contents through the Levine tube at a definite time, and a repetition of this at stated intervals will often prove a very valuable aid in determining the amount of hemorrhage over a given period of time. This evacuation of the contents of the stomach also tends to check the hemorrhage.

2. *Fluids* should be supplied in every available manner, and in such form as to meet the desired requirements. We are concerned here principally with the use of normal and hypertonic saline solutions and dextrose in normal saline.

a. *Hypodermoclyses* meet all of the ordinary requirements in the post-operative cases. However, where the patient is in a moderate or marked degree of shock, and the pulse is of poor quality, or where there is acute toxemia with paralytic ileus, these sub-cutaneous fluids are absorbed very poorly. Under these circumstances, we much prefer to give fluids and carbohydrates intravenously, either as continuous venoclyses or separate infusions. Following prolonged operations or those of any severity, we usually administer 1,500 to 2,000 cc. of 5% dextrose in normal saline under the skin immediately after the patient returns to bed. A similar hypodermoclysis may be repeated once or twice during the next 24 hours. Usually by this time the patient is taking fluids by mouth, and the administration through other routes may be discontinued. After the patient reacts from the anesthetic, subsequent clyses are very painful, owing to distention of the tissues. This pain can be relieved to a considerable extent by injecting 5 cc. of a 2% solution of novocain into the delivery tube at the commencement of the clysis, and by adding 5 to 10 cc. of 2% novocain to the fluid in the container. The skin should be infiltrated with novocain prior to the insertion of the clysis needles.

b. *Proctoclyses* of 500 cc. of 10% dextrose in normal saline (0.9%) or tap water may be given every eight hours, in addition to either clyses or infusions, or a continuous Murphy drip may be instituted. These are usually poorly tolerated by the patients after the first one or two are given, and the percentage of absorption of the nutritive and medicated ingredients is small. Retention enemas of 6 or 8 oz. of normal saline or 10% dextrose solution every four hours are much less irritating, and are tolerated for a much greater length of time. Lugol's solution or other medication may be given with these instillations.

c. *Intravenous therapy* represents the introduction directly into the blood stream of physiologic and therapeutic solutions, which must be sterile, compatible with the blood and fulfill the indications desired.

The objective in the use of intravenous fluids is to provide fluid volume to increase the vascular tension and reduce dehydration, combat infection, and to supply food, chlorides and antiketogenic substances. The direct delivery of fluid into the veins inhibits peristalsis, places the alimentary tract at rest and renders the patient independent of his intestinal tract for several days, which is particularly valuable in cases of intestinal anastomoses.

The solution "par excellence" is whole blood. For economic reasons and because of the necessity of meeting the indications as quickly as possible, it is frequently not expedient to administer blood. Either normal saline, acacia, distilled water, or 5% or 10% dextrose in distilled water or normal saline may be used. We prefer the use of 10% dextrose in normal saline.

Any intravenous medications indicated, as insulin, digitalis, sodium iodide and calcium chloride, may be added to these solutions by injecting them through the delivery tube by means of a needle and syringe.

Mode of administration: The fluid is held in a suitable container, usually a glass bottle of 1,000 cc. capacity preferably with an attached mechanism for the maintenance of a constant temperature. Hot water bottles may be adjusted to the container so as to maintain the desirable temperature. The fluid should be delivered into the vein at approximately 100° F., which necessitates the maintenance of the fluid in the container at 120 to 130° F., since much heat is lost through the delivery tube. The container is suspended three or four feet above the level of introduction into the body, and is connected with a suitable needle by means of rubber tubing. The needle may be of any suitable size, but the ordinary 15 to 17

gauge blood chemistry needle is quite convenient. For continuous administration over a period of several days, a gold or silver plated canula is advisable. The ordinary needles do not remain patent for a sufficient length of time. A visible rectal dripper connected into the delivery system aids materially in the continuous administration of the fluid. Any superficial vein may be selected, but the median cubital or cephalic veins are most conveniently used. Those of the forearm and hand may be found useful.

The fluid may be introduced intermittently or continuously. At any rate the flow should be slow, particularly when a cardiac condition is known to exist. The sudden collapse of the circulatory mechanism, such as is experienced in a rapid loss of a large quantity of blood or a marked degree of shock, as following some cases of spinal anesthesia, brain surgical procedures or other conditions in which the vascular tension is extremely low, are the only indications for a rapid delivery of fluids intravenously.

Ordinarily fluids, other than blood, may be introduced at the rate of 1,000 cc. per ½ hour with a repetition two or three times during a 24 hour period. Frequently we give 1,000 cc. of 5 or 10% dextrose solution in normal saline intravenously at 8 hourly intervals when the condition of the patient is serious and the delivery of fluids into the system is imperative. At this rate the danger of overloading the heart is slight and the percentage of chills and temperature reactions is extremely small. Hendon[1] recommends a continuous venoclysis of 10% dextrose solution, given at the rate of 200 cc. per hour, or a range of between 4,000 and 5,000 cc. of fluid in 24 hours for an adult patient. In general, our tendency is to reserve intravenous fluids for rather urgent indications.

Infusions are far more comfortable for the patients than are the hypodermoclyses, they supply food and fluids directly into the vascular system, and, through distention of the blood vessels, produce a stimulation of the vital centers, which brings about an improvement in the patient's general condition. Very rarely have we seen any reactions which we thought were due to cardiac embarrassment as a result of the introduction of too much fluid into the vascular system or a too rapid delivery of the fluid.

The causes of chills, temperature elevations and other unpleasant reactions following infusions have been thoroughly studied. No definite conclusions have been reached. When we have kept the solutions in the containers at 120 to 130° F., these reactions have been so rare that we believe the delivery temperature plays a very important role in the prevention of these unpleasant conditions. Rademaker,[2] following a series of recent experiments, suggested that these reactions were due to alkaline impurities in the solutions.

Hendon has observed from clinical experience that about 200 cc. of fluid per hour, in the form of a continuous infusion, or 4,000 to 5,000 cc. of 10% dextrose solution per 24 hours approximately meets the physiologic requirements of the adult patient. In cases of septic infections, he found that one pound of dextrose a day could be cared for without sugar appearing in the urine. He states further that under these circumstances his patients were free from chills and sudden temperature reactions. At the above rate, the blood sugar was never more than 200, and it is said to return to normal within three hours. In 95% of Hendon's cases, the red blood cell count was increased following these venoclyses. With continuous infusion, using a gold or silver canula, Hendon found that a vessel would remain sufficiently patent for an average period of five days. The longest period of continuous administration was accomplished by Strickler who, by changing veins, kept the flow going for 21 days.

Hiccough

Hiccough may be an alarming, or even a fatal condition following operative procedures. Its etiology is not known. At first, attacks of singultus may appear for only a few seconds at a time, and gradually become more frequent and more prolonged until the patient is hiccoughing almost constantly. If this is permitted to continue, extreme exhaustion will result. Occasionally, persistent hiccoughing seems to precipitate a fatal termination.

There is no completely satisfactory treatment for this condition. In our hands the inhalation of a mixture of 10 to 30% carbon dioxide in oxygen has proved to be the most effective means we have of controlling hiccoughs. This is administered through a rebreathing bag, which is connected to a tank of the carbon dioxide mixture. These are kept in the patient's room, and as soon as he begins to hiccough he is immediately started rebreathing this mixture. It is continued until the respiratory excursion is marked, i.e., the inspiratory and expiratory phases are markedly prolonged and very deep, resulting in a greatly increased absorption of CO_2 and O_2. The respiratory rate is only slightly increased. Using this mixture and method of administration, one is usually able to stop the hiccoughing in from ½ to one minute. It is very likely that it will recur, and it is necessary to repeat the rebreathing procedure.

The administration of the carbon dioxide should be discontinued if the patient shows any signs of twitching of the fingers, forcible motion of the head or other indications of a convulsion, which sometimes occurs as a toxic manifestation during the inhalation.

Before the carbon dioxide is administered, the patient should be given any desired food or fluids, the shades should be drawn, and the room made absolutely quiet, so that it is not necessary

for the patient to move after the hiccoughs have stopped. Any motion of the patient or disturbance in the room are very likely to cause a recurrence.

A distended bladder is frequently a cause of hiccough, and an evacuation of the bladder contents will serve to relieve this symptom. In many instances relief has been provided by lavaging the stomach with alkaline solutions. Among the other preparations frequently used are: benzyl benzoate, Hoffman's anodyne, chloretone, belladonna, atropin, Tr. of valerian, Tr. of capsicum, purgatives, adrenalin, and, perhaps the most effective of all of these, opiates, chloral hydrate and bromides. It is very important to maintain the patient in a state of comfort and relaxation.

Urinary Suppression

Suppression of urine is invariably a serious symptom and calls for prompt treatment. It is especially liable to occur in patients in whom there is pre-existing kidney damage, for example, chronic nephritis. Not infrequently, following an operative procedure, a patient will manifest a partial or complete suppression of urine, which may be considered to exist when the output is 200 cc. or less in a 24 hour period. If it is 800 cc. or more we need not be concerned about a suppression.

It is said that a total suppression may be present for 10 to 14 days before death occurs, but a fatal termination from cardiac or respiratory embarrassment frequently occurs before this time. When anuria itself does not cause a demise, the accumulated toxic by-products act adversely upon the other organs, particularly the liver, and reduce their efficiency. Anuria may, therefore, be a primary or secondary cause of death.

Acidosis is almost, if not always, present when there is urinary suppression, and hence alkalies can be given in fairly large amounts without danger of producing alkalosis and tetany. The practice of giving alkalies without previous knowledge of the bicarbonate content of the blood plasma cannot be too strongly condemned.

There is experimental evidence to show that anuria may be associated with either an abnormally high or low plasma bicarbonate. Experience and experimental data indicate that the excretion of urine begins when the alkali reserve reaches a normal level, and that when the alkali reserve is maintained at a normal level, post-operative complications do not develop in patients with kidney damage where they might be reasonably expected. The pre-operative administration of alkalies will establish a normal alkali reserve and should prevent much of the post-operative suppression of urine.

The treatment of urinary suppression consists in stimulation of the kidneys and in promotion of elimination of waste products through the skin and bowels by means of hot packs, diaphoretics and purges. Counter-irritation to the kidney in the form of hot applications and warm colonic irrigations may be of value. It is extremely important to relieve any existing dehydration and acid-base imbalance.

Osman[5] believes that alkalinization of the system is very important in urinary suppression. He states that a mixture containing 30 grains each of potassium citrate and sodium bicarbonate may be given at hourly or two hourly intervals, or in case coma exists, an equivalent of a 3% solution of this mixture may be given by rectum. It is seldom necessary to give this intravenously. The difficulty of sterilizing sodium bicarbonate solutions for intravenous use makes this method very complex.

He says further that the administration of alkalies should be continued in these quantities until diuresis commences and reaches 15 ounces in 24 hours, at which time the dosage should be reduced, say one-third, but not withdrawn. If there is a decrease in the urinary output, the dosage should be increased. A sufficient dosage to maintain a satisfactory diuresis should be continued. Upon withdrawal of the alkalies, anuria is apt to recur and be extremely resistant to treatment.

The chief danger in the administration of alkalies is the development of alkalosis and tetany. When alkalies are being given, repeated determinations of the CO_2 combining power of the blood should be made.

Fluids should be given in adequate amounts through all channels, not less than, say, 2,000 cc. per 24 hours. In our hands, the intravenous administration of 1,000 cc. of 10% dextrose in normal saline two or three times in 24 hours has been the most effective diuretic we have used. Caffein sodium benzoate grs. viiss hypodermically every four hours has often proved of value in promoting kidney excretion. Usually we administer it in conjunction with the infusions. Alkalinization is undoubtedly an important factor in the treatment of partial or complete suppression of urine.

Septicemia

Not infrequently following the release of abdominal adhesions and other general surgical procedures, the patient's temperature will suddenly rise to 103 to 105° F., and begin to run a typically septic course. The patient appears acutely ill, the pulse and respiratory rates are increased, and there is an expiratory grunt. There may be pains in the legs, chest or other parts of the body suggesting phlebitis or multiple pulmonary emboli. The general reaction of the patient and the facies suggest a pneumonic process, but a thorough physical examination fails to reveal anything to account for the temperature, pulse and respiratory variations.

Occasionally agglutination reactions will demonstrate the existence of Malta fever. Much more frequently, however, a blood culture will show the presence of streptococci, B. coli or other vicious organisms in the blood stream.

As soon as a hemic infection is found to be present, prompt and persistent treatment should be provided. Blood cultures should be taken every two days. The type of organism present should be definitely determined, if possible. If it is a streptococcus and within a group for which a specific antiserum has been prepared, this serum should be given intramuscularly in doses of 5,000 units every day. If no specific antiserum has been prepared, we are unable to accomplish very much with the serum treatment. In the absence of a better means of treatment, we may give a like dose of anti-scarletinal serum every day. Further general therapy may be attempted by the intra-muscular injection of 5 cc. of spleen extract every day, as a stimulant to the hematopoetic system.

Bacteriophage is highly specific and by direct contact causes a lysis of the organisms, for which it is specific. Within the streptococcus group it is in the experimental stage and affords little hope for relief at the present time. However, in the B. coli and staphylococcus aureus and to a less extent in the staphylococcus albus group, it is very effective, and a sufficient number of strains of bacteriophage has been prepared to enable one to treat these infections quite effectively.

For staphylococcus aureus infections, we give 5 cc. of the bacteriophage intravenously every half hour until 40 to 60 cc. are given. If a chill, high temperature or other unpleasant reactions occur, we discontinue its use. We believe that the intravenous administration is more effective, though the intramuscular or subcutaneous injection in somewhat larger doses may be used. In the B. coli group, smaller doses are required.

We feel that repeated small transfusion and infusions of dextrose in normal saline are of great value. We prefer to administer 500 to 750 cc. of 10% dextrose in normal saline twice a day, and 350 cc. of whole blood every two or three days. It is of the utmost importance to maintain an adequate fluid and chloride supply, and to provide a high caloric intake. These patients should be encouraged to take as much food and fluids as possible by mouth.

Acidosis

Acidosis is a condition in which the alkali reserve of the blood plasma is reduced. Acidosis may be nephritic or ketogenic in origin. The majority of these cases are of nephritic origin. The chemical states leading either to acidosis or alkalosis are dependent upon dehydration, vomiting, diarrhea, anoxemia, incomplete dextrose oxidation or circulatory or renal insufficiency, and, as Heyd[4] points out, to hepatic dysfunction.

Marriott & Howland[5] ascribed the acidosis of nephritis to the failure of the kidneys to excrete acid phosphates, which make up 90% of the phosphates of the urine. These authors also noticed in a nephritic acidosis a decrease in the blood serum calcium, and that when the calcium dropped to 7 mgm. per 100 cc. or less, this decrease was accompanied by muscular spasms or distinct convulsions. Bandler and Killian[6] have called attention to a reciprocal relationship between the inorganic phosphorus and calcium—as the inorganic phosphorus decreases the calcium shows a return toward the normal. They suggest that the fatal outcome of the nephritic acidosis may be due to a reduction of the blood serum calcium to less than 7 mgm. per 100 cc. with death in convulsions, a termination in nephritis frequently mislabeled "uremia." Hence it is important in handling a nephritic acidosis to determine the carbon dioxide combining power and the inorganic phosphorus and calcium content of the blood plasma. The CO_2 combining power of the blood can be influenced by the administration of alkalies, but it is evident that these do not completely inhibit the tendency to acidosis, except insofar as alkalies may influence diuresis and hence promote the excretion of the retained phosphates.

It has been shown that calcium administered in any form causes an increased elimination of phosphates, chiefly by way of the intestines. The converse is also true. This suggests that the administration of calcium should prove of definite value in the treatment of nephritic acidosis, as well as the spastic or convulsive stages of nephritis, frequently called "uremia."

The acidosis of ketogenesis is thought to be due to the incomplete oxidation of fats as a result of the improper metabolism of carbohydrates, resulting in the accumulation in the system of ketone bodies.

Heyd and Killian[7] state that the diminution of the CO_2 combining power below 50 volumes per cent indicates a decrease in the alkali reserve and the onset of acidosis. When the CO_2 combining power drops to 40, a moderate acidosis is present; to 30 a severe acidosis; and to 20 an acidosis that will probably prove fatal (see Fig. 1).

The principal clinical manifestations of acidosis are: dehydration, vomiting, dyspnea with long sighing respirations, acetone breath and drowsiness, lapsing into coma. It must be recalled that from the clinical signs alone it is extremely difficult to differentiate between acidosis and alkalosis. However, vomiting is more marked in alkalosis, and acetone breath is present only in acidosis. The final diagnosis depends upon the presence of acetone bodies in the freshly drawn urine and a decrease of carbon dioxide in the blood.

Acidosis was formerly much more prevalent when it was the custom to starve and dehydrate patients for 24 to 48 hours prior to operation.

Much can be done in the preoperative period to prevent this by forcing fluids orally, by rectum, in some instances subcutaneously and even intravenously In the presence of jaundice or tumors of the large bowel or those involving the pylorus, or other conditions in which the fluid absorption has been small, we make it a practice for 24 to 48 hours before the operation to force fluids by mouth, give retention enemas of 8 oz of saline or tap water every four hours, and in many instances within a few hours prior to the operation to give a hypodermoclysis of 1,500 c c of dextrose in normal saline

The rationale in the treatment of ketogenic acidosis is based upon the assumption that this condition is the result of incomplete metabolism of fat, as a consequence of the lack of carbohydrate for "fats burn in a flame of carbohydrate" The concurrent dehydration also must be relieved

Depending upon the severity of the acidosis carbohydrate may be given orally, subcutaneously or intravenously We prefer the intravenous route, using 10% dextrose in normal saline, giving 1,000 cc at a time and repeating it two or three times in 24 hours Dextrose in this form acts almost as a specific through its antiketogenic properties, in that it supplies carbohydrate in a readily oxidizable form which permits the complete reduction of fatty acids It acts further as a diuretic, which assists in the excretion of phosphates and toxic by products of metabolism

The methods of treatment of acidosis of nephritis are based upon the promotion of kidney excretion, as well as relief from dehydration and acid-base imbalance This is most effectively accomplished by the intravenous introduction of fluids, preferably dextrose in normal saline, as in the treatment of ketogenic acidosis The more rapid the introduction of the dextrose solution, the greater the diuretic effect and the less the dextrose retention and metabolism

The alkalinity of the system may be adjusted so as to promote diuresis, and the acidosis may be reduced by the oral or rectal administration of bicarbonate of soda The dosage of alkali in the form of sodium bicarbonate is calculated according to the formula of Palmer and van Slyke, that is, 0 5 gram of sodium bicarbonate will elevate the CO_2 combining power of the blood plasma one volume per cent for each 42 pounds of body weight Giving sodium bicarbonate beyond this limit elevates the alkali of the blood plasma above the upper normal level and produces an uncompensated alkalosis, which may lead to death in tetany Concurrent with the administration of alkalies, the CO_2 combining power of the blood should be determined at least once in 24 hours

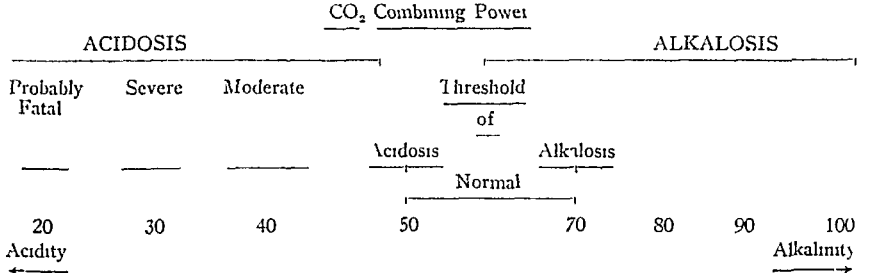


FIGURE 1

An increase in the CO_2 combining power toward 80 volumes per cent indicates an alkalosis, the reverse an acidosis (after Killian)

ALKALOSIS—TETANY

Alkalosis presents a clinical picture of shock plus intestinal obstruction It is only within recent years that attention has been directed to alkalosis as an etiological factor in the occurrence of otherwise baffling deaths It has been frequently confused with acidosis, acute paralytic ileus, intestinal obstruction and acute gastric dilatation

Alkalosis results from an acid-base imbalance, in which there is either an increase in the base or a decrease in the acid radical of the blood This usually results from persistent vomiting, with a rapid loss of chlorine in the form of hydrochloric acid Not infrequently, however it follows the indiscriminate use of alkalies in the pre operative and post operative periods Occasionally a patient is converted from an acidosis into an alkalosis by frequent gastric lavages with sodium bicarbonate solutions

With the onset of alkalosis, the patient may first begin to hiccough, he becomes nauseated, "spits up" and soon vomits He is unable to retain anything in his stomach At first the vomiting is accompanied by retching but later the fluid, which is green, brown or more commonly black, spills out of the mouth in large quantities The intestinal tract soon ceases to function and the

abdomen becomes considerably distended. There is present intense toxemia and marked dehydration. The patient appears acutely ill, his cheeks are sunken, his extremities are cold and clammy and his temperature is normal or subnormal, though he insists that he feels fine.

The diagnosis of this condition depends upon first the consideration of its presence as an etiological factor, and, in the last analysis, upon the characteristic blood chemistry findings, which show a rise in the nonprotein nitrogen (25-35 mgm. per 100 cc. of blood), a fall in the blood chlorides (0.45 to 0.50%), and an increase in the CO_2 combining power of the blood (50-70 volumes per cent). In alkalosis the alkali reserve is definitely increased above the normal, and the CO_2 combining power varies between 70 and 100 volumes per cent.

The general principles of treatment of alkalosis are based upon supplying adequate fluids, chlorides and dextrose or other readily oxidizable carbohydrate, and the promotion of renal excretion, elimination through the intestines, and relief of gastric dilatation and duodenal reflux, the latter two of which are discussed in detail under "acute gastric dilatation."

We believe that the requirements for the control of alkalosis, dehydration, starvation and suppression of urine are adequately met by the intravenous administration of 1,000 cc. of 10% dextrose in normal saline twice and 1,000 cc. of 2% saline in 24 hours, given eight hours apart. A similar amount of 5% dextrose in normal saline may be given, though with much more discomfort, by hypodermoclyses in case the intravenous administration seems inadvisable. In addition, one may give retention enemas of 6 oz. of saline or tap water every four hours, or a 10% solution of dextrose in normal saline or tap water as a continuous rectal drip or a 500 cc. Murphy drip of this fluid every eight hours.

The function of the dextrose is that of a diuretic. The advantage of the hypertonic saline is that it supplies a large amount of chloride with a moderate volume of fluids. The principal disadvantage of the hypertonic saline is that it causes thrombosis of the veins. Some of these cases that are receiving large quantities of fluids intravenously show edema of the feet and hands, and it is possible that this is due to the amount of sodium chloride in some instances and not necessarily to the amount of water given.

The acid salts, such as ammonium chloride and acid phosphates, have a tendency to reduce the alkali balance. The acid phosphate is given in doses of 4 cc. every 2 or 3 hours. If vomiting prevents its oral administration, it should be given by rectum, using twice this dose. These salts are so quickly neutralized that they accomplish little toward the relief from the alkalosis.

Insulin may be given with the dextrose solution at the rate of one unit of U-20 insulin for each 1½ gm. of dextrose. Not more than ½ of the carbohydrate given intravenously should be neutralized with insulin. Though the insulin accelerates the rate of metabolism of the sugar and the oxidation of the acetone bodies, it is not necessary except in cases of primary diabetes or hyperglycemia.

Tetany when present is almost pathognomonic of alkalosis. It is of serious import and requires immediate treatment. It results from a diminished available calcium in the blood stream. Snell[8] states that about 50% of the blood calcium is in combination with the serum protein and cannot be removed by diffusion. He states further that there is a diffusible portion, which probably protects the organism against tetany, and that it is upon the diffusible or available calcium that the parathyroid hormone exerts its effect. The parathyroid hormone is believed to be a calcium mobilizer. In case of deficiency of calcium, more calcium is drawn from the skeleton by its action.

Collip[9] has prepared an extract from the parathyroid glands of animals, which has proved very effectual in not only controlling the symptoms of tetany but in causing an elevation of calcium in the blood serum in normal animals. This parathyroid extract has been used clinically with good results in cases of tetany. It is given in doses of 20 to 30 units (1-1½ cc.) and, if necessary, is repeated 2 or 3 times in the first 24 hours. The doses are then diminished according to the condition of the patient. Hypercalcemia may be fatal unless the parathyroid hormone is discontinued.

Tetany is usually very satisfactorily controlled by the intravenous administration of 10 cc. of a 10% solution of calcium chloride, or it may be given according to the rule of 0.5 cc. of a 5% solution per kilogram of body weight. It may be necessary to repeat this dose once or twice at ½ hourly intervals. Anhydrous magnesium sulphate given intramuscularly in doses of 1 cc. of a 10% solution per kilogram of body weight, repeated if necessary in 15 to 30 minutes, sometimes is effective. Since this preparation tends to inhibit an already embarrassed respiratory mechanism, it should be used cautiously.

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VETERINARY ASPECTS OF UNDULANT FEVER*

By J. F. DE VINE, D. V. S., Goshen, N. Y.
From the J F. De Vine Laboratories, Goshen, N. Y.

UNDULANT fever, Malta fever, Mediterranean fever and Brucelliasis are synonyms for an ailment that has long been recognized as affecting man, and more recently lower animals.

Perhaps nowhere in the annals of veterinary medicine, do we meet with an inter-communicable infection with more vagaries than surround that occasioned by the Brucella group of organisms. The whole subject as to its transmissibility to man is clouded with a good bit of uncertainty. There seems to be missing a link, that if found, might explain the present *paradoxes and simplify prevention.*

Epochs in the History of Brucelliasis

The history of Brucelliasis has been rather unusual. Perhaps its great epochs might be divided as follows:

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Biological Characteristics of the Organisms of the Brucella Group

The organisms of the different species of lower animals are not, in a true sense, pathogenically inter-changeable. For instance, Cotton and Buck, of the United States Bureau of Animal Industry Experiment Station, proved that the Br. abortus of the bovine variety has a low pathogenicity for swine and that while the swine strain is more virulent for guinea pigs than the bovine, it fails to infect cattle by the natural route, though cattle may be infected with this strain by intravenous injection. It has been found that the swine germ may persist in guinea pigs for two years or more, whereas the bovine strain usually disappears within a year.

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reasonable to suppose that cows may become infected by porcine strains if kept in close proximity to swine. Theobald Smith holds very similar views.

Hardy's investigations of the clinical aspect of human cases of undulant fever in Iowa show that those yielding porcine strains suffered more severely than those yielding bovine strains.

A study of the organisms of the Brucella group reveals, at once, that they are rather unusual as to their ways of invasion, places of living and their biological behavior. For instance, the Br. abortus may invade the blood stream through the alimentary tract, through the skin, or through the conjunctiva and, while we are prone to think of abortion as a venereal disease, still no one has yet succeeded in infecting a bovine through the vaginal canal.

Here we have an organism that in certain species of animals, such as the female of the bovine may be manifest by cotyledonitis and placentitis, not infrequently causing death and expulsion of the fetus. The same organism may live and apparently thrive in the male animal of another species, without causing the least semblance of malignancy. It has been recovered from abscesses, such as fistulous withers in the horse. There may even be a striking difference in its behavior in the male and the female of the same species. For instance, it stands accused of causing an undulating fever in man and according to Larson and Sedgwick (1913) the serum of a number of women who had aborted gave a larger percentage of positive reactions when Br. abortus was used as antigen, than when the usual Wassermann test was applied, but the authors do not indicate that the clinical picture simulated, in any way, Malta fever.

Another unusual biological characteristic of the Brucella group is its low infectivity for young animals. According to Hasseltine, children have a very considerable immunity in the case of Malta fever, and we know this to be true in the case of young bovines. Calves born of diseased mothers may be allowed to live with their mother and drink her milk, or milk from the infected udders of other cows, for months, but if removed from such exposure, for a few weeks, the infection dies out and, if such animals are not exposed again, after they reach sexual maturity, most of them continue to give a negative reaction to the agglutination test: so, apparently the bovine strain of this group requires sexual maturity (a developed udder) for a suitable habitat and a pregnant uterus to become pathogenic for the host.

Our laboratories recently ran agglutination tests on a kennel of wolf hounds, fed on milk from cows that reacted to the abortion test. While some of these were mature dogs, most of them were puppies. All reacted to high dilutions yet suffered no inconvenience. Evidently sexual maturity is not essential in this species to become a carrier of Br. abortus.

Since beginning this paper, agglutination tests with Br. abortus antigen have been run on three of my laboratory associates with the following results:

No. 1—Working in the pharmaceutical department and not handling biologics or animals, an occasional milk drinker—in dilution 1-50, there was a weak and slow reaction.

No. 2—Laboratory Director, handles many blood samples and is around cattle, more or less, not a milk drinker—gave a weak and slow reaction in dilution 1-50.

No. 3—Laboratory assistant, milk drinker—in dilution 1-875 gave a rapid and complete reaction.

The blood reacting to the highest dilution (No. 3) was that of a young man, 23 years of age, a large, strong, athletic fellow, and apparently in perfect health, but the only one of the three being a heavy milk drinker.

At the same time, we also tested a neighbor, a baker, not in contact with farm animals or the laboratory and does not drink milk in any form. His blood gave a negative reaction to all dilutions—as low as 1-50.

This simply corroborates information that others have published.

Nicolle, Burnet and Conseil attempted to decide the question of the pathogenicity of Br. abortus for man by experiments on human volunteers. Five subjects were given massive doses (800 to 900 millions) of the organism subcutaneously and failed to develop any signs of infection, even agglutinins being absent from the blood.

The information they present would appear prima facia, to knock the whole theory of thansmission by simple contact or milk drinking into a cocked hat.

Pathological Characteristics of the Organisms of the Brucella Group

If we compare the pathological characteristics occasioned by the Br. abortus in the bovine and the Br. suis in swine with the clinical picture occasioned by the Br. melitensis in man, it would appear that there is no pathogenic relation whatever, but we shall need to admit that we have an analogous picture in the goat. The only manifestations of disease that Br. melitensis causes in the goat are the same as those occasioned by the Br. abortus in the cow and the suis in the sow, that is, abortion and its corollaries. The goat may not abort but act simply as a carrier, re-

maining apparently well and still infect man. This is exactly what the bovine and the porcine now stand accused of. There is one striking difference, however, and that is the regularity with which the micrococcus melitensis in goats' milk conveys the disease to man. You will recall that in 1905 sixty-five goats, all apparently healthy, were shipped from the Island of Malta to America. During the passage the goats' milk was drunk by the Captain and most of the crew with the result that nearly all those who drank the milk developed Malta fever. In contrast to this, thousands—yes, perhaps millions—are daily drinking milk carrying Br. abortus and the incidence of infection, according to reports, apparently is very low.

Investigators at the Cornell Veterinary College have found that about 20 per cent of the raw milk examined in that territory was infected with Br. abortus, as determined by the guinea pig test, and in one positive reacting herd 75 per cent of the animals were proved to excrete Br. abortus from one or more quarters. These data are in keeping with reports of many, many other investigators. For instance Schroeder and Cotton of the United States Experiment Station found milk infection in 83½ per cent of cows examined.

Some of the Characteristics of Br. Abortus Bovine

1. In the female bovine, the organism seems to have a particular predilection for placental tissue. In fact, it requires a pregnant uterus to become pathogenic, since the utero-chorionic space is the only place in the female bovine where the organism is known to produce pathological changes.

2. If exposure occurs when the animal is not pregnant, instead of becoming actively pathogenic, the organisms may locate in the udder or the lymphatics near the udder and cause no apparent systemic disturbance and still the animal's blood for years may give a high titre. This may also be true in the case of an animal that is pregnant. Or to make this statement more explicit, not all reacting bovines abort, even though their blood gives a high titre. Abortions in some infected herds may approximate 100 per cent, but in the case of mature animals, it is not an uncommon thing to have a considerable number of the herd react to a high titre and the actual abortions not exceed the percentage that may occur in a non-reacting herd—say around 5 per cent.

We have at our laboratories a mature cow that aborted an 8-months dead fetus, five years ago. Following abortion she was given the best possible care with our present knowledge. She has since conceived promptly and regularly and dropped four normal calves, but her blood and milk serum continue to give positive reaction to a fairly high dilution.

There was a cow at the United States Bureau of Animal Industry Experiment Station that Schroeder and Cotton proved, by guinea pig inoculation, carried infection in her udder for a period of over 7 years.

3. If on exposure a bovine animal becomes actively infected and aborts early in pregnancy, that is, while the cotyledons are still small and the circulatory system still primitive, the membranes slip away with the fetus and, so far as we can determine, the act of abortion, at this period, occasions little or no constitutional disturbance of the host. In fact, we have observed that when abortions occur early, most mares and cows show all the characteristics of estrum and that both of these animals will readily take service from the male, the same day they abort, or before the act of abortion is completed. I have also observed instances where conception took place on such occasions. This would indicate in the case of early abortions, that infection of the uterus must be of a low type, if conception and implantation can take place so promptly.

4. If a bovine animal does not abort early in pregnancy, that is not until after the 4th or 5th month, it is quite usual for such an infected animal to carry the fetus 7 or 8 months, or even the full term, the Br. abortus producing a low type of inflammatory irritation leading to necrosis of the chorionic villi and the maternal cotyledons. Cotyledonitis and placentitis are usually so severe as to cause retention of the fetal membranes with a resultant cervicitis, endometritis and, not infrequently, more chronic impediments such as pyometra, salpingitis, cystic ovaries or cystic degenerated corpora lutea. When the fetal membranes are retained, it has been the custom, as long as within the memory of those living, to attempt their removal by hand, the manipulation being spoken of as "unbuttoning." Since the villi of the chorion dip into the tufts of the maternal cotyledons, the membranes may be pulled apart or unbuttoned, if the inflammatory exudate has not become too solid. This procedure has been in vogue all these years and no special precaution has been taken by operators to protect themselves from infection and, so far as we can learn, infection has been exceedingly rare, this not withstanding that the fetal membranes and the uterus have been literally teeming with Br. abortus organisms. We now know the latter to be true and that the uterus continues to be infected for several days or weeks after an animal aborts, or goes full term and retains her placenta. In fact, the Br. abortus has been

recovered from the uterus as late as the 63rd day after abortion. This being so, it would seem as if there were some information wanting as to the present susceptibility of human beings, judged by the number of cases that are now reported as infected by contact with living or dead animals. My associates and I, in our practice, during the past 30 years, have manipulated or removed hundreds and hundreds of diseased placentæ and, so far as we know, we have suffered in no way from the procedure, and yet we have unintentionally done the very thing we would advise against, that is, it has been necessary to strip to the waist in all sorts of weather and sometimes in rather filthy surroundings. The usual procedure is to clean the external genitals as best can be and the hands and arms are lathered with warm water and soap. The arm is drawn in and out so frequently that the epidermis is often actually rubbed off. It is then customary to wash up in clean water and pass to our daily routine. So, I repeat, if thousands of veterinarians have gone on doing this thing, for years and years, it would seem strange that simply being in contact with live farm animals, or handling carcasses at abattoirs would be so conducive to infection. Such contradictory evidence surely suggests that there are other factors involved.

In view of information of this character and inevitable daily exposure of those who drink raw milk, the natural reaction is—if man is susceptible to Br. abortus and Br. suis, why are there not more cases of human infection?

Dr. Hasseltine sums up the situation rather logically. In his "Current Studies of Undulant Fever" he states, "I can't answer this question directly. However, if you can tell us why the milk-borne epidemic of typhoid fever in Montreal caused only about 1 person out of every 160 in Montreal to take typhoid, and why all of us who drank typhoid-infected water in the days before filtration and chlorination did not take typhoid fever, I will say that you will probably find that your answer will apply to the above question on undulant fever. We know that the Br. abortus is not present in large numbers in milk—50,000 per cubic centimeter being an exceptionally high number. We know that under laboratory conditions it takes Br. abortus a week to achieve any such multiplication as B. typhosus does in less than one day.

"We also know that the bovine strain of Br. abortus is less pathogenic for animals than the goat or swine strain. We believe that resistance to disease is a variable factor among persons, and differs in any particular individual at different times. We know from experience that seed and soil are not always the only factors necessary to insure reproduction. When we find the accessory factors that determine the incidence of infectious disease and learn how to control these factors so that the proper combinations for the production of disease will not occur, our communicable disease problem will be much simplified, if not completely solved."

While it is true that all this evidence is more or less controversial and in no way satisfying to the trained or untrained mind, still it is highly probable that it will aid research workers in eliminating the irrelevant and patching together the important and we must admit that out of it all there has come epidemiologic data as to Br. abortus bovine and Br. abortus suis causing a serious illness in man that is in no way distinguishable from melitensis. For reasonable proof we need only refer to such evidence as has been published by Evans, Carpenter, Burnet, Huddleson and Hasseltine.

Affirmative Evidence

Information on the transmission of Br. abortus bovine and Br. abortus suis to man bears origin with the acute observations made by Alice Evans in 1918. Since then a wealth of literature has sprung up in most every civilized country in the world. Of all that has been published, perhaps none is more conclusive or convincing than that given us by Carpenter and Merriam. In the summary of their report on "Undulant Fever from Brucella Abortus" (1926) they state "From two patients with undulant fever, two strains of micro-organisms indistinguishable from Brucella abortus have been isolated. The organism was isolated seven times from the blood and twice from the urine in Case 1, while it was recovered only twice from the blood and not from the urine in Case 2. There was a marked difference in the severity of the disease in these cases. The course in Case 1 was extended over a period of twelve weeks. The patient was confined to his bed practically all this time. There was extreme emaciation and anemia with marked debility. The temperature was of the remittent type and fluctuated between nearly normal in the morning to 103 and 105 in the evening. This high temperature was followed by a chill and profuse sweating, after which the temperature returned gradually to normal.

"Case 2 was comparatively mild. The patient was not confined to his bed during the course of the disease, but he rested often in the afternoon because he felt weak, tired and unable to work during the whole day. The type of fever was identical with that in Case 1, but the temperature was never higher than 101.5. There was practically no change in the blood picture. All of the other symptoms

were essentially the same as those observed in Case 1, except that all were much less serious. Biologically, the two cultures isolated from these cases behaved like Brucella abortus (Bang). By the agglutinin absorption test, they showed that they were of the abortus variety rather than melitensis. We produced abortion in two heifers in their first pregnancies by injecting some of the culture intravenously. A placentitis typical of Brucella abortus infection in cattle was caused, and the cultures were recovered from the placentas and various organs of the fetuses. The cultures were virulent for guinea-pigs and produced lesions, which in their gross appearance, were typical of those produced by cultures of Brucella abortus that have been isolated from cattle."

In another report Carpenter states, "Abortion was produced in five pregnant heifers by the intravenous injection respectively of five strains of human source. The organism was recovered from the colostral milk, placenta and fetus. The infection established itself in the udder and was present in the milk of one case for 6½ months after the animal aborted. The cultures isolated from man were more toxic for the pregnant heifers than the bovine types and produced abortion in a shorter time than have bovine strains as reported by other observers."

Prevention

All of this naturally leads to the question of prevention. Two methods suggest themselves rather clearly.

One is eradication of contagious abortion in cattle and swine.

The other is pasteurization.

While many progressive livestock owners are attempting to rid their herds and flocks of this scourge it will, of necessity, require a long, tedious pull.

As to pasteurization: again quoting Hasseltine, "In cities having only a portion of their milk pasteurized, undulant fever has picked out the user of raw milk with as much precision as smallpox picks out the unvaccinated.

"In the January issue of the *Health Messenger* of the Illinois State Board of Health, it was reported that Arnold had found that 140°F. for 40 minutes was required to kill certain strains of Br. abortus. He did not give details, and it will be noted that the temperature he employed is 2 to 3 degrees below standard pasteurization temperature. On the other side numerous investigators have reported pasteurization temperature and exposure effective in killing the various strains of Brucella."

In the face of all this affirmative data, it would seem that until we have more definite knowledge on the whole subject, those who advocate where practicable the pasteurization of all milk not coming from abortion-free herds are giving good advice and supporting rightful public health policies.

I have purposely avoided burdening you with wearisome statistics, but have appended a list of references for any who may be sufficiently interested to review such data.

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PSYCHIATRY IN RELATION TO LITERATURE*

By LOUIS J. BRAGMAN, M.D., SYRACUSE, N. Y.

PERHAPS an apology should be necessary in presenting such an unclinical subject as the relation of psychiatry to literature before a practical medical organization. Yet there are certain approaches to this topic that are of proper and pragmatic interest to the psychiatrist. For there are undisputed lessons to be learned from the psychopathological aspects of life and

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letters that are of immense importance for a complete realization of the problems that face the prosaic patient. Psychiatry has contributed enormously to an understanding of creative expression, and particularly to literature; similarly, literature has bestowed considerable of value on the art and science of psychiatry.

There is no other department of medicine that ramifies to the extent that psychiatry does into all fields of human thought and activity. In addition to the usual physical, chemical, and biological sciences it utilizes material from sociology, psychology, religion, anthropology, genetics, among others, and even makes use of mysticism and metaphysics. Especially does it affiliate itself with the sublimating achievements of the human race—with music, painting, sculpture, and all forms of literary and artistic expression. In fact, it is the outstanding strength and weakness of the psychiatrist that he sits with the gods on Mount Olympus, and attempts to survey and comprehend, in his own peculiar fashion, all the mechanisms of what Voltaire called this best of possible worlds.

Should one grant this viewpoint to be correct, it will be found that the psychiatrist looks at the manifestations of the human comedy and tragedy at large to be merely nothing more than specific types of understandable human behavior, on a grand or minute scale. From one extreme to another, from world wars to marital discords, from epic poems and paintings to schizophrenic dabblings, from world re-creating inventions and discoveries to perpetual motion devices, life is seen as a matter of degree and of relativity.

This is particularly true in the realm of letters. What lessons in psychopathology can be gleaned from a study of literature? The average patient who offers himself to the psychiatrist shows on the surface very little of psychodynamic interest; and often what lies beneath is diluted in nature, difficult of access, and quite presumptive to the understanding. But a close study of the unconsciously motivated productions of the makers of literature very often gives a magnified perspective of the manner in which the mind in distress attempts to solve its conflicts. As Nelson Antrim Crawford says, speaking of *Literature and the Psychopathic,* in the *Psychoanalytic Review* for October, 1923: "To the student of abnormal psychology the legend, popular literature, and literature revelatory of actual life, are all significant. In the legend he finds race taboos, in the popular literature of the day he discovers this re-inforced by the mass of contemporary racial taboos, in literature that aims to be realistically revelatory of life he finds material for study such as he can hardly obtain from any group of patients." In the lives of those souls who, as Jeannette Marks says in her book *Genius and Disaster,* are crushed by a cruel social mechanism and are accordingly more often God than realized, can be discerned, on the basis of their writings, their inner discords and their concomitant strivings for harmony. For just as a master of words, a *menschenkenner* such as Dostoievsky can give a more vivid, a more realistic picture of epilepsy or idiocy than the clinically astute but ingloriously mute physician, so can a gifted, inspired poet or painter, for instance, depict in more glowing words or colors than the narrow, halting patient, the definitely painful situation from which he is suffering or of which he is becoming aware.

In writing what was to be his favorite poem, *The Chambered Nautilus,* Oliver Wendell Holmes said that he was filled with "the highest state of mental exaltation and the most crystalline clairvoyance" that had ever been granted him. For, he declared, the poet's special gift was that "lucid vision of one's thought and all forms of expression which will be at once precise and musical."

Is the cognizance of this mental exaltation, this crystalline clairvoyance, this lucid vision of significance to the psychiatrist? Can he interpret this creative inspiration as a form of dynamic action which has its source in the unconscious mind of the creator? In other words, is there a continuity, a universality, in that all forms of writing are allied by representing a need for self-expression on the part of the author? And would it not seem that the greatest step in psychiatry consisted in breaking away from the Kraeplinian method of classifying the patient, and instead, listening and observing to comprehend the vital urge back of the symptoms? If this is true, it is true reciprocally for literature and psychiatry, for writer and patient.

And it is undoubtedly true, that "a chaotic self-state," as one writer puts it, "drives the artist to strike at the world's wrongs; that great writing springs from a terrible driving unrest." And it would seem true, despite the judgment of Louis Untermeyer, the poet and critic, who declares:

"Certain types of great art *may* spring from fever, maladjustment, hypersensitivity, discontent; but even more of the world's masterpieces —in words and wordless—have risen from nothing more 'heretical' than peace, acceptance, affirmation."

For is not this peace, acceptance, and affirmation merely the negative, the passive phase, the submissive factor, representing no less turmoil and discontent for having been suppressed and submerged? Did not Shakespeare "mirror the tragedy of his own being, reflecting lust, hate and jealousy?" Did not mental warfare produce Beethoven, spiritual conflict the visions of Blake, inner troubles DeQuincey, Baudelaire, Coleridge, Rossetti, Swinburne, and the Thompsons? Cannot an ample psychiatric case be made out for

each of the great and enduring names in American literature: for Poe, Emerson, Thoreau, Hawthorne, Melville, Whitman, Mark Twain, and Henry James?

For all this, psychiatry answers that genius and psychosis are inter-related, that the works of men grow out of their mental torments which made their lives miserable but produced masterpieces of strange and weird and lasting beauty. And what are these masterpieces if not clinical outpourings? E. Graham Howe, writing on *Motives and Mechanisms of the Mind* in the *Lancet* for Feb. 14, 1931, says: "It is probable that much that has been written and much that has been said would never have seen the light of day had there not been emotional repression behind it." In an article in the Proceedings of the Royal Society of Medicine for May, 1930, called *Psychiatry in Relation to Biography and History,* Hubert Norman offers further proof that "much of the best, or at any rate, the most impressive work in the world is the product of individuals in a state of unstable nervous equilibrium." And C. Macfie Campbell, in a study of *Psychology and Biography,* in the *American Journal of Psychiatry* for March, 1931, shows that there is much of psychopathological value to be obtained from an investigation of biographies and autobiographies as case histories. For, he says, biography demonstrates "that outside the clinical field there are a great many experiences which form part and parcel of the varied texture of human life and which are not monopolized by the patients of the psychiatrist." *Genius and Disaster,* by Marks, *The Man of Genius,* by Lombroso, *The Insanity of Genius,* by Nisbet, and *The Great Abnormals,* by Hyslop, afford numerous and detailed instances of this relationship between conflict and creative sublimation.

In addition to a study of the works of frustrated genius, the psychiatrist can well profit by an analysis of those novels that are reputably not entirely sane. One need not always presume that the author has outstanding conflicts, in these instances, for it is conceivable that some writers can objectify, can penetrate into the souls and lives of their characters, and thus give clinical verisimilitude to their creations. It is one of the incidental outcroppings of the widespread knowledge of the doctrines of Freud that artists in all spheres have striven to re-create and re-animate the mechanisms he has promulgated. The works of D. H. Lawrence who more than any one man except Dostoievsky, wrote his pathological condition down in his books, Waldo Frank, and Marcel Proust are some outstanding examples. De Maupassant's *H'ourla,* James' *Turning of the Screw,* Stetson's *The Yellow Wall Paper,* which treats of hallucinosis associated with exhaustion, Beraud's *Lazare,* a study of double personality, Dominique's adventures of a madman called *Notre Dame de la Sagesse,* and more recently the works of Julian Green—notably *The Closed Garden,* and *The Dark Journey,* offer a tremendous wealth of clinical material to stimulate the diagnostic and descriptive acumen of the psychiatrist. George Duhamel's *Midnight Confession* is a study of dementia precox; general paresis is the central theme in Paul Morand's *La Nuit de Portofino Kulm;* and *The Paranoic* is depicted in a story by that name by Dr. George L. Walton. Huysmans and Proust among others, knew 'degeneracy' in the quick, and their descriptions of it are recognized psychopathologically as true to life. As stated by Groves and Blanchard in their *Introduction to Mental Hygiene,* in the chapter on *Mental Hygiene Aspects of Literature*: "There are many contemporary novels which so closely parallel actual experience that they can be recommended to the student who would learn to understand human conduct. They are as true to the principles of psychology and psychopathology as are the case records of a clinic."

From another angle the relation between psychiatry and literature can be surveyed in an investigation of what might be called personal human documents. The bibliography of studies in self-revelation and self-revaluation by the mentally afflicted has in recent years been rapidly mounting. The best known, of course, is *The Mind That Found Itself,* by Clifford Beers. But a large number of others can be cited, the readings of which are well worth while to the psychiatrist. In James Hendrie Lloyd's *The Case of William Cowper,* is found a reference to the memoirs of this poet who had recurrent melancholia and suicidal impulses, and who, in 1816, described his own mental state. E. G. O'Donoghue, in his *Story of Bethlehem Hospital,* refers to the remarks of Cromwell's porter, who described his own madness. In 1871 the impressions from the inside of a hospital for the psychotic from the standpoint of a patient were given in an anonymous book called *Behind the Bars.* Arthur Symons wrote *Confessions—A Study in Pathology,* in which "this critic and translator charts his own reeling back and forth across the slender line that separates the sober health of the mind that we call reason, and headlong insanity."

Gerald de Nerval, the romantic poet, in his *Le Reve et la Vie,* presents his psychosis as a marvellous adventure into psychic realms. In the *Diary of an Unsuccessful Man,* Barbellion gives the steps in the downfall of his mentality. Norman Douglas, author of *South Wind* and *Goodbye to Western Culture,* presents in *Nerinda,* in 1901, a study of what he calls his progressive insanity. In a footnote to *Nerinda,* Douglas refers to the *Inferno* of Strindberg as "a convincing study of the borderland between reason and unreason, of the paranoic temperament as revealed from within," and adds that it should serve as a

textbook for medical men. *The Shutter of Snow,* by Emily Holmes Coleman, contains a description of the psychotic experiences of a former state hospital patient. *Reluctantly Told,* by Jane Hillyer, is the autobiographical sketch of the sensations, ideas, and reactions of a woman going through a psychotic attack. "Here," writes a reviewer, "one can follow the tension, the dissociation, the tenuous hanging on to some semblance of ego function, and a final compulsive defense mechanism which would wall up the spiritual abscesses and prevent self-destruction." This work, a paragon of literary and dramatic style, is compared with *Selbstschilderung der Verwirtheit,* by an assistant in the psychiatric clinic at Heidelberg, which contains much of the same kind of material in quite a different form. *A Challenge to Neurasthenia Through a Patient's Eyes* is a recent book by Doris Mary Armitage. A self-study in perversions is given in *The Invert,* by one who calls himself *Anomaly. The Recovery of Myself,* by Marian King, with a preface by Adolph Meyer, relates a patient's experiences in a hospital for mental disease, following her adventure with veronal. Giovanni Papini, according to the chapter on *Lunatics in Literature* in Joseph Collins' *Taking the Literary Pulse,* was admittedly autobiographic, in *Un Uomo Finito,* a revelation of morbid childhood, raging adolescence, furious flights from reality, near-delusions of grandeur, aspirations towards omnipotence, and descent to depths of depression. A. C. Benson, in *Thy Rod and Thy Staff,* gives a detailed account of a long depressive experience.

The *tour de force* of personal documents, of interest to psychiatrists, is *The Locomotive God,* by William Ellery Leonard. Studied together with his lengthy sonnet-sequence, *Two Lives,* and his book of verse, *A Son of Earth,* a masterful self-presentation of the case of a *phobiac* reveals itself, unparalleled perhaps save by Rousseau's *Confessions* in the literary history of soul-baring. Two comprehensive analyses of the case of Leonard have appeared in psychological journals. Thus the psychiatrist can aptly paraphrase an old saying, and express the wish that his patient write a book, for thereby hangs understanding for the physician, and comfort in catharsis for the afflicted. In juxtaposition with these free and impassioned outpourings, scientific textbooks and clinical reports of detailed cases are barren and dull.

Another aspect of the relation between psychiatry and literature is found in connection with the so-called new school of literature comparable to what has been termed *futurism* in art. Here one encounters the stream of mental activity and the content of thought of such obtuse and obscure writers as James Joyce with his *Ulysses* and *Work in Progress;* Gertrude Stein with her *Tender Buttons;* T. S. Eliot with his *Waste Land,* and others, who follow closely the stereotypies, the mannerisms, the repressions, the archaic ways of thinking, and the symbolizations of the schizophrenic. Considering only the symbolism, one finds that it has exercised quite a generating force in modern literature. Edmund Wilson, in a recently published study in symbolism called *Axel's Castle,* finds that in relation to literature symbolism represents an effort to communicate by means of a unique personal language ideas, feelings, and sensations more faithfully than they are rendered through the conventional and universal language of ordinary literature. Mallarmè, the great symbolistic French poet, had an imagery so personal that few people in his day could understand his work any more than Joyce and Proust today can be comprehended. Modern symbolists are even using multiple associations, which are supposed to include and fuse characters, places, motifs, and patterns of behavior. Is not this condensation, this unique personal language, this departure from ordinary modes of expression the business of the psychiatrist to unravel and ferret out, as to the wish that lies back of the disguise? Is it not true equally of the psychoses and of symbolic literature that each deals with the cultivation of private phantasies in the face of contemporary reality, that thus the writers if not manifesting, at least are escaping from a neurosis by the exercise of a primitive or childlike attitude? As one reviewer says of the modern Imagists, they are "a band of adolescent escapists in one way or another cut off from the direct realities of their time." Can the meaning of this type of literature otherwise be understood?

It may be inferred from these relations of psychiatry to literature that to the alienist nothing should be alien. It can further be surmised that a great share of literary criticism must perforce be psychobiological, for the human element is always to the fore; the feelings, instincts, urges, hopes, and disappointments of the writer play an integral part in his creations. From a non-psychiatrical angle this situation is not as morbid as it may seem—*Khubla Khan* is no less perennially beautiful for having been hasheesh-dream conditioned. John Greenleaf Whittier said: "A physician could not be otherwise than melancholy—he sees incipient disease where the uninitiated see only delicacy." But great writing is no whit less great for the conflicts that gave it birth; and to the psychiatrist an inestimable benefit accrues if he approaches literature in this fashion.

THE IMPORTANCE OF VENTILATION IN OXYGEN TENT AND OXYGEN CHAMBER THERAPY

With a Description of an Improved Oxygen Tent

From the Department of Medicine of the College of Physicians and Surgeons Columbia University and the Presbyterian Hospital, New York City

By ALVAN L. BARACH, M.D., NEW YORK, N. Y.

THE development of modern oxygen therapy in the form of oxygen tents and oxygen chambers necessitated the use of confined atmospheres with artificial systems of ventilation. In the provision of high concentrations of oxygen it has become increasingly evident that atmospheric conditions should be provided which in themselves make for the comfort of the patient.

In the provision of a healthful air environment one of the most important considerations to be borne in mind is the capacity which the surrounding atmosphere possesses of facilitating or retarding the rate at which heat is dissipated from the human body. The heat-loss from the body varies in its mode, depending on the temperature, humidity and velocity of air motion of the surrounding environment. At certain atmospheric conditions characterized by high temperatures, dissipation of heat by radiation, convexion and conduction are zero. At these points cooling is accomplished solely by evaporation of water from the skin. It has been found that certain combinations of temperatures, humidities and air motions may be made which feel alike to the human body and which result in a constant rate at which heat is dissipated. These are called "effective temperatures."[1]

Thus, air at 95°F. with a relative humidity of 10% seems no warmer to one's body than when the air is 75°F. with a relative humidity of 100%. The American Society of Heating and Ventilation Engineers have worked out combinations of temperature and humidity which give the same feeling, although the temperature itself may vary widely, viz.:

Temperature		*Relative Humidity*
95°	with	10%
90°	with	23%
85°	with	43%
80°	with	68%
75°	with	100%

Both the rate of heat production and heat-loss from the body are the same at any given effective temperature, regardless of humidity or air motion. Comfort zones have been established in which normal individuals feel best. At *increased effective temperatures*, which tend to retard the loss of heat from the body, interference in the normal functioning of the various organs takes place with changes in well-being, rate of heart beat, arterial blood pressure, body weight and other physiological criteria. In the table below from Houghten and Yagloglou,[2] the atmospheric conditions along the 70°F. effective temperature line for still air are given.

TABLE 1.—Atmospheric Conditions along the 70°F. Effective Temperature Line for Still Air, from the Data of Houghten and Yagloglou. The Skin Surface Temperature is always 95.2°F.

Relative Humidity %	Dry bulb Temperature °F.	Difference of Skin and Dry bulb °F.	Relative Difference of Fourth Powers of Absolute Temp. %
100	70.0	25.2	100
90	71.2	24.0	95
80	72.5	22.7	90
70	73.9	21.3	84
60	75.3	19.9	78
50	76.9	18.3	72
40	78.7	16.5	66
30	80.8	14.4	59
20	83.0	12.2	52
10	85.6	9.6	41
0	88.4	6.8	28

At an effective temperature of 70° F., where the humidity is very high, most of the heat will be lost by radiation, convexion and conduction. If the humidity is low a larger proportion of the heat will be dissipated by evaporation. The sum of the loss of heat remains the same.

Although the rate of heat loss is always the same at a given effective temperature, the mode of heat loss is altered, depending upon the humidity, temperature and the velocity of air motion. It is obvious that radiation, convexion and conduction will be largely employed in the presence of a high humidity and a low temperature whereas the rate at which water becomes available for evaporation will be increased with a low humidity and a high temperature. These general considerations have emphasized the importance of heat transfer from the human body to the air. The comfort zones established for normal people, however, do not apply to patients suffering from febrile or dyspnœic conditions. In actual practise, the dyspnœic patient with pneumonia or heart disease appears more comfortable at lower effective temperatures than that established for normal individuals. Furthermore, the existence in temperate regions of a wide latitude of temperature variation renders the maintenance of a rigid effective temperature zone undesirable.

Under ordinary conditions during the winter a temperature between 60 and 68 degrees with a relative humidity between 35 and 50% appears

to be the most comfortable zone for patients suffering from shortness of breath, either due to pneumonia or cardiac failure, in our experience. The constitution and the taste of the individual patient must be reckoned with in deciding whether the lower or higher temperature in this range should prevail. During the hot summer weather when the temperature mounts above 90 and the humidity above 60% the patient with dyspœna is especially harmed by the increased difficulty in heat loss. A modification in the atmospheric conditions which would result in a 10-15 degree temperature drop with a lowering of the humidity to between 45 and 50% will in itself cause a feeling of increased well-being even before oxygen has been added to the air. However, a drop in temperature from, let us say, 92°F to 62°F in an oxygen tent would be an unwise procedure. The patient, who may be removed from time to time from the tent, would under these circumstances be exposed to a sudden 30° increase of temperature. This would give him an immediate sense of suffocation until he had compensated in a new way for the increased temperature. Such sharp changes in atmospheric environment would reasonably seem unwise to administer to a patient whose cardio-respiratory mechanism is already impaired. If an oxygen chamber is employed it is more feasible to maintain the patient at a much lower temperature than that of the outside air, provided that the temperature is gradually elevated before the patient is removed.

There is, however, ordinarily no reason for having a temperature and humidity higher in an oxygen tent or oxygen room than that of the hospital or house in which it is placed. As a rule buildings are heated during the winter to maintain a temperature between 68 and 72 degrees; during the summer they take on the temperature of the outside air. When the ventilating system of a tent or a chamber is unable to remove the heat dissipated by the body as fast as it is formed, an increased temperature and an increased humidity develops in the confined atmosphere. This adds to the discomfort of the patient, and may be sufficient to cause profuse sweating and other vasomotor disturbances. Although no pre-determined standards for temperature and humidity for patients suffering from clinical diseases are available, certain general rules may be mentioned. These are intended to apply specifically to cardio-respiratory conditions characterized by dyspnœa in which oxygen therapy is indicated. We therefore exclude ailments such as arthritis in which increased temperature may be thought desirable.

Under ordinary conditions, then, a temperature between 62 and 68 degrees with a relative humidity between 35 and 50% is a comfortable zone. In atmospheres in which high humidity and temperatures are present a ten to fifteen drop in temperature with a corresponding fall in humidity is desirable. The temperature and humidity of the tent should not be above that of the room in which it is placed. When this occurs it indicates a mechanically inefficient mechanism which has the possibility of providing uncomfortable and even dangerous ventillatory conditions. An exception to this rule would have to be made in the case of infants.

The velocity of air motion is usually relied upon to vary the temperature of an enclosed atmosphere. Inasmuch as infants give off much less heat than large adults, both the tent and the chamber should contain a mechanism for varying the amount of cool dry air. In an oxygen tent which contains between eight and twelve cubic feet of air, a velocity of two cubic feet per minute passed through an ice chamber may be adequate for infants, whereas eight to ten cubic feet per minute may be required for a large obese adult. However, because of the great variation in atmospheric conditions a thermometer should be placed within the tent and the flow of air gov erned by its reading. Tests of the humidity should also be made from time to time although it does not seem necessary to have a hygrometer put in the tent at all times. Because of these considerations it seems highly desirable to have a tent in which the flow of air may be arbitrarily varied to conform to the needs of the patient and to control the outside temperature and humidity. A tent that would have a range of two to ten cubic feet of air motion per minute would fulfill most indications.

We suggested the passage of air directly over chunks of ice originally because it appeared to be the most effective way of eliminating heat and moisture.[3]

In premature infants it is sometimes necessary to warm the air within the tent after it has been de-humidified by passing it through the ice. This may be done by hot water bottles but never by the insertion of an electric pad or of any contrivance where a spark may be given off. In the tent which we are to describe at the end of this article provision has been made to insert a series of lamps at the roof of the tent entirely disconnected from the oxygen atmosphere. Since this tent is thermostatically operated any temperature may be achieved in the presence of a relative humidity between 35 and 50%.

The velocity of air motion in oxygen chambers may be varied within wide limits as long as a comfortable effective temperature is maintained. In the chamber at The Presbyterian Hospital, New York, we employed a thermal circulation of the air in which there was a movement of the air from one entire wall to the opposite wall of 25 linear feet per minute.[4] We have recently installed in this chamber a filter to rid the air of dust and bacteria in which the velocity of air movement may be varied between 300 and 1,500 cubic feet per minute. These high velocities are not necessary as far as the provision of a com-

fortable air atmosphere is concerned but have been utilized in connection with the attempt to make the air within the room as dust-free and as bacteria-free as possible.

We wish to mention briefly the use of an air filter which rids the air of 99% of bacteria and dust particles by passing air through it at a moderate velocity. (Protectomotor Company.) In the oxygen tent we have added this filter for cases of dust asthma. In the oxygen chamber it has a similar use. There is, however, another indication for its employment in oxygen chamber therapy where more than one patient is enclosed within the same room. We have found that bacteria accumulate in the air from patients' coughing and forceful talking that are not removed by condensation on brine pipes or by passage of the air through soda lime or ice. The possibility of cross-infection arises because of increase of bacteria in the chamber unless an air filter is employed through which at least one-third to one-half of the cubic contents of the room air be passed each minute. This factor will be additionally discussed in another communication.

There is one other important consideration in oxygen tent and oxygen chamber therapy which remains to be discussed concerning which unfortunately our knowledge is still meagre. The use of enclosed circulated atmospheres necessitates re-breathing of a considerable portion of the atmosphere. A certain leakage of the air environment necessarily takes place through raising the tent fabric or through opening the chamber door. In this way some of the old re-breathed air is replaced by fresh air as well as by oxygen from the tank. Odors are partly dissolved in the cooling process since many of them are water soluble, but some are gotten rid of through leakage and replacement by fresh air. Our knowledge of the rare constituents of the air is so scant as to seriously interfere with any arbitrary standards in this connection. It is of importance to realize, however, that these rare gases may be of value for normal respiration and that they may be partially exhausted by re-breathing. Hershey[5] has conducted recently experiments in which the rare gases argon, neon, krypton, xenon and helium were excluded from chambers in which animals were kept. Without these rare gases, although with a normal amount of nitrogen and oxygen, animals do not survive longer than ten days. Hershey concluded that the rare gases seemed to play a part in normal life equally as important as oxygen. Fidler[6] has suggested because the rare gases appear not to be vital in the absolute sense but require a long period of time to demonstrate their value that they may play the part of vitamins in the air, comparing the accessory food factors such as vitamin A and B with argon and helium. For these reasons it seems to us that a certain amount of leakage is desirable in enclosed systems such as that which requires an inflow of five to seven liters a minute of oxygen to maintain 40 to 50% oxygen in an oxygen tent, and in an oxygen room an inflow of ten to fifteen liters per minute. We have kept animals in an oxygen chamber for two to six months,[7] patients in an oxygen room for two to six months[8] and in oxygen tents from one to two months[9] without any signs of harm, maintaining a leakage range suggested above.

We have recently reported a portable oxygen chamber[10] in which it is unnecessary to use soda lime. The use of a rubberized fabric aids in the elimination of carbon dioxide because it has a relatively high permeability to this gas as contrasted to oxygen. Edwards and Pickering[11] found that carbon dioxide will permeate rubber fabric at the rate of 28 liters per square meter of rubber per 24 hours at 25° centigrade when exposed to a concentration of 100% CO_2. With rubber such as dental dam the permeability is increased to 42 liters per square meter per 24 hours whereas the permeability to oxygen is only 5 liters per square meter per 24 hours. The rate of permeability falls sharply as the partial pressure of carbon dioxide in contact with the rubber is decreased. In the portable oxygen chamber which has a surface area of approximately 50 square meters elimination of CO_2 through the rubber fabric might take care of from 1/5 to 1/3 of the CO_2 exhaled by an adult patient. The remainder of the CO_2 is largely disposed of through leakage. An inlet of 12-15 liters per minute in the oxygen chamber results in a washing out of carbon dioxide, with a replacement of fresh air. Even with two patients in the portable oxygen room the CO_2 has never accumulated above 1% when oxygen treatment has been carried on for a period as long as two months at a time. In order to administrate 50% oxygen and 3% CO_2 it has been necessary to add carbon dioxide from a tank. As the oxygen tent is ordinarily used, 6-7 liters



Improved oxygen tent with large ice chest and thermostatic control.

per minute of inflow of oxygen is required to maintain a 50% oxygen concentration. In our experience this has been sufficient to wash out most of the carbon dioxide exhaled by the patient so that we have not found it necessary to employ soda lime any longer. However, tests of the CO_2 concentration should be made routinely.

With the technical assistance of Mr. A. E. Davidson the oxygen tent has been modified in the following ways. The air cooler has been enlarged to have an ice capacity of over one hundred pounds. The motor blower is in a soundproof box below the ice chamber and is almost noiseless at ordinary speeds. In addition a thermostat is located in a duct between the tent and the cooling chamber. On the thermostat is a scale from 60-80° F with a hand wheel to operate the pointer. When the temperature falls below the desired level the motor slows, diminishing the volume of air to the tent. When the temperature rises above the desired level the motor is speeded up until the temperature is cooled to the set point. There are no rubber tubes, which avoids the possibility of kinking. The tent frame is on a movable joint which is easily elevated over the head of the patient and the tent fabric tucked in around the patient as formerly used. There is an additional switch which throws in a large volume of air and is capable of cooling the tent down to any temperature desired within a few minutes. Ordinarily the thermostatic switch alone is operated. The ice has to be refilled only every twelve hours. The picture shows the essential points. The volume of air delivered may be varied from 3 to 45 cubic feet per minute.

SUMMARY

Various factors involved in the ventilation of oxygen tents and oxygen chambers are discussed. The importance of providing a healthful air atmosphere in addition to an increased concentration of oxygen is emphasized. A modification of the oxygen tent is described in which a thermostatic control of temperature is achieved.

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PRESENT AND NEEDED HEALTH SERVICES IN MONROE COUNTY*

By JOHN LIVERMORE HAZEN, M.D., BROCKPORT, N. Y.

THE recently proposed Public Health Law has aroused a new interest in, and stimulated a study of health administration throughout the State. Many of us were awakened from a sort of complacency to the realization that our various local health programs were falling far short of the possibilities included in the term "Preventive Medicine." State survey, also, showed a wide variation in methods and effectiveness of work in the various sanitary districts. Some excelled in certain lines of work, some in others, but few were carrying on a complete program of preventive health measures. Lack of organization, lack of funds, of public health nurses and of laboratory and hospital facilities were among the causes contributing to this inadequate service in many parts of the State.

The State of New York, greatest in wealth and population, certainly should be pre-eminent in this most important governmental function, that of conserving the health of its citizens, and that those living in remote and sparsely-settled districts are entitled to the same service and protection as is given to those living in centers of population is a basic principle of our government. If they are not getting proper service, how can it best be given them. The proposed Public Health Law attempted to answer this question and, while it was not enacted in its entirety, the attempt has proven salutary, for it has resulted in a State-wide demand for an administrative plan that will give uniform and effective service throughout the State.

To aid in the formation of such a plan, probably there is no organization so competent as is this Association of Sanitary Officers. In intimate contact with health conditions in all the various parts of the State, from the most remote to the crowded centers, and with years of administrative experience in their respective localities, the collective ideas of this body should offer constructive aid in the formation of a health plan for the State.

To invite discussion and study of the subject is the purpose of this paper, and to that end the essayist will suggest some requirements that seem fundamentally necessary to effective health work,

* Read before the Annual Conference of Health Officers and Public Health Nurses of New York State on June 30, 1931, in Saratoga, N. Y.

not only in the County of Monroe, but in any locality

First, a proper unit of administration Except as legislative boundaries, modern transportation has practically eliminated the border lines between adjoining towns and villages A family lives in a certain health district the husband works in another, the children attend school in another and their summer home is in still another, each under diverse and incoordinated health administration In determining a proper unit the County at once suggests itself, as it is a political subdivision having a central legislative body With its Board of Supervisors and other County officers very little added machinery would be needed to establish a County health Department Counties whose population and wealth are not sufficient to justify the support of a full health service might well join with another one or two counties having contiguous borders and establish an efficient central unit

Second, Organization Our study suggests the following departments

Administrative (a) A County Board of Health, among whose members shall be physicians from the district and a member of the Board of Supervisors The County Board of Health shall establish health regulations for the County and shall have general supervision of the County health program

(b) Local Boards of Health who may elect to continue as such and may enact local regulations under the rules of the County Board of Health

Executive A full time County Health Commissioner, appointed by the County Board of Health and a deputy from each local health district

Third A definite program, arranged by the County Board of Health and the County Commissioner, systematizing health education and covering clinics such as toxin antitoxin, small pox vaccination, prenatal, preschool, venereal, cancer, dental orthopedic, etc, clinics in which, so far as possible, local physicians would be utilized and paid for their services

Fourth A County Laboratory under qualified administration

Fifth A department of Public Health Nursing One or more County supervising nurses and local nurses distributed throughout the County, eventually approximating one to each five thousand of population

Sixth A Department of Sanitation, charged with the care of water and milk supplies, sewage and other physical problems

Seventh Tuberculosis hospital facilities available, the case-finding and follow-up directed by the County supervising nurse, and done by the local public health nurses, rather than by special nurses working from the hospital

The foregoing broad outline is intended to suggest a means by which the various local units, coordinated and acting under a central government, could set up collectively a service which no one local unit could accomplish individually

The question now arises, what would be the relation of the State to a program such as herein suggested? As to expense, both the present and the proposed Health Laws provided that the State pay one-half the cost of the budget under plans not essentially different from that outlined in the foregoing To find the expense to a district we have made careful estimates in Monroe County We have a population of 95,000 outside the City of Rochester, and we find that with State aid the County would save approximately $13 000 annually under the County Plan

Except for tuberculosis control, the cost of which varies widely in different localities, one dollar per capita is considered sufficient for a full health service

Regarding State control under a County plan The State Department of Health with its Public Health Council would formulate a general County plan, sufficiently elastic so that each County might adapt it to its own particular requirements, it would establish the qualifications necessary for the County Commissioner and the deputies, it would maintain constant supervision and contact with the State through the County Commissioners, collaborating and analyzing the statistical and epidemiological data furnished by them, it would maintain its various departments for consultation and assistance when requested by a County Commissioner

The State, then, would assume the relation that it now bears in the care of tuberculosis and insanity Instead of being a step toward State Medicine," in this plan the State relinquishes much legislative and executive function, delegating it to local governments

The Department of Sanitation of Monroe County has operated under this plan for three years, the State paying one half of our annual budget of $22,500 That it is working successfully is evidenced by the fact that we have applied to have our County Laboratory service put under the same plan The State requires only that which we ourselves demand—that the administration be competent and that the service be effective

This outline is submitted to the Sanitary Officers' Association for discussion and in the hope that each member will consider if a plan along these lines would meet the needs of his own County Details purposely have been omitted If a general plan can be agreed upon it can be easily adapted to meet special conditions

Unquestionably a new health bill will be written, and no more constructive work can be undertaken by this Association than the study as to what the bill should embody

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THE PRESENT STATUS OF ACUTE APPENDICITIS IN A GENERAL HOSPITAL*

By PLIMPTON GUPTILL, M.D., AND JOHN J. MORTON, M.D., ROCHESTER, N. Y.

From the Department of Surgery, University of Rochester School of Medicine and Dentistry, Rochester, N. Y.

IF there be need for an excuse in talking on such a trite subject as appendicitis let us remember Virchow's statement that the younger workers' knowledge at best covers from three to five years. Publications of five years past do not exist for them according to this world renowned authority. The teachings of the master surgeons of the early part of the century have been largely forgotten by the rising generation as the enthusiasm for the newly discovered pathological process, its early recognition and cure have subsided. The members of the profession who were exposed to the debates which were bitter and hard fought, came to accept the facts as finally established. These facts now appear to them as so commonplace that there is a natural hesitation in further drawing attention to them. The result is that neither the laity nor the profession is as alert to the dangers of delay as they once were when publicity was given to this problem. And there is now need of a prophet like Murphy who will prefer perhaps to shout his message not from the housetops but over the radio with the assurance that he will thus reach a larger audience.

The evidence is convincing that appendicitis is not being diagnosed as early and consequently not treated as well as it was twenty-five years ago.[1] It is only necessary to review the mounting mortality rate per 100,000 population as given by Willis[2] to realize that the percentage increase of 30.9 per cent should not be regarded lightly. It is exceptional now to get statistics from the large general hospitals which show a mortality of less than 6 per cent or 7 per cent. But Murphy[3] claimed in 1904 that "the man who is having more than three or four deaths in a hundred operations for appendicitis is either receiving his patronage from incompetent or procrastinating medical men or he is doing too much manipulating in the peritoneal cavity under unfavorable pathological conditions."

We thought that it might be of interest to review the admissions for acute appendicitis to a general hospital over a period of one year in order to estimate how well the hospital is being served by the physicians in its neighborhood and how well the hospital in turn is serving the profession outside.

This report is based on a study of 113 consecutive cases of proven acute appendicitis operated upon at the Strong Memorial Hospital during the one year prior to May 15, 1931. This includes all cases with this diagnosis treated at the hospital. No cases were denied operation. During this same period there were also admitted to the service 79 patients presenting evidence of appendiceal disease. The histories and pathological examination in these cases indicated an interval, subsiding or non-suppurative stage, whereas the cases included in this report showed definite macroscopic and microscopic evidence of acute inflammation.

These patients were referred to the hospital from the City of Rochester and surrounding towns within a radius of fifty miles, being commercial or agrarian in their pursuits in about equal numbers.

Treatment was administered largely by the resident staff of the hospital with advice from members of the department of surgery of the University of Rochester. A fairly standard procedure was followed in therapy, this being in essence early operation, postoperative hypodermoclysis of normal saline, narcotics, low Fowler's position and only fluids by mouth in small amounts during the early convalescence.

It is intended to restate the common symptoms of acute appendicitis only sufficiently to contrast the infrequent manifestations. It is due to these, we believe, that much delay and mismanagement of this potentially lethal disease is incurred. Bower has shown recently that "the time that elapses between the onset of symptoms and operation and the mortality rate are constant as shown by comparative percentages."

In these 113 patients age limits were from 1½ years to 64 years. There was a gradual increase in the number of patients of an age up to puberty, a slow decrease from puberty to forty with relative sharp drop to 65 years. The largest group falling in a single five-year period was from 10 to 15 years of age. Children will be termed patients ten years of age or younger. Twenty-three such occurred in this series or twenty per cent of the total.

Fifty-eight of the entire series showed evidence in the gross at operation of perforation of the appendix, fifty-five were considered unruptured. In fourteen cases with no macroscopic evidence of perforation, positive cultures were obtained from the abdominal fluid removed on opening the peritoneum. The percentage of perforation in all the acute cases treated at the hospital was 51.3 per cent. Perforation had occurred in twenty of the twenty-three children treated or 87 per cent.

We have found that 73 hours had elapsed, as an average in the entire group from the onset of the first symptom until hospital admission. Twenty-nine cases were admitted after 96 hours or four days. What was the cause of this delay?

* Read at the Annual Meeting of the Medical Society of the State of New York, at Syracuse, N. Y., June 3, 1931.

What transpired during these three or four days of illness? It will be shown that not all were without care. In fifty-three instances it was possible to determine the amount and type of medical care. The average time elapsing from onset of symptoms to hospital entry was 60 hours in these 53 cases, a decrease of 13 hours over the average at large. However, the average time from the first symptom to first medical visit was 31 hours, leaving an average of 29 hours of medical care at home. In the group of 23 children 119 hours elapsed before hospital admission, with an average of 54 hours of medical care in twelve cases attended. Delay in hospitalization is markedly greater in children than in adults. It is worthy of mention, however, that 34 of the 53 cases receiving careful medical attention entered the hospital directly after the first visit by a physician.

The study of complete histories reveals that the symptomatology of acute appendicitis is not always classical. The onset as characterized by gradual epigastric or perumbilical pain was present in but eighty of 113 cases; five had sudden epigastric and two sudden right lower quadrant pain; five had intermittent cramps; eight had onset with general malaise; six with nausea; two with vertigo; one each with chill, and diarrhea; three, all in children with vomiting. Except for vomiting no predominance of the unusual presenting symptoms was noted at any age.

Abdominal pain, usually dull, lasting for several hours with little variation in intensity is the most constant, reliable symptom of acute appendicitis. It was present in 96.5 per cent of our cases, entirely absent in four cases. It occurs a few hours after the initial symptoms. It is not always present at the first medical visit, or at hospital entry. The apparent complete absence of pain was observed twice in children of two years, once in child of four years, once in patient of 17 years, all ruptured at operation. In eleven instances, pain radiation was observed. It was noted extending to the right lower back in seven, twice to the right lower quadrant of the abdomen, once each to the right upper back and posterior portion of the right thigh. Perforation was present at operation in seven of the eleven;—the occurrence was wholly in adults. Marked intermittent variations in intensity were noted in eight, perforation being present in five, one of whom was a child.

Vomiting was present in 86 of the cases or 76 per cent. It usually occurs during the first day; the average was ten hours after the appearance of the initial symptom. It is relatively more reliable in children, being present in 91 per cent of the cases. Seven of the 27 patients who did not vomit showed perforation at operation; nausea usually precedes vomiting. It was absent in 29 instances.

Persistent constipation has not been a constant symptom in our series. One hundred and seven patients gave a reliable history in this regard and of these 46 or 43 per cent had had unrelieved constipation, 24 had the usual bowel activity; eleven had spontaneous diarrhea; sixteen had diarrhea following catharsis. The eleven cases of early spontaneous diarrhea represent 10 per cent of the total cases. These patients had an elapse of time, on the average of 187 hours or 8 days from initial symptom to the hospital. This is three times as long as the corresponding interval when constipation was present. Unripe fruit had been ingested preceding the initial symptom in five cases; diarrhea in all members of the family was present once; three patients had backache, chills or weakness. One patient was known to have ascaris infestation previous to his present illness. Ten of the eleven were ruptured, six of whom were children; the one unruptured was an 18-year-old male who had chills, white blood count of 7,400, with a gangrenous appendix removed 40 hours after the initial symptom. Bowel movements had been produced by catharsis in sixteen instances; in 33 cases catharsis was ineffectual. Castor oil was the most common drug, having been used thirteen times, eight times in children, the administration in these instances being wholly by the parents. Perforation occurred in nine of these thirteen cases. Magnesium sulphate was employed five times, other laxatives were given in eighteen cases. Enemas were used thirteen times. The occurrence of a chill is considered uncommon in appendicitis. It was noted in eleven individuals, all adults, during the first 36 hours after onset; at operation rupture of the appendix was found in five of the eleven.

Urinary disturbances were noted on nineteen occasions, thirteen times manifested as pain on voiding, three times as frequency. In one case dysuria antedated abdominal pain by several days. White blood cells appeared twice, red blood cells once in the urine in moderate numbers. Perforation was present in only nine of these individuals. The age was universally more than ten years.

Other unusual findings recorded were: pain on extension of the right leg noted seven times, five of which were with perforations. Because of the difficulty in walking or lying flat in bed patients mention this early in their history. Macroscopic blood in the stool was observed by two adults. Prolongation of menses was noted in girls of 13 and 16 years. Pain on defecation and in male external genitalia were each present once. Loss of weight, 20 pounds or more, had occurred in three adults directly preceding the attack.

Previous attacks, similar in symptomatology to the present illness, were present on one or more occasions in thirty-four patients. Fifteen had had multiple attacks with a few months interval during the one or two years preceding

hospital admission; only two of the nineteen with a single preceding attack showed this to be earlier than the preceding year. The incidence of perforation was 41 per cent in this group, definitely lower than the percentage in patients with operation during the first attack.

The diagnosis of acute appendicitis is not always easy from examination of the patient. Cardinal signs which can be elicited at certain periods may be minimal at the time of examination. We have found the vital signs of temperature and pulse, normal in 13 of 113 patients. This finding was observed only in adults; three presented perforation at operation performed shortly after. The white blood count was markedly elevated in all but two. This group includes chiefly early arrival at the hospital, several being admitted less than eight hours after the appearance of the initial symptom. Equally unexpected are the marked elevations such as temperature 39° C., pulse 100 or more, and six to ten points increase in respiration. Such changes as these were noted in twenty-one patients, four of whom had temperature of 40° C., eight, a pulse of 120 or more. Children occur in ratio of one to two to adults; perforation was present in all but three; and with three exceptions, not limited to unruptured cases, the white blood count was elevated to 14,000 or more. Bacterial examination showed organisms present in the abdominal fluid in every case. Except for three patients seen at a later stage of the disease, this group were all first seen in the period extending from the 26th to the 96th hour of the disease; high temperature and pulse are coincident with bacterial invasion of the peritoneum. One death occurred three months after appendectomy following repair of a released entero-caecostomy. These patients as a group can fairly be termed the sickest of our entire series.

The second cardinal sign of acute appendicitis is abdominal tenderness. Localization at McBurney's point or in mid-right lower quardant was noted in 105 cases, 93 per cent. Two patients showed no abdominal tenderness. Three had maximum tenderness in left lower quadrant, one at the umbilicus, one maximum in right flank, one tenderness without localization. All eight patients without marked tenderness in right lower quadrant were perforated at operation. Two of these were children. Recovery was satisfactory in all.

Gentle percussion often aids in localization of maximum tenderness especially in acutely tender or hypersensitive patients. This was found positive in forty-two of the fifty-eight ruptured and in twenty-nine of the fifty-five unruptured cases. Pain caused in the right lower quadrant by pressure elsewhere in the abdomen is termed referred tenderness. This phenomenon was elicited fifteen times in appendicitis with perforation and twenty without perforation. Pain caused by release of abdominal pressure was manifest in 61 per cent of cases, being present in ruptured and unruptured in equal percentages. Percussion, rebound and referred pain are auxiliary in localization only.

Spasm of the abdominal muscles was entirely absent in 21 per cent, in essentially equal percentage of ruptured or unruptured conditions. Spasm when present corresponds favorably with the point of maximum tenderness.

Lower abdominal mass was palpable in nine instances in the mid-right lower quadrant; twice in suprapubic area, and twice in the mid-left lower quadrant. In no unruptured case could the inflammatory reaction in or around the appendix be palpated through the abdominal wall. Rectal tenderness could be elicited in 80 per cent of the cases, usually more marked on the right. Fullness in the cul-de-sac of Douglas or a definite indurated tender mass was observed in nineteen cases.

Another constant sign found in acute appendicitis is elevation of the white blood count. Ninety-four per cent showed increase above 10,000. Except in isolated instances the count is between 12,000 and 25,000. A low white blood count was observed three times in ruptured cases, one of which was an actual leukopenia of 2,900; we have not observed that a low count is necessarily an indication of unfavorable prognosis, as there were no deaths. Elevations of the white blood count above 25,000 were observed in nine instances, the highest being 42,000 obtained in a child, six years of age with a history of thirty hours duration, the appendix being unruptured. Seven of the nine were perforated usually with abscess formation. There is inevitably moderate, never high, febrile reaction. Early adolescence is the age exhibiting this reaction, the average being thirteen years.

Removal of the appendix with drainage, when indicated, was accomplished by either low right rectus muscle splitting approach or by oblique incision through McBurney's point. The former was used on 39 patients, the latter on 74. The appendix was ligated, and removed in every instance. The cauterized stump was inverted by means of silk purse string suture in 105. Drainage was instituted at the time of operation in 52 cases.

Cultures of the abdominal fluid were obtained on opening the peritoneum in 104 cases. Bacillus coli communis was isolated in 49 cases, Bacillus melaninogenicum was found 14 times, 12 of which were in the presence of B. coli and twice with non-hemolytic streptococci; never isolated singly. B. Welchi occurred once with B. coli. Streptococci were present on seven occasions, three each as viridans and non-hemolytic, once as hemolytic; staphylococcus albus was isolated three times and staphylococcus aureus once;

B. pyocyaneus and B. Freidlander were each present on single occasions. In no instance was the B. coli observed in association with any of the cocci groups. Macroscopic perforation of the appendix was present in more than fifty per cent of the patients showing positive cultures of the cocci group. This would not substantiate the theory that the cocci are early invaders subsequently replaced by B. coli, this replacement not being observed in these patients at least.

Similarly it was noted that organisms were present in the free abdominal fluid in fourteen patients in whom at operation, no rupture of the appendix could be found; in this group B. coli was present nine times, B. pyocyaneus once, and the cocci group four times. The so-called "miliary perforation" of the appendix occurred in twelve percent of all cases showing acute inflammatory condition. The organisms present were closely analogous in type and percentage to those observed when macroscopic perforation was obvious.

We have not yet determined the value of bacterial studies in the ultimate prognosis. Many of the complications of early convalescence, however, can be foreseen. Two, of the fourteen cases presenting "miliary perforations" of the appendix, showed peritonitis of the lower abdomen for two to three days postoperative as evidenced by temperature and physical findings. Six of the cases developed an abscess between the skin and peritoneal layers of the wound, this being the obvious site of the complication on either the third or fourth postoperative day. Abdominal drainage had not been instituted at operation in any of the cases. Removal of a few skin sutures with insertion of rubber drain is sufficient for healing. One patient who had been operated upon in the 14th hour of his disease showed "miliary perforation" with positive B. coli culture developed a secondary abdominal abscess on the 14th day. Operative drainage was necessary. All of this group had otherwise a satisfactory recovery.

In ten instances residual abdominal abscesses developed. Eight of these had macroscopic perforation at operation and had had adequate drainage instituted at the time; one patient had miliary perforation, one had neither perforation nor organisms free in the abdomen; in nine instances the abscess was evident between the 12th and 17th postoperative day, in one on the 43rd day. Nine were located in the pelvis or right iliac fossa, one in the left subphrenic region. B. coli was present in eight; B. Freidlander in one. The cocci group did not contribute to the formation of abdominal abscesses. Operative drainage was instituted in all. Recovery was satisfactory except in one who died three months after appendectomy from the effects of an extensive intestinal obstruction.

Twenty-nine other patients showed postoperative complications exclusive of peritonitis which was inevitably present in varying degree in all macroscopic perforations. Complete mechanical obstruction of the intestine developed in three patients, 12, 22 and 44 years of age. Paralytic ileus was present in five, early in convalescence, while mechanical obstruction occurred early in the second week. Broncho-pneumonia was present six times, activation of pulmonary tuberculosis once, minor pulmonary complications five times, otitis media twice and each of the following was observed once: gonorrhea, salpingitis, fibroid uterus, passage of ureteral calculus, Meckel's diverticulum, marked diarrhea, chicken-pox, thrombo-phlebitis of the femoral vein, and acute mastitis.

Healing of wounds was by first degree intention in 43 cases, by third degree in 63 cases. The average period of hospital convalescence for undrained cases was fourteen days; with drainage 26 days. Purulent abdominal drainage ceased on an average by the 22nd day.

Seventy-seven patients were followed in the Out-Patient Department for an average of 47 days. Satisfactory convalescence was complete in this time. There was no occurrence of fecal fistula at the site of the appendiceal stump. Weakness of abdominal wound was noted twice but herniation had not occurred in any patient.

It is evident from this study that the diagnosis of acute appendicitis is made only after rupture in about half of the really acute cases. In children the chances seem to be about seven to one against a diagnosis before rupture has occurred. Murphy's statement is as true today as it was in 1904, when he claimed that "every death from appendicitis is chargeable directly to the people, either for not calling in the physician sufficiently early after the onset of symptoms; or to the physician and surgeon for not acting promptly when they are called."

There is no royal road to the diagnosis of acute appendicitis. Many of the patients especially when seen early are exceedingly difficult to diagnose. But if the physician is "appendix-conscious" in dealing with any case of abdominal pain he will be less likely to overlook or mistreat it. The most consistent symptom in our study has been spontaneous abdominal pain. The most consistent signs have been localized tenderness on palpation of the abdominal wall; or tenderness by rectal examination; and an elevated white blood count. It is well to recall Richardson's statement[4] that peritonitis in males under 40 years is likely to be appendicitis in 90 per cent. It is well to remember that acute appendicitis is the most frequent cause for spontaneous abdominal pain. It is an advantage to regard every undiagnosed abdominal pain with suspicion until proved not to be appendiceal in origin. It has been our experience that the pelvic situation of the appendix has protected it from palpation in a certain num-

ber of instances. In such individual the value of rectal examination cannot be overestimated. Rectal tenderness associated with abdominal pain in the male is practically pathognomic for acute inflammation of the appendix, if acute prostatitis can be ruled out, as it easily can. Rectal examination in children is also of great value because of the shallowness of the pelvis and the accessibility of a relatively large area for examination. We do not agree with the observers who report that the white blood count is of no value in estimating whether the patient has acute appendicitis. It is a simple, rapid test which gives valuable information but it must not be done in a slip-shod fashion. We suspect that when it has consistently failed in some clinics that it has been because of some such reason. In children the history of pain may not be obtained or it may be denied by the child through fear or for some childish whim. But close questioning will reveal that the child has been restless, fretful, sleeping poorly, or crying, indicating pain by his actions. There is often a pallor present. Any gastro-intestinal upset in children when there is no evidence of trouble in the ears, throat, kidneys or lungs should be regarded as potentially appendicitis till proved otherwise. Finally there is a group of patients in whom the history and examination has failed to support a diagnosis typical for appendicitis but about whom the physician is worried. In such individuals it is our feeling that it is safer to explore, for the risk of operation is overbalanced by the risk of a wrong diagnosis. It is a gamble in such instances, of two weeks against a life perhaps. We have not had a fatality in this class of case in our series.

In our series of 113 proved acute appendicitis cases there were four deaths, 3½ per cent. We look upon this figure as very good when it is recalled that over 50 per cent were ruptured at the time of operation. The mortality would have certainly been much higher except for the careful nursing attention and constant alertness in meeting the complications. One child, male, 1½ years of age, had been sick for 48 hours and had received castor oil before being admitted to the hospital. He died 12 hours after operation and autopsy showed general peritonitis, bronchopneumonia and otitis media. The second death was in a girl of 15 years, sick for 96 hours; who came in after sitting up for a fifty-mile drive in a car. The condition was bad and the child was poorly prepared for operation which should have been delayed. Death occurred within an hour. The autopsy showed general peritonitis and partial intestinal obstruction. The third death was in a 17-year-old boy who had been sick for ten days. His attack began with diarrhea. After three days in bed he got up and worked about the farm for the next three days, after which he went to bed again. He showed a large abscess on the left side of the abdomen at operation. Death was due to paralytic ileus and general peritonitis according to the autopsy findings five days later.

The fourth death occurred in a boy of twelve years who had been sick for 48 hours, who had had castor oil and was very acutely ill at the time of entry. Operation revealed a general peritonitis from a ruptured appendix. He had a series of residual abscesses which formed in the peritoneal cavity; and several acute attacks of intestinal obstruction. In each of these attacks his condition was critical. He lost weight till he became a skeleton. In an attempt to permanently relieve these obstructions it was necessary to take desperate chances. His general condition was too poor to stand the necessary procedure and he died three months after his entry to the hospital. Autopsy showed multiple intestinal obstructions still present in the pelvis from peritoneal bands and adhesions.

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LUPUS VULGARIS OF THE NOSE AND UPPER RESPIRATORY TRACT. TREATMENT WITH RADIUM

By E. MARTIN FREUND, M.D., ALBANY, N. Y.

LUPUS VULGARIS of the nose and upper respiratory tract is a rather rare occurrence in the larger cities in the eastern section of this country. While formerly it was seen more often, the present high standards of sanitation and public health have greatly lessened its incidence, particularly in the urban districts. Lupus is more common in Austria, France, Russia and the Scandinavian countries. Occasionally though, from some unknown source this condition will present itself, and if unrecognized in the early stages will bring about considerable destruction of tissue before it is arrested or cured.

Lupus of the nose is a form of local tuberculosis of that region, almost always secondary to an invasion of the upper respiratory tract. It may occur primarily in the skin, but more often it affects the mucosa. The nasal involvement may manifest itself first at the entrance of the vestibule, *i.e.*, at the union of the nasal mucosa with the skin of the vestibule. From there it may spread in both directions with equal facility, invading the nasal cavity or the face, sometimes involving one more than the other.

Incidence—Lupus occurs between the ages of 12 and 45, rarely commencing before or after this period. However, it is often seen in later life, but in these cases it is the chronic form which marks the patient with disfigurations that will persist until death. The ravages wrought by this disease are often extensive and horrible. Lupus is seen more in females than in males, the proportion being about 3 to 2, and its greatest incidence is between the ages of 15 and 25, occurring usually in poor hygienic surroundings, but sometimes developing under better environmental conditions.

Etiology—The causative agent is always the "acid fast" or tubercle bacillus, the invasion being either primary or metastatic. Usually there is an association of a tubercular adenitis, the latter being of an acute or subacute nature. The tubercle bacillus may not be easily demonstrable but a careful scrutiny of cultures and biopsies followed by guinea pig inoculations will in the end confirm the diagnosis.

Paths of Invasion—Lupus is essentially a dermatological problem, and I am therefore confining my discussion to involvement of the nose and upper respiratory tract. The primary localization may be in any portion of this region. If the nose is involved first, then the initial lesion is in most instances at the junction of the skin of the ala nasi with the mucous membrane of the anterior nares. Again, in the primary nasal type, the earliest manifestations may be on the septal surface or along the middle or inferior turbinate bone. The area involved may be self-limited or the disease may spread along the interior of the nasal cavity, involving the entire mucosa lining it.

It may also spread externally, breaking down the soft tissue of the tip of the nose, eventually involving the collumela, upper lip and cheek. This extension may be in a median line, unilateral, bilateral or in all directions. As this disease spreads, the tissues involved become destroyed, with the following sequence of changes: first, hypertrophic granulations, then small nodule formations, and finally ulcerations followed by complete tissue destruction. The area of involvement may be small or quite extensive and is not necessarily continuous. The nares may be collapsed and the lower portion of the nose may become a large ulcerative bleeding mass that is at times most unsightly in appearance. There is always a tendency to crust formation which, on being removed, leaves a bleeding surface that is soon covered again by new crusts. When this condition is widespread it produces severe disfigurement, and renders the victim a social recluse, especially in the case of a female patient.

When the invasion attacks the interior of the nose the destruction of tissue is not evident externally. Here, inspection may reveal extension along the turbinates, the septum, the floor of the nose and the rhino-pharyngeal vault, even reaching the area of the eustachian tubes.

Symptoms—In the early stages nodular formations appear under the surface of the skin. These may not protrude for some time and either are absorbed or become ulcerated. These nodules first give the appearance of an apple jelly mass, are semi-transluscent and have elevated edges. In most instances they break down, resulting in shallow ulcerous patches containing purulent fluid. The surface of the ulcer tends to crust formation which, on removal, bleeds and discharges pus freely, being soon covered again with fresh scabs. The ulcerative process may be slow or rapid, in the latter case often involving large areas. The face and nose are most often attacked. One or both ala nasi may be invaded and the process destroys the skin, soft tissue, cartilage and mucosa, causing extensive exposure of the nasal cavity in some instances, and in most cases a very distorted and unsightly appearance.

The course of the lesion is progressive though not continuous. There are periods of inactivity followed by exacerbations, each time resulting in larger cicatrices. From a rhinological point of view it may be sufficient to say that when the nose is attacked by lupus, the process may extend along the mucosa of the nose, lips, pharynx, larynx, vocal cords and trachea. On the soft tis-

sues in the mouth and pharynx there results a formation of infiltrative papillomata, while the hard and soft palate will show ulcerations followed by distorted contractures and whitish scar formations, not unlike scleroderma in appearance. When the larynx is involved, the tendency is fortunately slow and self-limiting. Here ulcerations and pachydermia may be noted and the edema will produce hoarseness, dysphagia and sometimes dyspnoea. The voice in these instances will vary from a mild huskiness to a marked hoarseness, and in advanced cases there may be complete aphonia. Due to perforations through the nasal septum the patients will often exhibit a characteristic nasal intonation.

Diagnosis—In the diagnosis of Lupus Vulgaris of the nose the salient features are as follows:

1. Characteristic appearance of the nodules resembling apple jelly masses, the color not disappearing on pressure.
2. Its tendency to develop in adolescence.
3. Predilection to invasion of face and tip of nose.

Lupus should be distinguished from an ulcerating syphilide, epithelioma and scrofuloderma. In doubtful cases Koch's old tuberculin will aid as a diagnostic indicator. The case history, blood reaction, age of patient, manner of onset and appearance of the lesion will help in the differentiation.

Varieties or Classifications

Clinically there are 5 distinct types of this disease: hypertrophic type, atrophic type, ulcerative type, multiple disseminated type and miscellaneous type.

1. Hypertrophic—nodules are large and coalesce, forming hard plaques and tumors of various sizes.

2. Atropic—small nodules forming a yellow brown mass resembling "apple jelly" in appearance; the skin surface is even, though it may be scaly. The older the lesion the more widespread and destructive it is.

3. Ulcerative—ulcer formations occur in either of the above types. These areas secrete a purulent discharge and tend to considerable crust formation. These ulcers also may be discreet, coalescent or disseminated.

4 and 5. Multiple disseminated and miscellaneous types—seen usually in the form of serpigenous ulcers, with the nodules either small or large and either superficial or deeply imbedded.

Prognosis—Lupus of the face and nose is usually a chronic disease. With the advent of radiation therapy, the prospects for cure or limitation of tissue destruction have been greatly enhanced. Much depends on the stage of the disease, the extent of the involvement, the general state of health and age of the individual.

By employing radium, the Finsen light or the *x*-ray, as I shall describe under the discussion of "Treatment," the disease can be arrested early. Though recurrences may follow, the extensive disfigurements so common in former years can be reduced to an absolute minimum.

Treatment—The treatment of lupus of the nose and face is not limited to any one method. Efforts must be directed toward the promotion of proper hygienic environment. The dietary treatment of this disease has been emphasized very much of late. This is particularly true of the salt-free diet. Some dermatologists even go so far as to limit their treatment of Lupus Vulgaris to the complete elimination of salt in the patient's diet, claiming recovery and cure by that method alone. However, I am of the opinion that the dietary regime should be used in conjunction with a proper form of local therapy.

Surgery must often be resorted to in the treatment of this disease, especially in the early stage and when the lesion is small and accessible. In that case surgical diathermia seems to yield brilliant results accomplishing the complete elimination of the disease. For the more extensive lesions the curetting and cauterization of the ulcerated areas will often also produce excellent results. Local caustics have been and are still employed, but their effects are inferior to those of mono-polar fulguration and carbon-dioxide application. Radiation, however, has proven the best means of treating this disease. Formerly the Finsen light was used exclusively, being followed by *x*-ray therapy which has been and is still considered a specific by some authorities. With the advent of Radium emanation therapy, a better form of treatment has been evolved. While the *x*-ray is directly applicable to external lesions it must be said that radium can be more easily applied to the inaccessible regions such as the nose, buccal cavity, throat and larynx. In the application of radium the Beta ray yields better results on the superficial lesions, while the Gamma ray seems to be almost a specific for the deeper or inner lesions.

Needless to state, the patient's physical condition must be cared for at the same time, both in the form of local treatments and general constitutional tonics.

Description of Case—Miss J. M., first seen by me March 3, 1930, age 19 years; well nourished; 5 feet 4 inches in height; weight 141 lbs.

Chief Complaints—Hoarseness of a marked degree. Facial disfigurement involving the nose and upper lip. Suffers from mild frontal headaches which are not constant. Has a continuous collection of thick mucus in the back of her throat which she either coughs up or swallows. Aside from that she has no complaints except a dread of mingling with people due to her facial appearance. See Fig. 1.



FIGURE 1

Front view of patient when first seen. Note extent of tissue destruction of lower portion of nose and upper lip at naso-labial junction.

Past History—Usual exanthemata of early infancy. No serious illness in early childhood except numerous attacks of tonsillitis. Had her tonsils and adenoids removed under ether anesthesia 8 years ago. Was informed at that time that only a portion of each was removed as they were "too large." The remaining portions were removed a year later. Hoarseness developed one month after the first operation and very shortly thereafter the nose infection supervened. As the soft tissues became involved and destroyed, crusts formed and these in turn fell off, leaving a bleeding surface; then a thick yellow pus discharge would remain, till new crusts formed again. There was always more or less discharge present. In the beginning there was no pain but as the interior of the nose began to be congested, there was tenderness, especially on blowing the nose. When the hoarseness first developed she had considerable pain in the throat and some difficulty in swallowing, but later the discomfort disappeared. She had received various forms of treatment in the past 5 years, including several series of *x*-ray exposures, "hypodermic injections" and ultra-violet ray therapy. There has been no cure or relief from any of these attempts.

Physical Examination—The nose reveals an ulcerative mass, "apple jelly" like in appearance, covered with thick, light yellow crusts involving the entire tip, both alae, extending almost to the cheek border on the left side. The upper portion of the upper lip is also involved, the lesion coalescing at the nasolabial junction. The right nostril is collapsed and indistinguishable while the left nostril is completely destroyed and permits an easy view into the interior of the nose. This ulcerative mass is red in color and covered by hard thick crusts underneath which there is much pus. The remaining tissue of both alae is tense, swollen and red. The ulceration extends through the interior of the nose, both on the lateral and mesial surfaces. There is a perforation of the nasal septum as large as a five-cent piece, involving the anterior half of the perpendicular cartilage. The middle turbinates are not involved. The nasal mucosa is inflamed and hypertrophic in character. The throat shows much scar tissue formation and distorting contractures, not unlike rhino-scleroma. These scars are firm in consistency and of a yellow-white color, and are seen on the hard and soft palate, pharynx and larynx, involving the epiglottis and false vocal cords. The true vocal cords are not involved, their movements being normal during the phonation and respiration. Posterior rhinoscopy reveals similar cicatrices in the naso-pharynx but no ulcer formations.

Heart and lungs normal, no evidence of tuberculosis in the chest clinically and confirmed by *x*-ray pictures. Nose cultures negative for Diphtheria Bacillus. A biopsy was made from a portion of the epiglottis and subsequently the pathological report was as follows: March 10th—"A small mass of dense fibrous tissue, of elastic consistency, showing intense chronic inflammatory

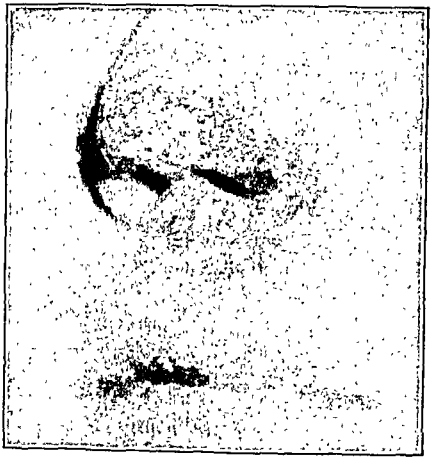


FIGURE 2

Shows new formation of tissue covered by epithelial islands, newly generated. Note also marked radium reaction of upper lip.

reaction. The surface of the tissue is covered with stratified squamous epithelium which in one place is slightly ulcerated. No true tubercles are observed but the reaction suggests tuberculosis." On March 17th a subsequent pathological report was as follows: "Tuberculosis dermatitis (Lupus Vulgaris). The tissue is intensely infiltrated with large mononuclear leucocytes and lymphocytes.

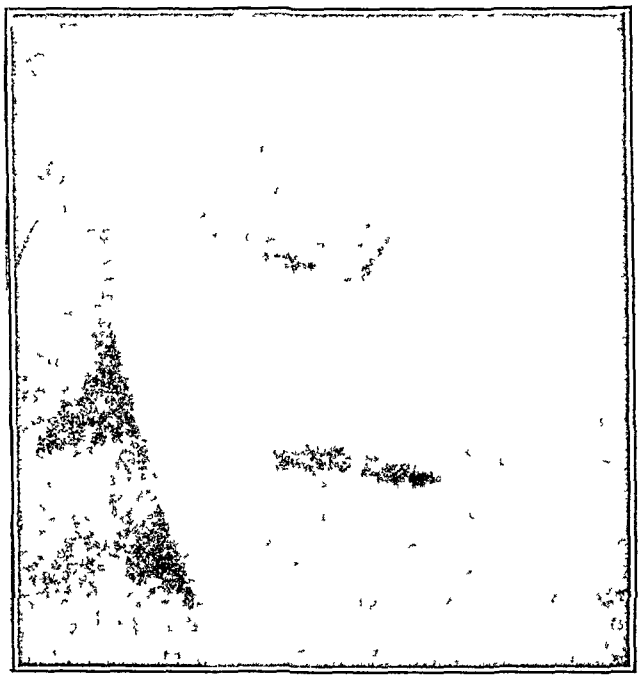


FIGURE 3

Scar tissue and granulations after partial plastic operation. These disappeared after several subsequent radium applications.

Foci of acute necrosis are also observed. A few typical tubercles are present." On May 5th the report of guinea pig inoculation was positive for tuberculosis. The patient's Wassermann report was negative and blood count was normal except for a slight leukopenia.

Radium treatments were instituted March 11th, 50 mgms. being applied for one hour to a selected area, at 10-day intervals properly screened for the Beta ray. Five such treatments were given in succession, the areas exposed being in the following order: left nares, columella and upper lip, interior of the nose and lastly right nares. For the interior of the nose only 30 mgms. were utilized.

There was no dermatitis or other undue reaction except on the upper lip which showed hyperemia and edema for about a month following this treatment. Fig. 2 demonstrates the gratifying effect of the radium two months after commencing treatment. By that time the patient's facial appearance was considerably improved and very shortly afterwards she discarded local dressings. A partial plastic operation was done to reshape her nostrils. Fig. 3 shows appearance imediately after this was done. The nasal mucosa appeared healthier and showed no tendency to crust formation. The patient felt better than she had for the past 7 or 8 years. Several applications of radium to the pharynx and larynx were subsequently made with marked improvement of the hoarseness as well as appearance of the mucosa. Fig. 4 shows the patient's condition on August 15, 1930, showing the disease practically cured.

Conclusions

1. Lupus Vulgaris of the upper respiratory tract is always metastatic, following a primary tubercular infection in the lungs, tonsils or the exterior of the nose. In the case above described the primary focus was situated in the tonsils.

2. The importance of a careful and detailed history plus modern laboratory diagnostic aids is stressed in the diagnosis of Lupus Vulgaris.

3. Radium therapy is by far the most efficient treatment, particularly in the regions that are inaccessible to surgery and *x-ray* exposure.

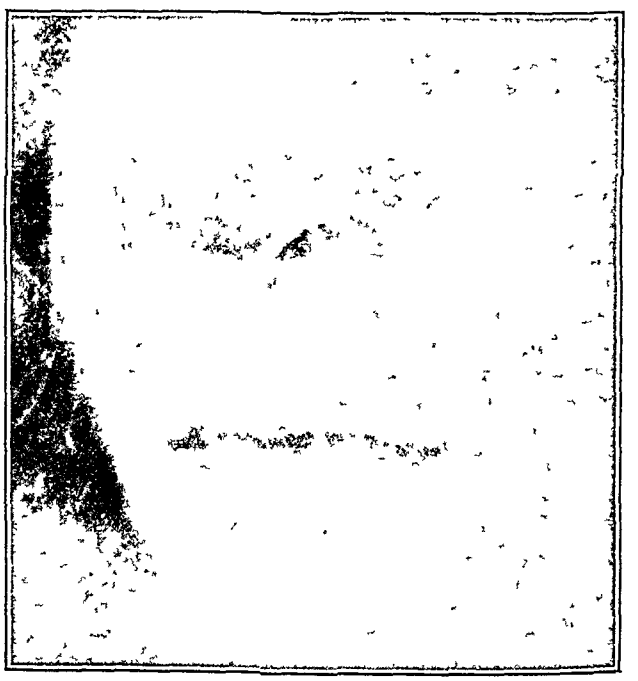


FIGURE 4

Patient's appearance after last radium treatment to face

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ROUTINE PROCEDURE FOR STUDYING ALLERGIC PATIENTS*

By KATHARINE BAYLIS MacINNIS, M.D., BINGHAMTON, N. Y.

MY object in presenting this paper is to suggest to you a practicable plan for handling your allergic patients. By "allergic" I mean those who have an altered reaction of the body to a foreign substance, whether it be purely protein or bacterial in nature. In this group I wish to include all of those patients who have hay fever, bronchial asthma, urticaria, angio-neurotic edema, eczema—especially in infants—gastro-intestinal hypersensitiveness or abdominal allergy, migraine, allergic bronchitis, certain arthritides, and bladder conditions.

When a patient presents himself for treatment, and perhaps says he has "hay fever," it is not sufficient to guess at the cause, but a very careful history and physical examination are most helpful before any protein testing or therapy is started.

Practically all investigators have agreed that 60 per cent of cases will show that one or more members of the immediate family has, or has had, some allergic condition. Heredity plays a most important part in the allergic patient. The careful family history which contains the information that a relative now has or formerly had an allergic manifestation does not mean that the same type of hypersensitiveness will be present in this patient. The child whose history reveals an allergic condition in both parents has a small chance of escaping some form of the disturbance at some time in life.

It is even more important to get a detailed personal history than family history. In taking the history there are certain factors that must be inquired into very closely, namely: the onset—as to time, new foods in diet, new places visited, new bedding, new pets—both live and artificial, new clothes—especially those which are fur trimmed, and various other things depending on the individual.

Two cases that are quite typical of histories are these:

The first was a little girl four years of age who had had attacks of asthma, always at night, and worse when she had eaten bread for supper. These attacks had been growing worse each year, and morphine and adrenalin were necessary to control them. She was tested to 125 foods, feathers, and a few animal proteins although she had no pet. Marked reactions were noted for feathers and wheat. She was given a kapok pillow to sleep on, and wheat was entirely eliminated from the diet. A report six months later showed that she had had only two attacks, once when she went to sleep in her mother's bed where there were feather pillows, and once when she had eaten a biscuit.

The other patient was the wife of a doctor—a woman about middle age. She had had eczema on her neck and wrists during the spring and fall for three years—purely seasonal. She was wearing a spring coat with a squirrel trim. On testing she was found negative to squirrel and strongly positive to rabbit hair. A special solution made from the fur collar gave a marked reaction, showing that the so-called squirrel was dyed rabbit. An interesting note is that her winter coat had a fox collar and this never bothered her.

Very often it is necessary to make a trip to a patient's home or place of business to study the surroundings which might have a bearing on the attacks. For some reason people will not give true information about these matters. Frequently dust of various kinds is the cause of the asthma or other allergic condition. The floor coverings, wall hangings, upholstery, bed clothes, animal houses or cages, dust from chicken houses, dust from places of employment, and so on, may be the offending agent.

I had one patient who had asthma due to the dust from woolen rugs on the floor. When cotton rugs were used the condition cleared. Another patient was sensitive to goat and horse dander, and when he visited his uncle who owned a goat farm he had asthma until he left. Still another patient had a most severe eczema on all the exposed surfaces, and legs, even though covered. Investigation of conditions and testing revealed the cause to be wheat flour dust from a flour mill in which he was employed. When given an outside job he immediately began to improve, and two weeks later the eczema was entirely healed.

Before beginning protein tests it is wise to have a complete physical examination and laboratory tests made. There are about 400 to 500 different proteins on the market used for testing. These do not include all the different ones made especially for patients from substances obtained locally. Very often the stock proteins will give no reaction, while a solution of local feathers, dust, or other suspected agents will give a positive reaction. Sometimes it is necessary to test a person to many proteins before the exact cause is determined. Often various types of testing must be used to verify the results.

The two main types of testing are the

*Read at the meeting of the Women's Medical Society, held at Syracuse, N. Y., June 1, 1931.

scratch method and the intradermal method. Some of the others are the patch method, the corneal or eye test, a passive transfer method which requires a third person, and a trial by diet, using first one food and then another. This last is most useful when there are repeatedly negative skin and intradermal tests.

Skin testing is used more generally than the other methods. The test scratches are located usualy on the inner side of the arm and forearm and the back. It is better to choose an area that is free from hairs. It is absolutely necessary to keep the tests in definite order so there will be no chance of confusing the readings. Usually rows of five or ten are made. The scratch is approximately one-fourth inch long and about three-fourths of an inch distant from the one just before and just following. Reactions depend upon the sensitivity of the individual skin, location playing only a minor role, and vary from a mild erythema to a wheal of varying sizes with pseudo-pods. Sometimes it is necessary to retest in various locations before the final diagnosis is made.

Treatment varies, depending on the type of case and the individual. In the purely food cases it is better to arrange a diet that is absolutely free from the foods that give positive reactions. If the case is due to eggs, milk, or wheat it must be remembered that just telling the patient to eliminate these is not sufficient, but that a detailed diet of all foods in which these are found must also be eliminated, even to the smallest amount.

In cases of pollen and animal hypersensitivity, if the offending agent cannot be entirely eliminated, desensitization must be effected, that is desensitization of specific allergens. All too frequently a "treatment set" which is not standardized and which contains one or more proteins of unknown strength is ordered for the patient. It is purely and simply an old "gunshot" prescription, and very likely to be the cause of poor results. Most of us today, I feel sure, believe in specificity of certain drugs, and in the treatment of allergic patients specificity is the most important thing if good results are desired. In using a "stock" or "gunshot" treatment set it must also be remembered that one is likely to cause a sensitivity to another pollen or protein to which the patient was negative at the time of beginning the treatment.

Desensitization by injection of specific protein therapy usually gives good results—60 to 90 per cent marked improvement or cures. This is accomplished by making a specific stock solution which is called standard or 1-50 solution. From this the other dilutions are made, and these different dilutions are used for testing. If the patient gives a reaction to the 1-10,000 dilution then a 1-100,000 dilution is made, and if no reaction occurs treatment is begun with this dilution in very small amounts, increasing until the patient is desensitized regardless of the size of the dose. After desensitization is once obtained it must be maintained for varying lengths of time, or until the body has become able to remain desensitized to the former offending protein without outside help.

Conclusions:

When a patient presents himself for relief of an allergic condition the first step taken must be a detailed history and investigation of all the angles of the case

In addition to the history a complete physical examination and laboratory tests must be made. Following these, from 50 to 300 protein skin tests are made by the scratch method.

After diagnosis is established treatment will depend on the case, necessitating either elimination or specific desensitization, or both.

Allergy is still so young and immature a specialty that one praises the results with caution, however a study of the available literature on the subject and personal work with hypersensitive individuals within the past few years convinces me of the great future in this field of medicine.

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Annual meeting, Buffalo, May 23 25, 1932

DEVELOPMENTS IN PUBLIC HEALTH ADMINISTRATION

One of the most important problems before the medical profession today is that of making all forms of medical service available to all classes of people The responsibility for giving the medical service is generally recognized as resting not only on the medical profession, but also on government officials and the citizens of the community Governor Roosevelt recognized his responsibility when he appointed a health commission to devise a coordinated medical service throughout the state

The recommendations of the Governor's Commission have to do largely with the duties of the state and the various communities While not much is said about the duties of the family doctors, yet they are recognized as essential for any

complete health service. While there is an undercurrent of feeling among doctors that the provisions of the health commission might lead to state medicine, yet actual experience with the laws that have been passed in the last year or two justify the assertion that family physicians are recognized as necessary in public health to a greater extent than ever before.

Physicians and public health administrators both need to keep in mind the fundamental principles on which medical service is rendered.

There are two parties in every medical service that is rendered.

1. The doctor.
2. The patient.

Whenever a doctor treats a patient he must consider two phases of the case:

1. The scientific principles to be applied to the case as an abstract medical problem.
2. The ability or inclination of the patient to carry out the directions of the doctor.

Medical science has advanced to such a degree of perfection that the majority of human ills and physical defects may be cured or prevented; but human nature remains as it was five thousand years ago, and patients often refuse to carry out treatments and public officials decline to provide hospitals, nurses, social workers and other means necessary for treatment.

A doctor deals with two classes of cases:

1. Those in which a doctor does practically all the treatment, as for example, dressing a cut, or administering drugs to a syphilitic case.
2. Those in which the patient carries out most of the treatment, as for example, diabetes and tuberculosis.

It is in the treatment of the second class of cases that a great part of the difficulty between the medical profession and government officials arises. If a man is earning only a thousand dollars a year and has half a dozen children to support, and is afflicted with tuberculosis, he cannot possibly obtain the proper food or take the proper rest unless he is helped by some outside agency. The medical profession has frequently been criticized for its inability to "cure" tuberculosis or chronic rheumatism. Treatment will be effective only when the community does its part in assisting the patient to apply the treatment.

The old method of dealing with sickness was that of providing for the patient and family after the sickness had fully developed. Charity has always been an appealing virtue, and people are quite willing to dispense help in the face of acute suffering. But dealing with conditions after they are fully developed is wasteful and inefficient, according to modern standards. The new way of dealing with sickness is to provide the means of treatment before the condition becomes advanced or incurable. The means of treatment are now considered to include economic and social aid as well as medical charity.

The burden of giving medical service until recently was borne almost entirely by the doctor in a two-fold way:

1. To give the actual scientific service.
2. To secure the means by which the patient could utilize the service.

When a doctor had to operate on a patient in the decade of the 90's, before hospitals were common, he often had to get a nurse, prepare a room in a private house for the operation, and see the poor officials for the food, and the church wardens for clothing. The doctor was the leader in charity and social work, as well as in medical service. Some doctors accepted this responsibility and others ignored it. One great development of medical service in these modern times is the provision for hospitals, public health nurses, and social workers, so that a doctor is relieved of the multitude of non-medical services which formerly had to be done by him or they were not done at all. Examples of the modern laws which compel the communities to do their part in giving medical service are the tuberculosis law and the welfare law. The welfare law, for example, states that the county shall provide medical service for those who are otherwise unable to obtain it. It recognizes the fact that there may be other reasons besides indigence for inability of a wage earner to provide medical service for his family. The interpretation of this law in several counties has been that the community shall remunerate the family doctor for treating these cases.

There are two methods by which the community may provide medical service:

1. By salaried doctors paid by the community.
2. By utilizing family doctors, thereby enabling the doctors to treat these cases as they would those in their private practice

There are grave objections to salaried doctors, both theoretically and practically. The experience of Germany, England and other European countries is sufficient to condemn that form of practice. The tendency of the New York laws and customs is to utilize the family doctor as is shown by the welfare law, the venereal disease law, and the laws relating to crippled children.

When a government official or department provides medical service, the community may reasonably demand that the service be of a high standard of practice. For example, the intravenous administration of arsenicals, and the procedures in the diagnosis and treatment of poliomyelitis are both considered to be within the realm of expert service to be given only by those who conform to the standards of expertness.

The adoption of proper standards of medical service is considered to be the prerogative not only of the doctors themselves but also of governmental bodies, especially departments of health. The ideal results are obtained when both the doctors and the governmental bodies meet in friendly cooperation as in New York State. The great accomplishment of the Committee on Public Relations of the Medical Society of the State of New York is that it has brought about the happy coordination of the medical profession with government officials and lay health organizations. If there are misunderstandings, a very large proportion of responsibility rests on the doctors themselves. They are the experts and should advise the government officials and lay organizations in their dealings with practitioners of medicine. A great field of medical societies is to secure this harmony and coordination of action.

The public health laws which have been passed recently have said very little about the duties and responsibilities of physicians, for the law-makers rightly assume that family doctors will do their part, both in the treatment and prevention of diseases, provided they are given the tools and other means of working. The Governor's Health Commission deals principally with these activities which the community is expected to carry on so as to enable the family doctor to give medical service to all classes of people. There are two methods by which the community may approach this problem:

1. By means of authority from above.
2. By means of evolution from the ranks of practicing physicians.

The members of the Health Commission have been like observers looking on a field of battle from a far-off height. They see the field of action like a general in command of a great army. Their conclusions have a very great value, and are respected by the medical societies of the State of New York.

The Joint Committee of the Medical Society of the State of New York is considering the observations of the Governor's Health Commission from the point of view of a soldier in the ranks. The responsibility for dispensing any form of medical service rests ultimately upon the family doctor; and his abilities, feelings, and customs must be considered.

The preliminary report of the Governor's Health Commission was printed in this Journal, of October first, beginning on page 1208. Several of its recommendations have already been enacted into law to the satisfaction of doctors generally. The major recommendation on which controversy is arising is that of a compulsory establishment of county boards of health in every county.

Since governmental officials manifest an increasing willingness to do their part in providing tools for giving medical service, doctors are inspired to renewed efforts to use those tools for the benefit of the public.

LOOKING BACKWARD

This Journal Twenty-five Years Ago

Milk Education: Physicians who have begun to practice in the last decade know little about the long struggle to educate the people to demand pure milk and the milkmen to produce it. A pure milk special train today would be unnecessary, but a quarter of a century ago there was need for the one described in this Journal of October, 1906, as follows:

"The State of Maryland has a Department of Health and an independent citizen's movement, which are performing magnificent services for the people. The campaign against tuberculosis in that State has been most effective. Now it has turned its attentions to the milk problem, and is promoting a campaign of education of exceptional vigor. Besides the ordinary measures for encouraging and compelling the production of good milk, a 'milk special' was started out. This is a combination of a technical school on wheels and a political stumping tour. The train consisted of an engine and two coaches, one of which was used as an auditorium car. The territory to be covered was thoroughly advertised, together with the names of speakers and subjects. Farmers were invited to attend demonstrations and lectures at the stations at which the train stopped. Stops of forty minutes were made at each point. There were two speakers at each session. Each spoke for fifteen minutes and the audience was allowed five minutes to get into the car and five minutes to get out. In this way from fifteen to twenty stops were made in a day. The talks were published in the local papers, and were of such a character that make every word count.

"Such work as this is practical and profitable. The farmer can be shown how to produce good milk; he can be shown that it pays; and a demand for good milk can be created."

MEDICAL PROGRESS

Studies of the Mechanism of Upper Respiratory Infection.—A. R. Dochez, Katherine C. Mills, and Yale Kneeland, Jun., present confirmatory evidence that the primary cause of the common cold belongs to the order of ultramicroscopical viruses. They inoculated intranasally young chimpanzees, isolated under rigid quarantine, with bacteria-free filtrates of nasopharyngeal washings from individuals with acute colds. Within twenty-four to forty-eight hours the apes began to manifest signs of upper respiratory infection, sneezing, coughing, nasal obstruction, and a mucoid or mucopurulent discharge, which persisted for from five days to two weeks. Coincident with these symptoms, pneumococcus, *Streptococcus haemolyticus,* and *Bacillus pfeifferi* developed in greatly increased numbers and spread over a wide area of the nasopharyngeal mucous membranes. Similar experimental transmission of colds was then carried out in human subjects. The human experimental colds differed from those of the chimpanzee in that there was no immediate evidence of increased activity on the part of the potential pathogens harbored in the human nasopharynx. The authors describe the method by which they succeeded in preserving the virus of the common cold for as long as seventy-four days. The virus also reproduced itself *in vitro* when cultivated in a suitable tissue medium. The method employed was that of Maitland and Maitland and of Li and Rivers. In addition to initiating the symptoms of infection, this filterable virus may be considered to provoke increased activity of any potential pathogens that may happen to be present in the respiratory tract, and, furthermore, to render the respiratory tract susceptible to implantation by pathogenic organisms from the exterior. Studies conducted by the authors have shown, considering the respiratory year as running from September to June, that as this year advances there is an increasingly wide distribution in the nasopharynx of healthy individuals of the usual potential pathogens of the upper respiratory tract. It seems not unlikely, that as a consequence of the repeated cycles of common cold throughout the respiratory year an increasing opportunity is afforded the potential and secondary pathogens of the respiratory tract to cause infection. It may be that certain outbreaks of so-called influenza result from the coincidence of an epidemic of the common "cold in the head" with a period of wide distribution and greatly increased virulence of the well-recognized pathogenic organisms of the upper respiratory tract.—*The Lancet,* September 5, 1931, ccxxi, 5636.

The Progress of Nutrition.—In a review of the outstanding advances in our knowledge of nutrition, Francis Lowell Burnett emphasizes the fact that nutrition is the most important factor in the maintenance of health and longevity in man. McCarrison describes an unusually healthy people who inhabit a remote part of the Himalaya Mountains and live on the "unsophisticated foods of nature," and without meat. They are of magnificent physique, preserve until late in life the characteristics of youth, are unusually fertile and long-lived, and are endowed with nervous systems of unusual stability. On the other hand, McCullough observed a tribe in West Africa, whose diet consisted largely of cereal food, with only a small amount of protein and fat, both of poor quality. Among these people the infant mortality was high, lactation was seldom successful, and children and adults were short and underweight. The selection of an adequate diet in health and disease is comparatively simple. The normal requirement is 2,600 calories daily, the proteins supplying 10, the fats 30 and the carbohydrates 60 per cent. In addition an adequate amount of minerals and vitamins is essential, and the acid-base balance must be preserved. Stone considers the amount of sugar consumed by English-speaking peoples as excessive, but believes a protein intake of one gram per kilogram of body weight is not injurious. Minot points out that deficiency diseases occur in many and varied types, some of which are recognized after many years; that they may be the result of failure to assimilate the required factor, and that the lack of vitamin not only causes a particular disease, but plays a rôle in the economy of the body by its effect on certain functions and types of cells. Proper treatment requires a recognition of the relationship between the amount of substance a patient receives and the beneficial results produced. Diseases characterized by edema and cardiac swelling are probably caused by long continued deficiency with excess of fluid intake. The excessive increment of fat in the human body is undoubtedly due to malnutrition. In reducing the loss of two pounds a week is as much as should be sought, and one pound is quite enough after 10 or 20 pounds has been lost. Investigations have shown that the chemical character of the fat stored is unmistakably determined by the nature of the dietary precursors. Temporary diabetes can be produced in healthy persons by first reducing the carbohydrate and then giving it in excessive amounts. It has been proved that liver and iron are of definite value in hemoglobin regeneration in anemia. Desiccated and defatted

hog's stomach has proved as effective as liver in pernicious anemia In heart disease dyspepsia may be prevented and acidosis controlled by a diet low in calcium and the chlorides, and increase in the ingestion of sugar has a peculiarly beneficial effect A meat diet tends to increase blood pressure A high protein diet promotes wound healing An acid diet inhibits growth, depresses the serum phosphates, the alkali reserve and the pH, with a compensatory rise in the chlorides sugar, and cholesterol in the blood Rickets has developed in animals on an acid diet Ivy has shown that the hormones play a role in digestion There is evidence that an excess of protein in infants causes a very irritable colon, diarrhea, and acid stools Several investigators have shown that vitamin deficiency lowers resistance to specific infections The value of the ketogenic diet in epilepsy has been demonstrated Burnett also reviews the relation of diet to rickets osteomalacia, carious teeth and arthritis He mentions studies showing that vitamin A deficiency is the chief factor in producing lymphadenoid goiter A diet such as that of Hermanns dorfer and of Mayer and Kugelmass produces a definite improvement in certain tuberculous patients Sugiura and Benedict have found that cancer does not develop on diets deficient in vitamin A and that their rat carcinoma regresses when the animals receive an excessive amount of butter fat —*New England Journal of Medicine,* August 13, 1931, ccv, 7

The Failure of Liver Treatment in Hemolytic Icterus —J Neuburger says if the view so often expressed in the literature be correct, that the essence of pernicious anemia consists in a primary hemolysis with a secondary reaction upon the activity of the bone marrow, and that this primary agent of hemolysis can be overcome by liver therapy, it must likewise be true that hemolytic icterus would react to liver treatment On the basis of two case histories, however, he shows that this is not the case A study of these histories shows that the anemia of hemolytic icterus is very difficult to influence After administration of liver substance a temporary improvement in the red blood picture could be observed, but it had not proceeded far before it came to a stop In both cases the white blood picture was favorably influenced more promptly than the red, the number of white cells became approximately normal and the megalomacrocytosis was overcome The microcytosis however, was still less influenced than the number of the red cells and the hemolysis responded least of all In the first case there was free hydrochloric acid in the stomach so that the failure of the liver therapy might conceivably be connected with this, but in the second case there was achylia In neither case did the use of either liver extract or fresh liver have the slightest effect upon hemolysis Powdered stomach substance produced no better results It is impossible as yet to say whether in pernicious anemia the good effects of liver and stomach substance are exerted not upon the hemolysis but must lie in some other direction It could be seen, however, that the improvement in the white blood picture began before the liver was administered, whereas the hemolysis and microcytosis continued undiminished despite the liver treatment This raises the question whether hemolysis really constitutes a primary cause in pernicious anemia The author thinks it does not In both cases there was some improvement in the anemia under other forms of treatment notably iron and arsenic, but not of the hemolysis Not even after iron had improved the anemia and the white blood picture did further administration produce any modification of the hemolysis —*Deutsche medizinische Wochenschrift,* June 5, 1931

Reflex Tenderness A Sign of Gall-Bladder Disease —In the examination of a large number of patients for possible gall bladder disease, George Levene has observed that tenderness in the right subcostal area is a somewhat uncertain sign While a diseased gall bladder is always more or less tender, the difficulty in eliciting such evidence lies in the fact that the position of the bladder varies considerably in different persons and not infrequently in the same individual Thus a given point on the skin surface may, or may not, overlie the gall-bladder During radiographic examinations Levene has noted that tenderness on slight pressure over the right costovertebral angle is of frequent occurrence In the analysis of 100 unselected cases tenderness was found over this area in 92 3 per cent of patients showing roentgenological evidence of gall bladder disease It was absent in 95 7 per cent of the persons regarded as normal Of 13 patients operated upon, 92 3 per cent showed reflex tenderness, and the diagnosis of gall bladder disease was confirmed In order to elicit this sign, the patient is placed prone on the examining table, the arms by the sides The examiner places the middle finger and thumb, respectively, over the left and right costovertebral angles, and applies gentle pressure, first over the left side and then over the right He next explores the area from the tenth to the twelfth ribs, in a zone two inches from the spine, palpating left side first Tenderness due to gall bladder disease is invariably higher than that produced by disease of the right kidney The author is of the opinion that even lesser degrees of gall bladder disease can be detected by this sign —*New England Journal of Medicine,* August 20 1931 ccv, 8

The Three Different Rhythms Controlling the Heart.—On the basis of a case studied electrocardiographically for nearly 5 years, with tracings made at frequent intervals, Anna Francova-Helbichova says that disturbances of auriculo-ventricular conduction are the symptom of a lesion of Tawara's node and the bundle of His, which are unable to conduct the sinus excitation with the optimum speed. Because of this lesion there was an incomplete auriculo-ventricular dissociation, manifesting itself by a simple prolongation of the PR interval and by ventricular intermittences which appeared either regularly (2nd type of Mobitz's partial block) or irregularly (a block of 2:1). As a result of troubles of conduction and a hyperexcitability of the autonomic ventricular center, there appeared ventricular contractions of such a kind that a rhythmic production of ectopic excitations could be assumed side by side with sinus excitations. The sinus impulses could not affect these subordinate centers under cover of the incomplete auriculo-ventricular dissociation and of a defensive block which may be supposed to have formed around them. The phenomenon of interference of different rhythms was the more remarkable, in that, in opposition to the sinus rhythm, there were established not one but two rhythms of automatic excitations. The ectopic centers functioned in very slow rhythm (27-26). The distances between the ectopic ventricular contractions had a greater common divisor, which represents the time between two impulses of these subordinate centers. The author thinks a parasystolia must be assumed, in the sense of Weber and of Singer and Winterberg. According to these authorities, any given case is a parasystolia if it fulfils the following conditions: (1) The ectopic contractions start in a focus of ventricular excitation; (2) the frequency of these excitations is slow, in accordance with the weak physiologic automatism of the specific ventricular tissue; (3) the waves of excitation at the sinus point of departure do not disturb the rhythm of the ventricular center; therefore one may suppose that the latter is protected against the sinus wave (a block of defense); (4) the heterotopic contractions in ventricular parasystolia appear at very different intervals after the antecedent normal systole. This case meets these conditions and hence seems to offer an example of parasystolia of slow form.

Ectopic rhythms are not perfectly regular. Following a considerable oscillation of the sinus rhythm, the author would explain this irregularity according to Scherf and Weiser's theory, namely that a supraventricular ectopic rhythm may oscillate parallel with the sinus rhythm, since it is exposed to the same influence of the nerves of the heart as the sinus center.—*Archives des maladies du coeur, des vaisseaux et du sang,* June, 1931.

Diathermy.—E. P. Cumberbatch, writing in the *Canadian Medical Association Journal,* August, 1931, xxv, 2, describes the advantages gained by employing diathermy to heat the tissues; hot air, hot water, and other hot objects placed in contact with the skin, or at a distant point from it, heat the superficial tissues alone. Electric currents other than diathermy are quite unsuitable for the purpose, because they produce unbearable contraction of the muscles and dangerous chemical changes within the tissues. The therapeutic properties of the diathermy current are those of heat and of heat alone. The diathermy current relieves pain and spasm, aids the resolution of inflammation, assists the tissues in freeing themselves from infection and can be brought into regions which are beyond the reach of other thermo-therapeutic agents. In the treatment of certain pelvic diseases of women diathermy has made the most far-reaching advances. By introducing a special electrode into the urethra and completing the circuit by means of a pelvic belt electrode the part mentioned can be heated to 114° F., and freed from infecting gonococci in about 90 per cent. of the cases. The same is true of the cervix uteri when treated in a similar manner. If the infection is non-gonococcal it can be removed in about 80 per cent. of the cases. By means of a special vaginal electrode it is possible to terminate infection of the Fallopian tubes. Congestive dysmenorrhea can always be cured by diathermy, but the spasmodic type is only temporarily benefited. The prostate and vesicles can be subjected to diathermy by way of a special rectal electrode. This treatment always brings gonococcal arthritis and fibrositis to an end. In gonococcal epididymitis and orchitis its action is remarkable. In angina pectoris diathermy diminishes the frequency and severity of attacks, and a few patients appear to have been cured. The blood pressure, if very high, can be maintained at a reduced level for long periods. In mucous colitis diathermy is of high value, and by it the pain due to anal fissure can quickly be relieved. In both innocent and malignant growths the diathermy current can raise the temperature until the tissue proteins coagulate. By the use of the needle electrode malignant growths can be eradicated. It divides the tissues like a scalpel and at the same time coagulates the divided surfaces, thus sealing microscopic vessels. Large vessels are seized by forceps and the cut ends coagulated by the current, so that no suture is needed. Wounds made by the cutting current heal by first intention, and postoperative shock is less than after operation with the scalpel.

Experimental Studies in the Genesis of the Common "Cold"—Catarrh.—With a view to obtaining a better understanding of the common

cold, P Schmidt and A Kairies report that by means of delicate thermoelectric measurements they have succeeded in taking the exact temperature of different parts of the mucous membrane of the mouth and throat Using 36° C as a zero point, they were able after a little practice to record variations as slight as 0 03° C or even one half this amount The warmest portion of the mucosa was found to be the sublingual and tonsillar regions, the coolest the pharynx and palate After these various preliminary measurements, a uniform spot was chosen as a basis for comparison in different individuals, viz a point between the uvula and the lateral wall of the soft palate, about 1 cm from the margin of the palate, and as a rule on the left side Tests were carried out on 16 persons in the winter season, to find the reaction of the mucous membrane upon exposure to cold and heat The chilling experiment consisted of letting the subject inhale cold air for one hour at an open window, with the mouth open, after which the temperature of the mucous membrane was recorded The subject was then given a cup of hot coffee to drink, and a little later the temperature was taken again, both in the mouth and at various points on the skin In most individuals the degree of chilling was about the same, but the time required for warming up again of the mucosa showed wide variations in the different subjects The restoration of temperature was particularly slow in persons of asthenic type with great sensitivity to cold and a strong catarrhal tendency This time factor seems to be of peculiar significance for establishing the *types of reaction* In tonsillectomized persons the absence of the tonsils as "warm pillows" for the temperature of the mucosa is evidently an influential factor In most persons the drinking of a large amount of hot coffee quickly restores the normal temperature In some subjects loud speaking and singing, as a mechanical irritation, had a much more marked effect on the mucous membrane than did chilling, especially in cases of chronic tonsillitis and pharyngitis There was a relation found in some cases between chronic tonsillitis and the great group of hypersensitive states (asthma, bronchitis, hay fever, chronic joint rheumatism) Chilling of the feet produces distant symptoms in some subjects, suggesting that a vascular spasm occurs, which, in extreme cases, lasts long enough to stop all phagocytosis, while growth of bacteria continues —*Deutsche medizinische Wochenschrift*, August 7, 1931

Hyperfunction of the Posterior Lobe of the Pituitary as the Cause of Nephropathy and Eclampsia of Pregnancy —When the cause of the metabolic disturbances that underlie toxicoses is sought, say Friedrich Hoffmann and Karl Julius Anselmino, in the *Klinische Wochenschrift* of August 1, 1931, it is wise to begin with the study of milder cases rather than with cases of eclampsia accompanied by coma and convulsions, for these are nonspecific manifestations which may be found in all possible kinds of disease, and which accordingly explain nothing of the nature of the illness But we find metabolic disturbances in pure form in pre-eclamptic states, viz, in patients with hydrops and nephropathy Here the principal metabolic disturbance is the tendency to water retention In relating toxicoses to endocrine disturbances it will be recalled that the cardinal symptom, which is water retention, represents the characteristic effect of the antidiuretic component of the posterior lobe of the pituitary, which accordingly—probably by increasing the retrograde resorption of water in the tubules—produces in the healthy kidney a characteristic inhibition of diuresis This at once suggests that the increase of blood pressure frequently observed is in accord with the pressor action of the posterior lobe If we compare the other *important clinical manifestations in nephropathy* and eclampsia with the corresponding effects of the posterior lobe, we find nearly complete agreement Among these were increase of blood pressure and capillary spasms, appearance of coma, convulsions, pulmonary edema, diminution of galvanic excitability, definite displacements of ions from blood into the tissue, and the diminution of symptoms by means of very definite narcotics and hypnotics Quantitative determinations on the part of the authors established the presence of an excessive content of the blood in the posterior lobe, and a parallelism between the hormone concentration and the severity of the clinical manifestations These clinical symptoms are accordingly to be regarded as the result of a toxicosis of the posterior lobe of the pituitary It is thus shown that the renal symptoms and eclampsia of preganancy are attributable to endocrine disturbances, with the clinical picture dominated by an overproduction of the antidiuretic component of the posterior lobe of the pituitary, and in the cases with increased blood pressure by increased production of a pressor substance, which is presumably identical with that in the posterior lobe

LEGAL

AUTOMOBILE—RIGHT OF POLICE TO COMMANDEER IN AID OF ARREST

By Lorenz J. Brosnan, Esq.

Counsel, Medical Society of the State of New York

A citizen of the State of New York is driving his automobile on a highway or street in this State, when suddenly a police officer jumps on the running board and commands him to pursue a fleeing criminal. Must the citizen obey such command or, if he does not, can he be prosecuted criminally for such refusal? In the event that he obeys such command and is injured in the course of such pursuit, has he any redress in the civil courts for compensation based upon such injury or, if in carrying out this command he is killed, can his dependents obtain redress in the civil courts for his loss? In this age of racketeers and gunmen these questions are not academic. It is a common occurrence to pick up a daily newspaper in any of our large cities and read the gruesome details of a battle between the gunmen and the police, in broad daylight, upon the crowded streets of our cities and towns.

The police in the performance of their duty may lawfully call upon a private citizen for aid and assistance in order that such police officers may arrest any person or recapture a person who has escaped from legal custody. "The right of a peace officer 'to summon and require the assistance of as many bystanders as may be necessary to enable him to perform his duty in making an arrest or preventing or suppressing a breach of the peace,' as well as the obligation upon the bystander to obey, is firmly rooted in the common law. Like those summoned to form a posse comitatus, the bystander is bound to aid and assist."

Section 1848 of the Penal Law of the State of New York provides: "A person who, after having been lawfully commanded to aid an officer in arresting any person, or in re-taking any person who has escaped from legal custody, or in executing any legal process, wilfully neglects or refuses to aid such officer is guilty of a misdemeanor."

A few years ago a very interesting case arose in the Court of Appeals of this State dealing with the question under consideration. The case came before the Court upon the following state of facts: A man was employed as a chauffeur by a taxicab corporation. While driving one of its cars in the performance of his duty upon the public highway, a police officer jumped on the running board and ordered the driver to chase another car in order to arrest its occupant. Suddenly another vehicle cut across the path. The result was a collision from which death ensued. The chauffeur's widow filed a claim pursuant to the provisions of the Workmen's Compensation Law, claiming that her husband's death occurred in the course of his employment as a chauffeur for the taxicab corporation. The taxicab company contended that the death of the deceased did not arise out of and in the course of his employment, but was occasioned by the commandeering of the deceased and of the vehicle by a police officer.

After a hearing before the State Industrial Board, an award was made to the widow which was affirmed by the Appellate Division, and the taxicab corporation then took the case to the Court of Appeals. In affirming the award, Chief Justice Cardozo writing for the court said:

"'A person who after having been lawfully commanded to aid an officer in arresting any person, or in retaking any person who has escaped from legal custody, or in executing any legal process, wilfully neglects or refuses to aid such officer is guilty of a misdemeanor' (Penal Law, Section 1848). The duty goes back to the days of the hue and cry. 'The main rule we think to be this,' say the historians of our early law, 'that felons ought to be summarily arrested and put in gaol. All true men ought to take part in this work and are punishable if they neglect it.' The law did not limit itself to imposing upon the manhood of the country a duty to pursue. To make pursuit effective there were statutes in those early days whereby a man was subject to a duty to provide himself with instruments sufficient for the task. A typical illustration is a statute enacted in 1285. 'Immediately upon such Robberies and Felonies committed, fresh Suit shall be made from Town to Town, and from Country to Country.' Every man shall 'have in his house Harness for to keep the Peace after the antient Assise.' The amount is to be proportioned to the quantity of lands and goods. Thus, for fifteen pounds of lands and goods there shall be kept 'an Hauberke, a Breastplate of Iron, a Sword, a Knife, and an Horse.' We may be sure that the man who failed to use his horse, and who would only go afoot, would have had to answer to the King.

"The horse has yielded to the motor car as an instrument of pursuit and flight. The ancient ordinance abides as an interpreter of present duty. Still as in the days of Edward I, the citi-

zenry may be called upon to enforce the justice of the State, not faintly and with lagging steps, but honestly and bravely and with whatever implements and facilities are convenient and at hand. The incorporeal being, the X Taxi Corporation, would have been bound to respond in that spirit to the summons of the officer if it had been sitting in the driver's seat. In sending A upon the highway, it knew or is chargeable with knowledge that man and car alike would have to answer to the call. An officer may not pause to parley about the ownership of a vehicle in the possession of another when there is need of hot pursuit. In so far as the danger of pursuit was a danger incidental to the management of the car, it was one of the risks of the employment, an incident of the service, foreseeable, if not foreseen, and so covered by the statute."

One of the Judges of the Court dissented from the ruling of the Court of Appeals, holding that when the taxicab chauffeur, in obedience to a lawful command, gave aid to the police, he became himself a member of the police department and was no longer acting for his employer, the taxicab corporation, and hence his death did not arise out of and in the course of his employment. In the dissenting opinion it was said in part:

"The direction which he took; the speed at which he drove his cab—these became subject to the supervision and control of the policeman on the running board. Since, from then on, in all his movements, he must have yielded obedience, not to his original employer, but to the officer, he ceased to be a servant of the former and became a servant of the police department of the government. The argument that he remained the general employee of his original employer and a special employee of the police department is not tenable. All the cases dealing with general and special employment proceed upon the theory that the work of the special employment is performed at the instance of the general employer. Here the original employer was not aware that his employee had been impressed into the police service and, therefore, could not have given its consent or its direction that the services should be performed."

It thus appears that an employee working for an employer subject to the Workmen's Compensation Law, and his family are fully protected under the circumstances considered in this editorial; but this, of course, does not mean that a citizen driving his own car is so protected. The law does not give to him any redress in the civil courts against the municipality for an injury sustained in the course of assistance rendered to a police officer of such municipality nor, if death ensues, does the family of such individual have any legal redress against the municipality. It is true that the municipality may, and sometimes does, as a favor render assistance in such a situation, but the municipality cannot be compelled by law to do so.

In commenting upon the situation here discussed, one of the papers of this State stated editorially in part as follows:

"The legal, to say nothing of the physical, situation of a taxi driver who finds himself careering down a street with a policeman on the running board, his speedometer at sixty miles an hour and a fusillade of bullets imperiling his life is a matter not without interest. It becomes of even greater interest when one realizes that not only a taxi driver but any citizen who owns and drives a car may find himself in the same predicament. . . .

"Happily, commandeered drivers rarely stop to discuss the law with the policeman who hails them; ordinarily the citizen tears open his throttle and gives way to the excitement of the chase with a reckless courage fully equal to that of the police. If a hired driver, he can reflect as he goes that his compensation, at any rate, is safe. The private owner has to take his chances, though if his death should leave his family in want, the municipality would doubtless relieve them as an act of grace. And more timid souls can remember that if they refuse to obey the command, a misdemeanor involves a maximum penalty of only a year's imprisonment or a $500 fine."

HOT WATER BOTTLE BURN

A specialist in urological surgery was called by a general practitioner to the home of a patient who was suffering from an enlarged postate which prevented the emission of urine. The doctor examined the man, who was eighty years of age, and found that his general health was good and the doctor arranged to operate upon him. He placed the patient under an ether anesthesia, opened the bladder by making an incision in the abdomen and drained the bladder. He did not, however, remove the obstruction as he considered that that would be too much of an operation for a man of the patient's age to have done in one stage. He, therefore, inserted a drain and about ten days later, the man having recovered well from the shock of the first operation, the doctor undertook to complete the operation of removing the muscle which obstructed the ureter.

The operation was performed under a spinal anesthesia and all went well until just as the doc-

tor was completing the suturing up of the wound, one of the assistants notified him that the patient was going into shock. The patient who had been talking up to that time was gasping, and the doctor became apprehensive that he was about to expire. Hypodermics were immediately administered to the patient and a hot water bottle, which was handed to the doctor by a nurse, was wrapped by the doctor in a cloth and placed against the patient's abdomen about four inches above the point of incision. The doctor remained with the patient who in about five minutes revived and seemed to become normal again. He was returned to his room in the hospital and the hot water bottle was permitted to remain against his abdomen, since the patient had previously complained of being cold in that region. The doctor was informed the next day by the patient's nurse that a burn had developed at the spot where the hot water bottle was placed. The burn was dressed and healed without any difficulty.

Much to the surprise of the doctor, a suit was instituted charging that due to the negligence of the defendant doctor the patient had sustained a serious burn, for which large monetary damages were claimed. When the case came on for trial in its regular order, the attorney for the plaintiff failed to appear to try the case. On motion of the attorney for the doctor the action was dismissed by the presiding justice.

CLAIMED NEGLIGENT ABDOMINAL OPERATION

A young woman consulted the defendant doctor complaining of a burning sensation on urination and frequent urination together with a profuse vaginal discharge, and also severe pain on the lower right side of the abdomen. The doctor examined the patient and found a swelling on the right tube and ovary, with marked tenderness. A smear which was taken showed numerous pus cells. The doctor treated the patient practically daily for the next two months, at the end of which time the discharge had subsided and the acute symptoms had cleared up. The tube on the right side was still enlarged, so he advised that if she had any attacks in the future an operation would be the only cure.

Nearly a year later the patient returned to his office complaining of severe pain, so the doctor made arrangements for an operation. She entered the hospital and the operation was performed by another doctor, with the assistance of the defendant doctor, for the removal of the patient's appendix, part of her right ovary and part of her right tube. The defendant doctor attended the patient during her ten-day stay at the hospital which was uneventful. After her discharge from the hospital, he called at her home every day for the next week.

Apparently the patient on the first day after her discharge from the hospital got out of bed and walked to the bathroom in her home against the doctor's orders. The result was that a blood-clot formed directly over the incision. This was treated by the defendant doctor and promptly healed.

Sometime later the patient called at the office of the defendant doctor complaining of a slight discharge for which he advised a douche.

This was the last seen of the patient, and sometime later a summons and complaint were served on the doctor charging that the operation had been performed so negligently that a false growth and adhesions resulted and that the patient had been compelled to undergo a second operation. The doctor who actually performed the operation was not made a defendant, for apparently the patient had the false notion that the defendant doctor had performed the operation himself. The case was apparently a strike suit for, just as it was about to be reached for trial, the plaintiff's attorney agreed to discontinue the action.

NEWS NOTES

AMERICAN PUBLIC HEALTH ASSOCIATION

The Sixteenth Annual Convention of the American Public Health Association meeting held in Montreal, Sept. 15-19, 1931, was attended by fourteen hundred physicians, nurses, and teachers of health from America, Europe, and the Orient. The large attendance and the scientific character of the program easily suggest that the American Public Health Association is one of the outstanding health forces of the world.

The American Public Health Association is now sixty years old, composed of professional workers in the health field. It is the central scientific body in the profession which it represents. It carries on health research and sets standards of health work. It acts as an appraiser of work accomplished. The strength of this organization is the united strength of the public health workers of America. It is an interesting observation that the majority are physicians.

A new and aggressive war on disease is being conducted on a larger scale than ever before in response to public interest. Never before have the resources of science been better applied nor the forces of organization more actively enlisted in public health effort. It is probably true that all this is being carried on to a greater extent in America than anywhere else in the known world.

That the public health field is still unlimited is apparent from the character of the program presented. Two hundred fifty papers were read during the four days of the sessions. Their variety is shown by an enumeration of the scientific sessions,—Vital Statistics, Laboratory, Public Health Engineering, Industrial Hygiene, Food, Drugs and Nutrition, Child Hygiene, Public Education, Public Health Nursing, Epidemiology, and Health Officers. Including those who formally discussed the papers, there were five hundred scientific presentations of public health problems.

The American Association of School Physicians was held separately during the entire four days. There were twenty-nine papers presented. One of them was on "The Early Recognition of Cardiopathic Conditions in Children of School Age," by Robert H. Halsey of New York City. That so prominent an association exists will perhaps be news to many physicians. The attendance at these school meetings was surprisingly large.

One of the most valuable contributions was the address on "Infantile Paralysis," by Dr. Cushing, the Professor of Pediatrics at McGill University Medical School, at one of the sessions of the School Physicians. This was outstanding among all of the addresses.

Since it is the policy of organized medicine today to inform the public as to what medicine is doing for the prevention of disease and the results obtained, it was interesting to hear the address of the editor of the *Montreal Star* on "What is Health News?" He said that two things should be recognized.—"1, that the public as a whole is today favorable to the idea of public health, and 2, that the newspapers today should attempt to show the practical definite steps that the readers must individually take to bring about a general improvement in public health.

To anyone who has given thought to the present-day public character of medicine, to the interest of the public in preventive measures, to the great changes in ten years, to the rapidly growing problems in public health, and the need of increasing the availability of modern scientific medical knowledge,—to anyone who has thought of these things and who has attended the Public Health Sections of the American Medical Association meetings and sessions of the American Public Health Association, there is a very definite impression of the enormous amount of health work that is being done within our own nation and in other nations. Again one sees that this work is actually being done by physicians, and that other organizations are more and more coming to be supplementary. Other organizations are essential for the particular kinds of work that they can do and which medical organizations cannot do. At this annual meeting more that ever it was plain that the technical work in all public health advance depends upon physicians properly supported with means to inform the public on health matters and properly financed on units of area of sufficient size to provide the necessary financial support by general taxation.

The meeting of the American Public Health Association and its affiliated bodies was in many ways one of the most important gatherings of medical men held during this year. It was an example of the opinion today that health problems are international.

While many diseases are rapidly diminishing, it is still necessary to maintain increasing vigilance. New problems are just being attacked. Public health work in such things as venereal disease, cancer, and chronic diseases is just beginning. Greater effort has been made this year to find the cause of disease, and greater effort has been made to solve the problem of the spread of disease. The interesting observation is that in all the activities, physicians are taking the leading parts.

WILLIAM H. ROSS

RADIO BROADCASTS

By the Committee on Health Examination

The Committee on Health Examination of the Medical Society of the State of New York, after two years of research and preparation, is about to conduct, in cooperation with various social, medical, health, and particularly women's, organizations, a fifteen-minute radio broadcast at 11:00 A.M. every Thursday, on the Columbia chain, for fifty-two weeks, during the Women's Hour, which is under the direction of Ida Bailey Allen.

This is the initiation of a carefully worked out program of health education service, by the responsible medical authorities, to the people of New York and neighboring states.

It is designedly concentrated on one subject: Preclinical Medicine (the Health Examination, Foresight, and Management of Life for Health, Happiness and Efficiency; Personal Prevention of Disease, Positive Health). This is the new field of medical service; it needs wise leadership and authoritative guidance. Its service will be great.

This work will seek to bring into service all forces now working in this direction, and the responsibility will be centralized in the official medical organization, where it properly belongs.

This year's program will be concentrated exclusively upon the problems of the woman: her own welfare first; and her responsibilities, children, and family second. The whole life will be covered from babyhood through childhood, preschool, school, high school, adolescence, premarital, marital, motherhood, and grandmother herself. The circumstances and conditions of life occasioned by the school, farm, college, factory, office, home, club, village and city will be considered.

All the several fields of medicine, in its general and special departments, will be covered, in a direct, practical, personal way. Its medical policy will be conservative, constructive, without special doctrine, and strictly impersonal.

Each broadcast will start with a word of greeting and introduction from a prominent and responsible woman representing some organization of women, or some phase of woman's activity. The general hostess for the year is the New York State Federation of Women's Clubs, Mrs. William Dick Sporborg, President, in close association with the Business and Professional Women's Club, and the Parent-Teacher Association.

The physicians giving the medical messages will be those prominent in their respective organizations, or in special fields of medical and health work. They will predominantly be practicing physicians, familiar with the real problems of the woman and the real service of the family physician.

The broadcasting will be done on the Columbia chain; the addresses will be given from Chicago, New York and Washington. From Chicago, the medical leaders of the American Medical Association will be available; from Washington, the medical and other officers in the several departments of the Government, and the women of official Washington and the diplomatic service.

The programs will be concentrated each month on one topic. The first month, September, which marks the reopening of the schools, will be devoted to children, particularly babies and the preschool child; October, to the schoolgirl; November, to the high school girl; December, the month of Christmas, to mothers; January, to the business girl and the business woman; February, to the club-woman and the woman leader in affairs, with particular emphasis on a longer life for great and valuable women; March, to grandmothers; April, to children, in preparation for May 1st, Child Health Day; May, to the girl graduating from high school or college; June, to the fiancée, wife, and mother; July, to camping and the out-of-doors; and August, to husbands.

C. WARD CRAMPTON, *Chairman.*

SIXTH DISTRICT BRANCH

Between eighty and ninety members of the Sixth District Branch of the State Medical Society met at the Iron Kettle Inn near Waverly on the twenty-second of September for the twenty-fifth annual meeting of the Branch. The meeting was called to order by Dr. George M. Cady, president, at 10:50 A.M.

Dr. John A. Conway of Hornell, District State Health Officer, addressed the gathering on "Typhoid Carriers, Surgical and Medical Management." Dr. Conway deems the medical management to be unsatisfactory unless the source be urinary, when the use of hexamethylenamine will, at times, be followed with relief. The surgical approach is better when the source can be determined to be in the biliary tract.

Dr. Oliver W. H. Mitchell, Syracuse, spoke on the topic "The County Health Unit." According to Dr. Mitchell the advantages of the county as a unit far outweigh the disadvantages, and

this conclusion was approved by those who had had experience with this system, and who entered into the discussion that followed.

A nominating committee was appointed by the chair consisting of Drs. H. L. Knapp, Jr., Newark Valley, Tioga Co., H. E. Merriam, Ithaca, Tompkins Co., and G. R. Murphy, Elmira, Chemung Co.

At this juncture the guests of the Branch were introduced and gave their messages: Dr. D. S. Dougherty, State Secretary, Dr. W. D. Johnson, State President, and Dr. John A. Card, Speaker of the House of Delegates.

Adjournment was taken at 12:30 P.M. until 2:40 for luncheon.

Upon reassembling the nominating committee reported the following names as candidates for officers of the Branch: Dr. S. B. Blakely, Binghamton, for president, Dr. John E. Wattenberg, Cortland, for first vice-president, Dr. L. P. Larkin, Ithaca, for second vice-president, Dr. H. B. Marvin, Binghamton, for secretary, and Dr. W. A. Moulton, Candor, for treasurer. These candidates were elected unanimously.

Dr. Arthur C. Morgan of Philadelphia gave an excellent paper on "The Treatment of Cardiac Tragedies," which evoked considerable discussion.

The meeting was closed by Dr. G. S. Carpenter, of Waverly, who gave the history and operation of the Tioga County Hospital, and issued invitations to all to make an inspection of that institution at the close of the session. This invitation was accepted by a large number of the doctors. H. B. MARVIN, *Secretary.*

DUTCHESS-PUTNAM SOCIETY

A regular meeting of the Dutchess-Putnam Medical Society was held September 16, 1931 at the Nelson House, Poughkeepsie, N. Y. The meeting was called to order by the Vice-President, Dr. W. A. Krieger at 9:00 P. M.

Committees were appointed to adopt suitable resolutions to be sent to the families of the late members, Doctors Charles L. Fletcher and S. I. Jacobus.

The following resolution was introduced and adopted:

WHEREAS, it has been brought to the attention of the Dutchess-Putnam Medical Society, that there is at the present time, in the State Legislature, a bill to authorize the City of Poughkeepsie to issue bonds to the extent of One Hundred Thousand Dollars, ($100,000.00), to cover the cost of a sewer leading from the Bowne Memorial Hospital; and

WHEREAS, the passage of such a bill would not only relieve some of the unemployment situation, which is existing at the present time, but provide an adequate means of sewage disposal for that institution, which is important from the standpoint of health and sanitation;

THEREFORE, BE IT RESOLVED, that the Dutchess-Putnam Medical Society heartily endorse the project, and petition the State Legislature now assembled, and the Governor of the State, to use their efforts towards the immediate passage of such bill; and

BE IT FURTHER RESOLVED, that the Legislative Committee of the Dutchess-Putnam Medical Society, be authorized to transmit such resolution to the proper authorities.

Doctor John A. Card introduced the following resolution which was adopted after discussion:

The Dutchess-Putnam Medical Society passed a resolution commending the action of the various Boards of Health, in the Counties, in keeping the schools closed and requesting the closing of the Sunday Schools during the prevalence of the outbreak of poliomyelitis; and it further recommends that the Boards of Health be requested to forbid the attendance of children under 18 years of age from the moving picture houses.

The Secretary was appointed reporter to the State Society.

Dr. George T. Pack, Memorial Hospital, New York City, gave a paper on "The Management of Mammary, Uterine, and Oral Cancers," illustrated with lantern slides.

The meeting adjourned at 11:00 P. M. for refreshments.

Present: Drs. Sadlier, Appel, Baldwin, Stoller, Andrews, Thomson, Conger, Davison, Bulkeley, Harold Crispell, Burns, C. E. Lane, Stibbs, Peckham, Voorhees, Gosse, Harrington, Simon, Taber, Sobel, Leonidoff, Smith, Christensen, Dingman, Card, Krieger, Carpenter, Toomey, Rogers, Merritt, guest (Vassar College),— 32 in all. H. P. CARPENTER, M.D., *Secretary*

BRONX COUNTY

A Special Meeting of the Bronx County Medical Society, held at Elsmere Hall, on September 16, 1931, was called to order at 9 P.M., the President, Dr. Irving Smiley, in the Chair.

The President announced that the meeting was called for the purpose of conducting a Symposium on Immediate and After-Care of Poliomyelitis.

The Scientific Program then proceeded as follows:

Immediate and After-Care of Poliomyelitis:

A. Medical Aspects, James P. Leake

B. Neurological Aspects, Joshua H. Leiner

C. Orthopedic Aspects, Samuel W. Boorstein

The subject of the evening was then further discussed by Drs. William L. Rost and Samuel A. Jahss, following which the discussion was closed by Drs. Leake, Leiner and Boorstein.

It was moved that the Society extend a vote of thanks to the readers of the papers for their splendid presentation of the subject. This motion was unanimously carried, and the President accordingly expressed the appreciation of the Society. I. J. LANDSMAN, *Secretary.*

ROCKLAND COUNTY

The September meeting of the Medical Society of the County of Rockland was held at the State Institution, Letchworth Village, Thiells, New York, on the afternoon of Wednesday, September 23rd, 1931, with thirty-eight members present out of the total membership of fifty-two. The meeting was called to order with the President, Dr. Leo G. Weishaar in the chair. Dr. Maximilian Moses was elected to membership.

The meeting was first addressed by Dr. James Vander Veer, past president of the State Medical Society, of Albany, New York. Dr. Vander Veer appeared in behalf of the State Society as chairman of the Venereal Disease Committee. The doctor stressed many features which he considered neglected in the diagnosis and treatment of syphilis. Among them was early diagnosis. He recommended the greater use of the dark field study for the spirochetes, and also emphasized the necessity of further Wassermann Tests since the first Wassermann is frequently negative in very early lesions. Dr. Vander Veer impressed the members of their obligation in carrying out the treatment of syphilitics, and pointed out that a great number of chronic invalids who exist in our institutions as public charges results from inadequate antisyphilitic treatment during the early stage. (See this Journal, June 1, 1931, page 712.)

Dr. Albert Pfeiffer, Director of the Division of Social Hygiene, appeared before the members as a representative of the State Department of Health, and told the physicians what the State had to offer. Drugs for the treatment of syphilis would be furnished to the physicians free of charge for indigent patients. He explained that so many patients who discontinue their treatment (which should be prolonged) on account of financial reasons later become public charges in our institutions as a result of this disease. He stated that there are many thousands of people today in our state hospitals as a result of untreated syphilis. The new Public Welfare Law authorizes county boards of supervisors to establish venereal disease clinics. The state will match the county funds dollar for dollar. Dr. Pfeiffer is anxious that the medical society and county officials establish such clinics in Rockland County.

Dr. George W. Henry of the Bloomingdale Hospital at White Plains was the concluding speaker. His subject was "Practical Applications of Psychiatry to General Medical Practice." His discussion was both interesting and illuminating. Dr. Henry cited many actual cases where the patient had undergone several operations or long periods of hospitalization in different institutions for treatment of organic diseases where the condition was purely functional. This subject aroused considerable interest.

After the meeting adjourned, the members were the luncheon guests of Dr. Charles S. Little, Superintendent of the Institution, who proved himself to be the usual delightful host.

WILLIAM J. RYAN, *Secretary.*

ALBANY COUNTY

The September meeting of the Medical Society of the County of Albany was held at the Albany Hospital on Wednesday evening, September 23, 1931.

Following the regular order of business, Dr. William Feltman, Albany Medical College, 1930, was elected to membership. The chair announced that Dr. Huntington Williams, Secretary of the New York State Department of Health and Chairman of our Local Committee on Public Health would leave September 28th to assume charge of the Department of Health for the city of Baltimore, Maryland.

We rejoice in Dr. Williams' call to a larger field but regret to lose him from our membership.

The Scientific Program was presented by members of the Staff of the Albany Hospital, and consisted of the following interesting papers:

Peritoneal Carcinomatosis, Dr. John A. Sampson.

The Present Local Epidemic of Poliomyelitis, Dr. Henry L. K. Shaw.

Ten Years of Obstetrics, Dr. Thomas O. Gamble.

This meeting was one of a series that have been held at the various hospitals of the city during the year.

The Society will celebrate its 125th anniversary with a dinner at the De Witt Clinton Hotel on Wednesday evening, October 28, 1931, at 8:00 P.M. The principal speaker will be Dr. George W. Crile, of Cleveland, Ohio.

The Hon. Franklin D. Roosevelt is expected to be present. It is planned to make this one of the outstanding events in the Society's history.

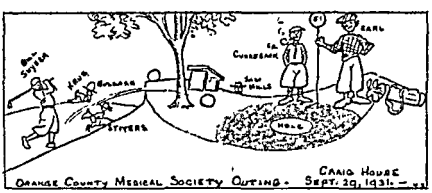
HOMER L. NELMS, *Secretary.*

ORANGE COUNTY.

A joint meeting of the Orange County Medical Society and the Newburgh Bay Medical Society was held on September 29 in the Craig House, Beacon, with forty members present.

Craig House is not a hotel, but a sanatorium at which psychopathic and neurological cases are given instructions in handicraft, including golf. Dr. C. J. Slocum, the Medical Director, conducted the visiting doctors through the institution and explained the therapeutic measures in use there.

The meeting was largely social and recreational, and the program included golf and a clambake.

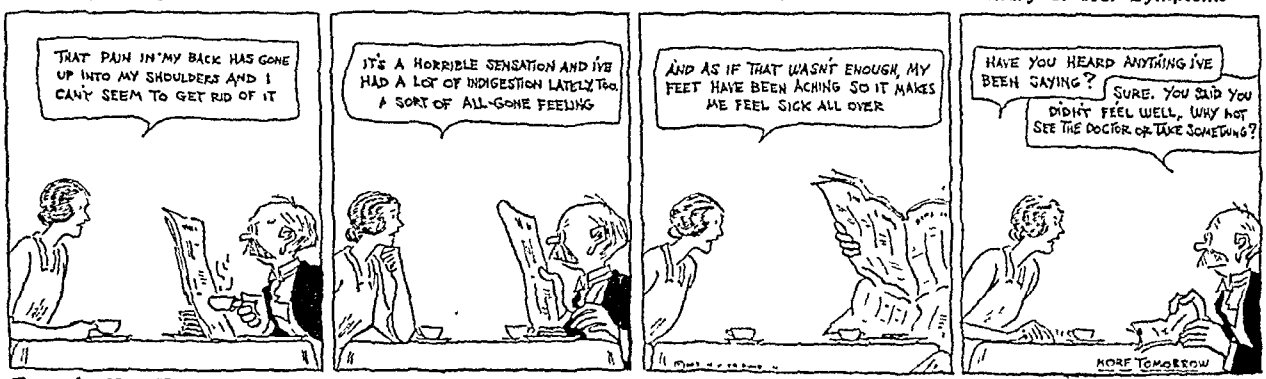


Heading of the Mimeographed Notice of the Meeting

H. J. SHELLEY, *Secretary.*

THE DAILY PRESS

Mr. and Mrs.— *Vi Gives Joe a Summary of Her Symptoms*



From the *New York Herald Tribune*, June 11, 1931.

TREES WITH FEELINGS

Who was it that said a tree groans at every stroke of the woodsman's ax? Whether or not trees can feel and think as do human beings, there is no doubt that to human eyes they may appear to rejoice or suffer—at least so they seem to James J. Montague in the following verses which were published in the *New York Herald Tribune* of September 21:

"The birches and the maple trees,
When winter is at hand,
Fling off their clothing to the breeze
And bleak and bare they stand.
The elm without his yellow cloak
Will presently appear,
And stripped and cold will stand the oak
Until the spring is here.

"Where once the willows formed a screen
That held the gales at bay,
The hills and valleys may be seen
For miles and miles away.
And high above the forest floor,
Majestic in its grief,
The stately mottled sycamore
Has cast its last lone leaf.

"But though in bitter undertones
The pines and firs may sigh,
And though the laden hemlock groans
When every gust goes by,
They still are clothed and snug and warm
When summer days depart,
And never any bitter storm
Can chill them to the heart.

"And when the air is keen and chill,
And hurrying snowflakes sting,
And one walks out beyond the hill
To seek for signs of spring,
They always seem in peace and ease,
Well muffled to their throats,
And shielded from the biting breeze
In winter overcoats."

FAITH HEALING

The New York *Herald Tribune* of September 21, contains an account of the report of a commission on faith healing in the General Assembly of the Protestant Episcopal Church at Denver. The report says:

"A joint commission of the Protestant Episcopal Church, after nine years' study of the problem of Christian healing, recommended to the general convention of the church today that those who practice such healing in the church operate in cooperation with the medical profession.

"The commission pointed out that, while the church must teach that spiritual healing is an integral part of the Gospel of Christ and part of the pastoral office, it must not teach or use any methods tending to lead people to believe it is the only, or even the primary, element of that gospel.

"No sober minded man," the report recites, "can dispute what materia medica has done for humanity to alleviate the suffering caused by disease and accidents and the practical eradication of certain diseases.

"We may believe that this progress in medical science has been due to certain illumination of the spirit of God. The church will not fail to give due credit to the medical profession for its noble work for poor suffering humanity."

"The primary stress of a constructive move-

ment, the commission states, must be placed on "health" and not healing. By stressing health, the Church must have an effective message to the sick, as it now has for the sinful.

"Many today would stress what is called 'the sacrament of unction.' To them it has not only the psychological but also sacramental value," the report states. "It is clearly Scriptural and has behind it the authority of apostolic times. We rejoice that there is a form of service for its administration. But no one, however high the value he placed on it, would question that it is only a means to a spiritual end.

"A sane constructive health movement can not be based upon the use of consecrated oil; that is not its primary truth. The same may be said of 'a gift of healing,' so much disputed and about which we know practically nothing."

PSYCHOLOGICAL TESTS FOR GUILT

Psychologists are giving much attention to methods of detecting criminals: and they frequently stage demonstrations before classes of college students. The New York *Herald Tribune* of September 25, comments editorially on the failure of a test in Columbia University, and point out the reason for the failure. The editorial says:

"Three different types of method cover the majority of these psychological machines, if not all of them. One is to test the time taken by suspected persons in replying to questions or in supplying words associated with those presented by the examiner. The assumption is that the person who has guilty knowledge of which he is reminded will take longer in his replies or will make these replies in some other abnormal way. A second method tests certain bodily functions, like the rate of the heartbeat or the number of respirations each second. Here it is assumed that guilty knowledge will cause the heartbeat or the respiration to quicken when this knowledge is brought to mind by questions or suggestions. Third is the method of the psychogalvanic reflex, a nervous stimulus which lowers greatly the electrical resistance of the skin and which is believed to be elicited by thoughts or secrets which the individual tries to conceal.

"In reality, all three of these mental reactions are evoked directly by emotions. Laughter or fear will lower the skin resistance even more than trying to lie. A joke or a sweetheart will make the heart beat faster and will quicken the rise and fall of the breathing muscles. The theory of the lie detectors is that any attempt to conceal something arouses emotions and that these emotions produce the reactions concerned. Usually this is true, but not always. Probably Dr. Lecky's two subjects already were as excited as possible by being asked to take part before their classmates in such a test. Perhaps one or both of them failed to be excited at all because of the realization that the whole drama, after all, was nothing but make-believe. Real criminals, it has been found, often respond poorly to these tests because they lack the quick emotional responses of ordinary folk.

COSMIC DUST

The *Herald Tribune* of September 13, comments editorially on a paper presented before the American Astronomical Society by Dr S. F. Carpenter of the University of Arizona. The Professor discussed the data in evidence of the existence of so-called cosmic dust, and says:

"The significance of these data for our own cosmic neighborhood is in the fact that this star-dimming dust cloud is not everywhere. It seems to be localized on the contrary, in a broad belt of the heavens approximately parallel to the Milky Way."

Dr. Carpenter likens the cosmic dust to the smoke thrown off by a pinwheel on fire, and says:

"On the fringe of an ordinary pinwheel is first a ring of sparks and outside this another ring of smoke and darkened dust. In our celestial pinwheel the fringe of sparks is the star ring of the Milky Way. Dr. Carpenter's facts show that there exists also the expected outer fringe of dust and smoke. In one or two spots in the sky telescopes show spiral nebulæ which we chance to see edge on, like viewing a fireworks pinwheel from one side. Sure enough, photographs show dark central lines bisecting the lengths of these sidewise presentments and indicating, it is probable, dust around the star cloud's edge. If we could get far enough away from earth for a similar outside view of our own home Dr. Carpenter's data indicate that it would look the same."

OUR NEIGHBORS

LEGISLATIVE COMMITTEE IN IOWA

The September number of the Journal of the Iowa State Medical Society contains an excellent editorial on the problems connected with state medicine and on the manner in which the Iowa State Society is meeting them. The article says:

"It has been well said that the paramount problem now confronting the medical profession of America is whether medicine is to be practiced and controlled by properly qualified physicians or by untrained usurpers (untrained laymen). For the past thirty years these problems have become increasingly acute in Iowa, and the members of this society are confronted with four decisive questions. It should be noted clearly that each of these four problems has a direct bearing on the larger issue 'state medicine.' They are:

"1. Should unqualified persons be permitted to practice medicine in Iowa?

"2. Should corporations control the conditions of medical practice?

"3. Shall public health activities be guided by laymen or by the medical profession?

"4. Is the method of operating the University Hospitals detrimental to private practice?

"The Legislative Committee of the Iowa State Medical Society has been instrumental in and has succeeded in securing favorable legislative answers to each of these four vital questions."

The answer of the State Society to the first question is as follows:

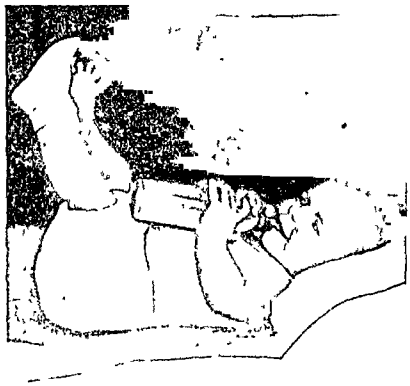
"A few years ago the statement was made that 'due to a weak medical practice act which is almost impossible of enforcement, Iowa is not only the dumping ground for quackery, but it is the one state in the Union where osteopaths and chiropractors are practicing medicine almost without restraint.' The activities of the Committee on Public Policy and Legislation, backed by the hearty support of the members of the profession and the various county medical societies have in the past two or three sessions of the General Assembly of Iowa almost entirely reversed this situation.

"In the entire history of law enforcement in the state of Iowa prior to July, 1929, all legal proceedings against violators of the medical practice act were less than a dozen in number and there had been but two or three convictions. In the last two years nearly one hundred individuals have been restrained from the illegal practice of medicine. Three things are responsible for this remarkable change: (1) improvement in the medical and other practice acts in the Forty-fourth General Assembly; (2) the creation of an inspection division in the Department of Health; and (3) the assignment of a member of the Attorney General's office to specialize in handling all cases concerning the practice acts. Your Committee on Public Policy and Legislation sponsored and cooperated in the enactment of certain laws which make it possible to prevent the practice of medicine by untrained persons. Your committee also worked for the measures which have placed in the Department of Health two full time inspectors whose sole duty is to secure evidence of violation of the practice act. Finally, through the just, efficient and fearless administration of the law and prosecution of violators through the Attorney General's office, there has been brought to justice an average of one case a week for the past two years. A prominent Iowan recently remarked that a thorough understanding of the necessities and standards of medical practice and the intricacies of the code could be achieved only by intensive attention to their legal aspects. The remarkable results accomplished are thus due not only to improvements in the law and the securing of the inspectors, but also to cooperation and specialization in the legal phases of this great program of protecting the people of Iowa from unscrupulous practitioners.

"When the Committee on Public Policy and Legislation recently tackled the problem of securing for Iowa physicians (as well as the hospitals) fair treatment at the hands of the corporations and other employers, under the Workmen's Compensation Act, the Iowa statutes unreasonably restricted the total amounts which had to be paid for the care of injured workmen. The maximum amount which an employer or the insurance company for him could be required to pay for all hospital, medical and surgical and other professional services, was originally $100. As a result of the very determined and successful effort on the part of the State Society, this limit has now been raised to $300.

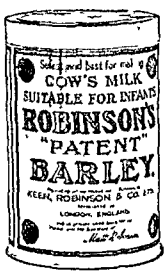
"While the financial aspect of this problem is an important consideration, yet it is in reality the minor one. The vital question here is whether or not the physician, his relation to the patient, and his fees, are to be arbitrarily and often unreasonably controlled by the state and by corporations. Here is very clearly an issue involving questions of 'state medicine' and the issue cannot be considered as settled until the physician is fully recognized as a major part in all problems affecting the health and medical treatment of workmen. In all

(*Continued on page 1298—Adv. xiv*)



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(*Continued from page* 1296)

fairness it should be stated that there is now every evidence of a spirit of conciliation and cooperation on the part of most of the more important corporations and insurance companies in this state, and it is possible that further adjustments may be secured by cooperation and mutual agreement."

In regard to the third question, that regarding lay control of public health activities, the editorial says:

"Laymen are not endeavoring to control medical practice in Iowa, thanks to the cooperative spirit of the various lay organizations, the leadership of the State Society in working out administrative problems, and the county health unit law passed in the Forty-third General Assembly. This is a permissive law which allows any county board of supervisors which so desires to unify all local health activities under the county board of health.

"The important detail in this plan is that three of the eleven members of the county board of health must be members of the local medical society. This provision insures cooperation between the members of the profession and the county health program and makes certain that the program itself will be based upon sound health and medical principles. This plan has been nationally recognized as sound and effective from the viewpoint of scientific medicine."

The answer to the fourth question dealt with local conditions, especially the manner of conducting state hospitals. A special committee to study this question will report to a special meeting of the House of Delegates to be held sometime before the Annual session. The article closes:

"The physicians of Iowa more than ever before are receiving fairer treatment and better recognition and cooperation in their efforts to protect the health and medical interests of the citizens of this commonwealth. Unity, cooperation and an unselfish interest in public welfare have produced these results. Continued unity and support can accomplish still more and every member of the Iowa State Medical Society should keep himself fully informed of the legislative and political program."

OFFICE OF THE INDIANA MEDICAL ASSOCIATION

The September number of the *Journal of the* Indiana State Medical Association devotes twenty pages to the annual reports of the officers and committees to the House of Delegates which meets on September 23 in Indianapolis. The first report is that of the Executive Secretary, Dr. Thomas A. Hendricks, who describes the work done in the central office in an interesting way, as follows:

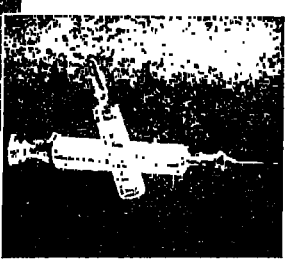
" 'What do they do at the headquarters office?'

(*Continued on page* 1300—*Adv. xvi*)

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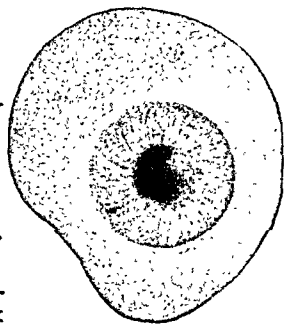
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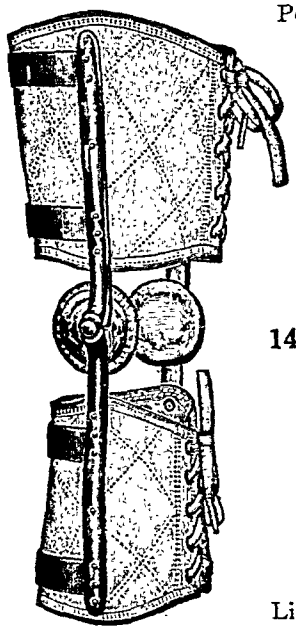
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(*Continued from page 1298—Adv. xiv*)

is the question often asked by members of the profession not directly in touch with Association activities. The best way to get an idea of the workings and accomplishments of the State Association is through reading the annual reports of the officers and committees that follow. This will give you some idea of the scope of work carried on by the State Association and will give you a conception of some of the questions that will come up for consideration before the House of Delegates and the Council at the coming session.

"A short outline of some of the duties of the headquarters office follows:

"First, we have an active, full-time staff of three persons on the job every working day at headquarters, and through this office the various activities of the county societies, the legislative committees and the American Medical Association program as it affects Indiana are correlated and executed. The work of this office is growing tremendously. In fact, so increased has the routine work alone become that we are faced with the necessity of employing a part-time girl to help out when the dues start to come in the first of the year. By routine work we mean the filing of letters, the constant correcting of membership records of some 4,000 physicians, the making of monthly reports of the American Medical Association, the collection of membership dues, the maintenance of medical defense records, the keeping of the treasurer's books, and the sorting and tabulation of the ever-increasing volume of work done by the Publicity Bureau. So small has the office become that this extra girl probably will have to work on Saturday afternoons when the office ordinarily is closed, at night, etc.

"1. At the headquarters office all of the administrative details of the Association, working through the State Executive Committee and under the control of the Council, are handled. Visits are made to the weak societies, they are bolstered up and all societies are helped to maintain a high standard of activity—

"(a) By talks of the society officers before county and district societies.

"(b) By monthly bulletins to secretaries of county societies.

"(c) By keeping a complete Kardex record of every physician, not only of the physicians who are members of the State Association, but every physician in the state. These records are up to date. Reports of these records are sent monthly to the American Medical Association. A complete tabulation is kept as to physicians in good standing, physicians who are blacklisted for ethical reasons and a

(*Continued on page 1301—Adv. xvii*)

(*Continued from page 1300—Adv. xvi*)

brief history concerning each individual member of the Association, the time he was licensed to practice medicine in the state, the school he attended, his date of graduation and his present location.

"2. Answering of many ethical questions through the Bureau of Publicity and Executive Committee.

"3. Maintaining an up-to-date file of possible locations that are available for physicians. This is done in cooperation with the salesmen of the various large pharmaceutical houses of Indiana. Splendid results have been obtained from this service.

"4. Supplying of material for medical and lay talks. Many requests are received for such material.

"5. Making out special membership lists for secretaries of district societies.

"6. The headquarters office keeps all records of medical defense cases. The Indiana State Medical Association has an unusually successful medical defense program for its members. Seventy-five cents of each member's dues go to medical defense. This entails a great deal of clerical and stenographic work.

"7. All detailed work of the treasurer's office has been done from this office since the first of December, 1925. This concentrates all administration duties of the State Society in one office, the collection and recording of dues, issuing of membership cards, etc. The State Medical Journal, one of the best in the country, is edited and published by Dr. A. E. Bulson, at Fort Wayne.

"8. A report upon every legislator who comes to Indianapolis is on file at this office. Records of every vote of every legislator on medical questions for the past six years are maintained. Through the State Legislative Committee, which meets in the headquarters office daily, if necessary, during the legislative session, the profession is kept in constant touch with the doings of the Legislature. This touch is maintained through the various county legislative committees. (Each county society has its own legislative committee which cooperates with the state committee.)

"9. The headquarters office is also the headquarters of the Bureau of Publicity of the Indiana State Medical Association. This Bureau meets once a week and does an infinite amount of work. It sends out weekly an article on scientific medicine to 250 papers and 800 members of parent-teacher associations throughout the state. It maintains a speaking bureau and provides medical speakers for lay meetings. It supplies also essayists for county medical society meetings. If a county society wants a speaker on any subject, the county secretary writes to the head-

(*Continued on page 1302—Adv. xviii*)



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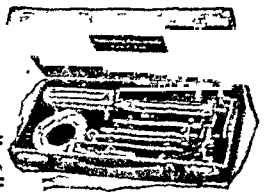
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(*Continued from page* 1301—*Adv. xvii*)

quarters office and the matter is presented to the Publicity Bureau. The Bureau is a real bureau of information and answers all questions that arise. The various newspapers of the state and the various press associations have become accustomed to calling the headquarters office in regard to questions of medical news. Thus, authentic information upon medical occurrences comes from the headquarters office. The headquarters office cooperates with the Better Business Bureau in making reports and gaining information upon quacks.

"10. The headquarters office makes all arrangements for the convention, meeting with local committees to insure proper accommodations, proper meeting places, proper entertainment, etc. (This work starts for each year right after annual ing of year before.)

"11. One of the big duties of the headq ive office is the handling of the commercial e ia- at the annual meeting. This alone takes a ed mous amount of time and correspondence, ng is well worth while as it gives the State A u- tion a good income. The headquarters o th responsible for laying out the floor plan, s to out the announcements, getting in the co st and collecting the money for the commerc ng hibit at each convention.

"12. General Duties. Besides this, the quarters office acts, as nearly as possible, a resentative for each individual physici Indiana who is a member of the state s Special effort is made to give complete inf tion and wholehearted help to individual cians who write in on any matter. We lo and check up on cases that individual physi have before the Industrial Board, physi throughout the state can call upon us for info tion they may desire in getting material essays, or obtaining information or anything has to do with the medical profession. This is growing each month. The headquarters acts as representative for the medical profes cooperating with the Indiana University S of Medicine, with the Indiana Council of S Agencies, and maintains close touch and coo tion with the State Board of Medical Registra and Examination.

"In short, the headquarters office will atte to handle any professional or personal prob of a medical nature of any of its members w these questions are submitted to it. Questi will be answered relating to the practice of m cine and the interpretation of any state or fed law, state compensation law, state license l narcotic laws, health laws. It will see that qu tions are answered relative to licensure and ciprocity. It will give advice upon any collect matter. The headquarters office desires to be the greatest benefit possible."

PERSONALS IN NEBRASKA JOURNAL

"Some state medical journals print personal notices of physicians. The Nebraska State Medical Journal of September contains the following note on its department of Human Interest Tales:

"For the Human Interest Tales in *The Nebraska State Medical Journal* we are almost wholly dependent on press clipping service. Lately, because of a shortage of material, it has occurred to us to make a comparison of items with the first 8 months of last year, with the following result:

	1930		1931
talks.	25	January	20
materi	19	February	30
"5.	9	March	30
secreta	13	April	30
"6.	28	May	20
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not produce the 'Tales'. The clipping bureau suggests in response to our complaint that it is just possible that the doctors are a little short of change for vacations and postgraduate courses and marriages this year.

"The department in the September Journal fills less than a column and consists of short items, of which the following are examples:

"Dr. G. W. Briggs, formerly of Decatur, has located at Walthill.

"Dr. L. D. McGuire, Omaha, submitted to a herniotomy, last month.

"Dr. and Mrs. C. W. M. Poynter, Omaha, motored in New England in August.

"Dr. Adeline Ashton, Chicago physician of note, visited relatives in Omaha, in July.

"Dr. R. B. Adams, Lincoln, secretary-treasurer of the Nebraska State Medical Association, spent a six weeks' vacation in the Canadian woods.

"Dr. E. I. Conner, medical missionary of Sierra Leone, Africa, is in the state on leave of absence and is lecturing under the auspices of the United Brethren church."

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GROUP COUNTY SOCIETIES IN WYOMING

The Wyoming section of *Colorado Medicine* for September discusses group county societies as follows:

"The success of the Northwestern Wyoming Medical Society, since its organization several years ago, points the way to the possibilities of three other similar organizations in Wyoming. The Counties of Park, Big Horn, and Washaki are located in the Big Horn Basin in northwestern Wyoming. Any one of these large but sparsely settled counties could not support a successful county medical society, but by uniting these three counties into one organization a strong society was formed and has successfully met the needs of the physicians in this area.

"In the northwestern part of Wyoming are Crook, Weston and Campbell Counties. In these three counties there are no large cities and in most of the counties only three or four physicians. However, by uniting these counties into a medical society much could be accomplished.

"Likewise in the southeastern part of Wyoming the Counties of Goshen, Platte, Niobrara, and Converse a strong society could be created.

"In the extreme southwestern part of Wyoming, Uinta, Lincoln, and Teton Counties could form the Southwestern Wyoming Medical Society.

"If we cannot support a live County Medical Society in every county let these counties unite their numbers and make a strong society. It is true that under our present State Medical Society Constitution a physician can join some adjoining county society, or he may in the absence of a county society in the county in which he lives, join the State Society. Yet by so doing he loses the companionship of a local society and has no vote in the House of Delegates which is the business body of the State Medical Society, and in turn the State Society loses the help of these unorganized physicians.

"It is true they can be members of the Wyoming State Medical Society and as such become members of the great American Medical Association, but by the organization of these thinly settled parts of Wyoming into strong societies composed of several counties much can be accomplished that is not now being done for the medical men of Wyoming.

"This year's program ought to include such organizations. We will all then be members of a stronger and better state organization."

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MEDICAL SERVICE TO VETERANS IN PENNSYLVANIA

No physician begrudges free medical treatment given to a veteran for conditions arising from his war service; but there is condemnation of the gift of medical service when the defect has no relation to army service, or the veteran is abundantly able to obtain the service for himself A protest against indiscriminate medical service to ex-soldiers of the World War was voiced by Dr. Walter F. Donaldson, Secretary of the Medical Society of the State of Pennsylvania, speaking before the Tri-State Conference as recorded in the August issue of the *Pennsylvania Medical Journal*. Dr. Donaldson sketched two soldier comrades, one a successful business man and the other a doctor. The business man had partly arranged that the doctor should operate on him for an epididymitis contracted ten years after the war, but a friend switched him to take free treatment in a Veterans' Hospital. The author says:

"After a stay in the hospital three weeks longer than necessary, or possibly had Jones been paying for it (it is difficult to find enough patients to fill the beds in many of the government hospitals), Jones returned to his home town, where for a long time he 'groused' about the quality of the free service he received from a bureau-controlled government hospital.

"In the meantime, Dr. Smith having aroused the interest of his fellow Federal income-taxpayers on the board of directors of the local hospital, as well as in the county medical society, is, or should be, endeavoring to convince his congressmen and the senators from his state that the Federal government must respect certain fundamental principles of 'states' rights,' and abandon its policy of providing free medical and hospital care, and financial relief for war veterans, except for impairments which can be reasonably related to war service, or the veteran who is unable to pay for treatment. Dr. Smith contends that since physicians represent the first group of citizens whose economic welfare is seriously threatened by this form of paternalism, and since they compose one of the few remaining individualistic professions, it is the duty of physicians to become politically conscious and to take the lead in fighting for recognition of 'states' rights' and for discontinuance of Federal interference.

"Surely, those who pay taxes to the United States Government will not supinely continue to approve free medical, surgical, and hospital treatment of the disabilities of 4,500,000 veterans which originate as ordinary incidents of everyday life twelve or more years after the World War ended. Congressmen and senators who support such legislation must be rebuked at the polls, and the great majority of the veterans retaining their patriotic principles must repudiate the noisy minority who continue their raids on the public treasury.

(*Continued on page* 1306—*Adv. xxii*)



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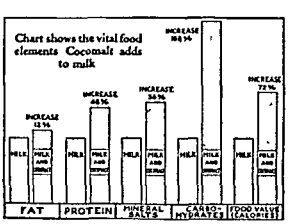
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Puretest Cod Liver Oil comes from the chosen waters of Lofoten, Norway, North of the Arctic Circle. The cod are caught during the early part of the year when the livers are richest in Vitamins.

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(*Continued from page* 1305—*Adv. xxi*)

"Dr. Smith, while agreeing that our Federal government should show every possible reasonable consideration to our war veterans, also emphasizes the fact that a larger proportion of physicians entered government service in 1917 and 1918 than from any other professional group. When the proposed 47 or more veterans' hospitals, each sustaining more salaried employees than patients, have been completed and occupied, then will 'state medicine' have been thoroughly established throughout the United States, never to be displaced because of the political patronage involved. And when veterans or their relatives no longer abound, then will the free hospital service be extended to other citizens; and by 1960 the private medical practitioner and the neighborhood hospital may largely have passed out of the picture.

"None can successfully deny, it is believed, that the Federal government, by the policy herein complained of, is in unfair competition with private physicians and the supporters of local hospitals who in turn are taxed to finance this paternalistic, bureaucratic form of medical and surgical hospital and dispensary practice."

HOW TO CHOOSE A CHIROPRACTOR IN INDIANA

The September issue of the Journal of the Indiana State Medical Association contains the following item:

"A woman routist traveling through one of our Indiana cities called up a leading surgeon and said: 'I understand that you are the leading surgeon in this community, and being a stranger in the city I would like to obtain some trustworthy information from you. Can you give me the name and address of the leading chiropractor?' The surgeon retorted, 'You don't need the address of a chiropractor; you need to make the acquaintance of the superintendent of the feeble-minded school.' "

The same Journal also comments on how to choose a doctor as follows:

"The *Literary Digest* for May 30, 1931, makes some pointed comments on the subject, 'How to Pick a Doctor,' and intimates that a stranger in a strange city, unless he uses unusual discernment, is just as apt to pick a quack as a reputable physician. We confess that we consider the question not easy to answer, although we believe that a stranger in a strange city will not make any serious mistake if he calls up the superintendent of the leading hospital and merely requests that the most prominent general physician or specialist on the staff be asked to give him attention."

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Physician. Experienced in the treatment of mental, drug and alcoholic cases, desires a responsible position in private sanitarium or institution. Best references as to character, ability, etc. Address Box 161. Care N. Y. State Journal of Medicine.

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E. Kromayer (in the Neue Deutsche Klinik 11, 1929) applies a zinc oxide ointment containing 2 to 10 per cent Lenigallol (triacetylpyrogallol) on the diseased eczematous areas. The effect obtained by the Lenigallol in the zinc ointment is a mild cauterizaton of the diseased areas, due to the gradual liberation of its pyrogallic acid constituent. "Because of the simplicity of application and certainty of its action, Lenigallol is of great service for ambulatory patients."

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Literature and sample tube of Lenigallol-Zinc Ointment may be obtained by writing BILHUBER-KNOLL CORP., 154 Ogden Avenue, Jersey City, N. J.—See Front Cover—*Adv.*

COCOMALT CLINICS

Some time ago R. B. Davis Co. cooperated with health authorities* in Arkansas in an unusual test. Cocomalt clinics were established in the drought area and the children placed under the care of an attending physician and registered nurse. The children were given Cocomalt mixed with milk once a day. The average gain for forty days was 8½ pounds per child. One of the most outstanding features of this work was that in thirty children that were checked an increase in hemoglobin from 5 to 15 per cent was indicated.

The splendid results obtained with Cocomalt in Arkansas with only one feeding a day are further evidence of the high nutritive quality of this delicious food drnk. Though it provides all the varied nourishment of a well-balanced meal, Cocomalt imposes no digestive burden. It is readily assimilated, quickly metabolized. It contains malt enzymes whch actually help to digest the starches of other foods. Cocomalt meets ideally the demand for a high caloric, easily digested food.

More and more doctors are advising Comomalt in cases of malnutrition; for expectant and nursing mothers; for convalescents and for hyper-nutrition in post-operative cases. Cocomalt is available at grocery stores everywhere in the ½-lb., the pound and the economical 5-lb. family size. High as Cocomalt is in food value the cost is surprisingly low—it is within the means of practically every family.

*The Cocomalt clinics were conducted, and reports rendered, by Dr. A. M. Gibbs, Hamburg, Arkansas, and other county health officers.

Dr. J. C. Miller, Desha County Health Officer (Desha County, Ark.), writes as follows: "We used Cocomalt with milk and had very satisfactory gains and I believe Comomalt to be very valuable as a flesh producer." —See page xxi.—*Adv.*

LIVER EXTRACT—LILLY

Of interest to all medical men is a recent news item from Indianapolis announcing plans for the construction of a new medical research laboratory by Eli Lilly and Company. Ground was broken about October first. Originally it had been planned to start construction next spring. On account of the labor situation it was decided to advance the work which will give employment to a large number of men throughout the winter months.

For some years Eli Lilly and Company have placed special emphasis on medical research. Eighteen years ago a fine new building was erected to house the staff and equipment of a scientific department. As opportunities presented themselves the work of this division of the business has expanded until the facilities were no longer adequate to the needs of the company.

Eli Lilly and Company are authority for the statement that this new research unit will be the finest of its kind in the country. It will be four stories above ground. The dimensions will be 222x50 feet with an auxiliary building at the rear 84x50 feet. The structure will be of monumental design, of reinforced concrete with brick exterior.

The building will house the latest and most advanced scientific equipment. It is said, on good authority, that the value of the interior furnishings and laboratory apparatus will greatly exceed the cost of the building. Another feature of this new Lilly medical research unit will be a very complete scientific library which will occupy the top floor of the building. It is interesting to note that in addition to the present science building the company also maintains research laboratories at its biological plant outside of Indianapolis and also at the Marine Biological Laboratories, at Woods Hole, Massachusetts, during the summer months.—See Color Insert.—*Adv.*

VITAMINS A AND D AT THEIR BEST

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NEW YORK STATE
JOURNAL of MEDICINE

PUBLISHED BY THE MEDICAL SOCIETY OF THE STATE OF NEW YORK

VOL. 31, No. 21 NEW YORK, N. Y. NOVEMBER 1, 1931

THE PRESENT STATUS OF QUINIDINE THERAPY*

By EDWIN P. MAYNARD, JR., M.D., BROOKLYN, N. Y.
From the Department of Medicine, Brooklyn Hospital, Brooklyn, N. Y.

QUINIDINE sulphate has now been in use in the treatment of various irregularities of the heart for thirteen years. Frey,[1] in 1918, was the first to describe its action in auricular fibrillation and since that time over one thousand cases of this disorder treated by this drug have been reported in the literature. Quite naturally its effect has been tested on other forms of arrhythmia. Scott,[2] in 1922, was the first to use quinidine in preventing and abolishing paroxysms of tachycardia of ventricular origin. Other workers have reported their experience with it in auricular paroxysmal tachycardia, auricular flutter and premature contractions so that now we are in a position to evaluate quinidine sulphate as a means of combating these conditions.

First, let us consider its use in the treatment of chronic auricular fibrillation. From the results of a study of our own cases, published in 1928,[3] those of Viko, Marvin & White,[4] Wolff & White[5] and Eismayer,[6] it is quite certain that sinus rhythm can be established in from 50-70 per cent of the cases of chronic auricular fibrillation. When considering the present status of quinidine therapy, one of the first questions to be answered is, of what value is the return of sinus rhythm to the patient? All workers familiar with quinidine agree that there is no evidence that the drug influences the natural progress of the underlying disease, or that it prolongs life. However, in a large number of people with auricular fibrillation, their chief complaint is that their activities are curtailed by the tumultuous beating of their hearts. Even when under proper digitalis control, this annoying symptom persists. It is true that there is a definite group of cases of chronic auricular fibrillation who are not conscious of the condition and in whom digitalis therapy is enough to keep them comfortable. However, for the larger group who complain of the irregular action of their hearts, quinidine therapy offers, not a cure, but symptomatic relief in from 50-70% of the cases.

As already stated, we studied a series of 53 cases of auricular fibrillation from the wards and private service at the Brooklyn Hospital. The work was completed in 1927. At the end of the study there were thirteen of the 53 cases still maintaining the sinus rhythm that had been established by quinidine. Of these thirteen patients we have a complete record on eight. All but one of the eight, have relapsed permanently to fibrillation. The one exception maintained sinus rhythm until his death in 1930. Three are alive but in permanent auricular fibrillation. The remaining four are dead and all had relapsed to fibrillation. It is of great importance to note, however, that of the eight cases successfully followed, six had long periods of regular sinus rhythm. One lasted for 8½ months—one for 21 months and two for 3 years—one for 4¼ years and one for 7 years until death. There is no evidence that the course of the disease was influenced by the treatment but there is abundant testimony that these patients were kept more comfortable for long periods of time.

Having demonstrated the value of quinidine sulphate in the treatment of certain cases of auricular fibrillation, it then becomes necessary to establish certain criteria for the selection of those cases in whom the drug should be tried.

First of all it should only be used in those cases in whom it seems desirable to abolish the fibrillation for the symptomatic relief of the patient. If the patient is not conscious of his irregular heart and if his activity is not limited thereby, quinidine is not indicated.

Second, the most favorable cases are those in whom the fibrillation has been of short duration, one month or less. Cases of longer duration than this do not show as high a percentage of successes, but are nevertheless not excluded on this ground alone.

Third, those cases are most favorable that have no signs of congestive heart failure or in which

*Read at the Annual Meeting of the Medical Society of the State of New York, at Syracuse, N. Y., June 3, 1931.

the signs of failure have responded well to digitalis. Those cases in which digitalis has failed to clear up the failure should not be given quinidine sulphate.

Fourth, patients with advanced mitral stenosis do not do well with quinidine. The fundamental pathology is so extensive in the heart that the likelihood of maintaining sinus rhythm is not very great. Furthermore the accompanying dilitation of the auricles makes the presence of auricular thrombi more probable and increases the danger of embolism.

Fifth, even in the absence of mitral stenosis, a history of previous embolism contraindicates the use of quinidine.

Having discussed the criteria for the selection of patients for whom an attempt is to be made to abolish auricular fibrillation it may be of interest to enumerate certain other factors that influence the success of the treatment. Age seems to play a definite part. According to White & Wolff,[5] those patients under forty gave a higher percentage of successes. At the same time, etiology, when related to age seems to influence the outcome. The younger cases of rheumatic heart disease did the best in their series, whereas, the older patients with arteriosclerotic heart disease did the poorest. Hurxthal[7] studied the use of quinidine in cases of fibrillation of thyrotoxic origin in whom the fibrillation persisted after thyroidectomy. He was able to establish sinus rhythm in all but five of his series.

The question as to whether digitalis should be used in conjunction with quinidine is still open to debate. There is no disagreement as to the fact that congestive failure must be thoroughly treated and that the ventricular rate must be well controlled by digitalis before the use of quinidine is begun. At this point the earlier writers felt that digitalis should be stopped, basing their opinion upon the fact that digitalis tends to increase the rate of the circus movement while quinidine tends to slow it. More recently, White & Wolff,[5] have brought forward considerable evidence to show that the response to quinidine is better in those cases that have been thoroughly digitalized. The theoretical considerations involved are very complicated but suffice it to say that the use of digitalis during the course of quinidine therapy is justifiable.

In the matter of dosage and method of administration of quinidine sulphate there is also some divergence of opinion. The drug is given in capsule or tablet form. The first day the patient is given two small test doses of 0.2 gm., each to determine the absence of quinidine idiosyncrasy. If none of the symptoms of cinchonism develop, the next day the patient is given 0.4 gm. of quinidine every four hours—day and night—after the method of Riecker[8] or 0.4 gm. every two hours for five doses as advocated by White.[5] If auricular fibrillation persists, the dosage may be cautiously increased up to 0.6 or 0.7 gm. at a dose. If the larger doses fail to restore sinus rhythm it is advisable to discontinue the drug at the end of two or three days of the heavy dosage and allow the patient to rest for two days on digitalis alone. Then a second course of quinidine should be given omitting the test doses. It has been found that quite a number of cases will revert to sinus rhythm in the second or even third course of the drug. As to whether the two hour or the four hour method of administration is the better it is impossible for us to say. The two hour method has the advantage that the patient is not disturbed for medication at night.

The maximum total dose of quinidine that can be given with safety in twenty-four hours has not been completely established. The earlier workers set the limit at 2 gms. In our series we found that it was sometimes necessary to give considerably more than this before sinus rhythm could be established, as much as 3 or 4 gms. a day in some instances.

The toxic effects of quinidine have been thoroughly described by many authors and they need only to be enumerated here. In the milder group of symptoms may be placed nausea, dizziness, headache, tinnitus, palpitation, vomiting, diarrhea and urticaria. These manifestations call for caution in the dosage but do not demand discontinuing the treatment. The more serious toxic effects are as follows, respiratory embarrassment with or without loss of consciousness, toxic rhythms, such as ventricular paroxysmal tachycardia, standstill of the auricle due to intra-auricular block and sudden collapse with death. Embolic phenomena with resulting hemiplegias may also follow quinidine therapy but are due to the dislodgement of intracardiac thrombi rather than to toxic action of the drug. These serious sequellæ are by no means rare in the treatment of chronic auricular fibrillation but they are apparently becoming less frequent as the cases are more carefully selected and as the use of the drug is better understood. Nevertheless, because of them, the attempt to abolish chronic auricular fibrillation by quinidine should be limited to hospital practice where the patient can have the closest kind of observation aided by frequent electrocardiographic tracings.

After sinus rhythm has been established it is wise to give the patient a daily ration of 0.2 gm. of quinidine three times a day for several weeks or months after leaving the hospital. This is done in the effort to prevent relapses to fibrillation.

All authors agree that quinidine sulphate is of real value in preventing or greatly reducing the attacks in paroxysmal auricular fibrillation. Wyckoff & Ginsberg,[9] reported three successful

cases in 1924. White,[10] Christian[11] and others recommend its use and so far as can be learned from the literature, agreement is complete that quinidine is a real addition to our armamentarium in the treatment of this condition. The dosage is small, 0.2 gm. three times a day and therefore the danger of serious toxic symptoms from the drug is negligible. The frequency of attacks can be greatly reduced in some instances from once or twice a week to once or twice a year. Furthermore some patients learn to terminate their attacks with one or two capsules of quinidine. The drug can be recommended as a safe and effective means of treating the paroxysmal type of auricular fibrillation.

Quinidine in auricular flutter does not enjoy the same reputation. Our own limited experience with it and that of others go to show that it is not often effective in ending the paroxysm. However, it may be tried if digitalis fails, using the same dosage as in the case of chronic auricular fibrillation. In some instances if the flutter has been converted to fibrillation by digitalis and if then the fibrillation tends to become fixed, quinidine may be of value in restoring sinus rhythm.

Next, we come to the use of quinidine in the paroxysmal tachycardias. Those that arise from ectopic foci in the auricles or in the junctional tissues may usually be stopped by the various methods of vagus stimulation and they rarely present serious difficulties. We have never found it necessary to resort to quinidine either to end an attack or to prevent recurrences. The tachycardias of ventricular origin are an entirely different matter however. They do not respond to vagus stimulation and they are nearly always associated with serious organic disease. All the older methods of treatment have been unsatisfactory and unless the attacks stopped spontaneously, serious heart failure and even death resulted. Scott, in 1922,[2] was the first to use quinidine in preventing and terminating attacks of ventricular tachycardia. Levine & Fulton,[12] have since confirmed his work and have called the attention of the profession to this real therapeutic agent. Since ventricular tachycardia is usually associated with serious organic heart disease, commonly with coronary thrombosis and since its results are so disastrous, no time must be lost once the diagnosis is made. The usual test doses are given and then the therapeutic doses the same day. Our practice has been to begin with 0.4 gm. every 4 hours and after one or two doses to increase the dose by 0.1 gm. at a dose until the paroxysm has been broken up. Levine recommends pushing the dose up to 1.5 gm. every 4 hours, if necessary. We have had the opportunity to treat three cases of ventricular tachycardia, two in young patients with cardiac enlargement of unknown etiolgy and one in a case of coronary thrombosis. In all three we were able to terminate the paroxysms, in the first two patients on two separate occasions each.

In order to illustrate the value of quinidine sulphate in ventricular tachycardia, one of our cases will be reported in detail.

S.M.N., age 29, male. Admitted to the Brooklyn Hospital, Jan. 30, 1929, and discharged February 9th, 1929. In his past history the patient gave no record of any of the rheumatic diseases except for two attacks of tonsillitis. Venereal disease was denied and the blood Wassermann was negative. The first attack of ventricular tachycardia was three years before admission after a game of tennis. Since then he has had two or three attacks a year always lasting less than twenty-four hours. Between attacks he is entirely free from cardiac symptoms. Physical examination then, reveals a heart which shows moderate general enlargement, a regular rhythm, no signs of valvular disease and no signs of congestive failure.

Diagnosis—cardiac enlargement, etiology—unknown. The attack to be described began January 29, 1929, but failed to subside in the usual manner. The heart rate was 230 per minute, blood pressure 90 systolic—70 diastolic. The patient was pale, anxious, sweating and troubled by attacks of vomiting and vague precordial distress. Electrocardiograms showed ventricular tachycardia. As the attack progressed the heart became larger to percussion, the liver became palpable and tender, 4 centimeters below the costal margin and numerous fine moist rales appeared in the anterior chest. After trying vagus pressure, without success, using large doses of morphine and other sedatives it became apparent that further measures must be taken to stop the paroxysm as congestive failure with pulmonary edema had begun. It was decided to use quinidine sulphate and the first dose of 0.4 gm. was given January 31st, at 8 P.M., and continued every four hours. After the 4th dose, or sixty-three hours from the onset, the paroxysm ceased. The signs of congestive failure rapidly cleared up and the patient recovered. There have been two recurrences since then, one in March, 1929, which was treated successfully at home and another in August, 1930. This attack was a severe one, the worst of all but was finally controlled by quinidine. Since then and to date the patient has been free from attacks. We have had no experience with quinidine sulphate intravenously but its use in this way has been reported. In serious situations, such as ventricular tachycardia, if quinidine fails by mouth, it would seem justifiable to give it intravenously. The dose recommended is from 0.2 to 0.4 gm. every 4 hours. Undoubtedly the most striking and dramatic results of the use of quinidine sulphate are seen in ventricular tachycardia.

There is one more use for quinidine in the

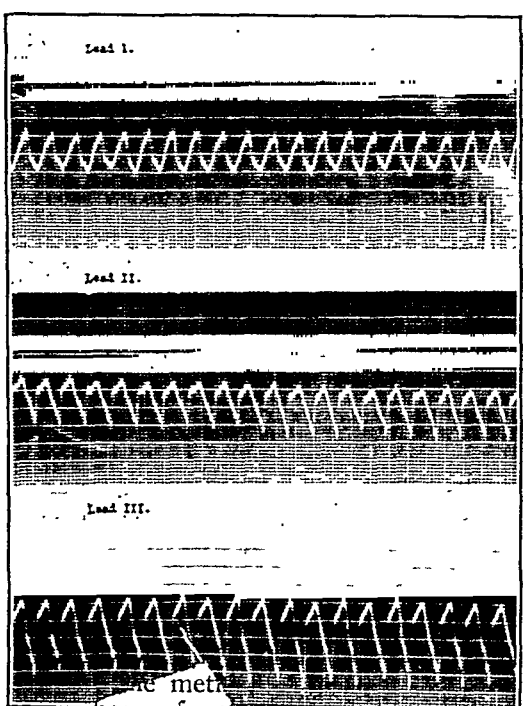
arrhythmias and that is in the treatment of premature beats. Ordinarily after careful examination has excluded organic heart disease, simple reassurance is enough to satisfy the patient. If the exciting cause of the irregularity cannot be found and eliminated, sodium bromide is usually the best remedy. Digitalis may also be useful in some cases. If these measures fail, small doses of quinidine sulphate 0.2 gm. three times a day may suffice to make the premature beats very infrequent and relieve the patient of their annoyance. There is a considerable group of people, however, in whom quinidine is unsuccessful.

Summary

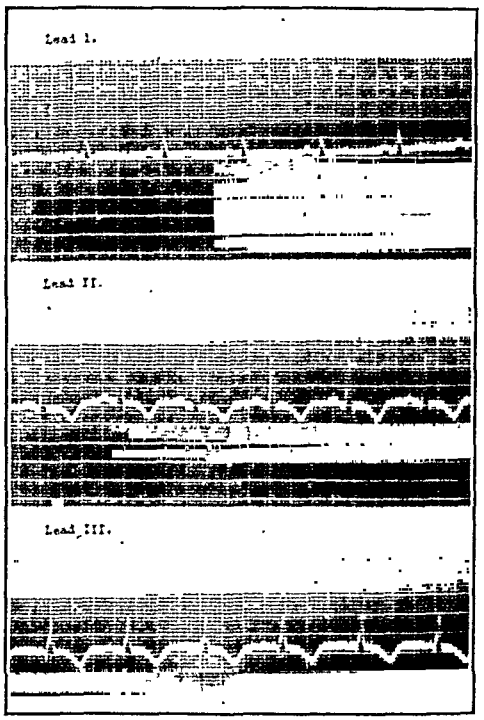
1. The use of quinidine sulphate in the treatment of chronic auricular fibrillation is described. The criteria for the selection of cases are discussed and the end results in our series of cases reported in 1928[3] are given. In properly selected cases quinidine sulphate is recommended in the treatment of chronic auricular fibrillation for the relief of the symptoms arising from the irregular action of the heart.

2. In the paroxysmal type of auricular fibrillation, quinidine sulphate was found to be highly successful in abolishing or greatly reducing the frequency of the paroxysms.

3. Auricular flutter does not respond so well and quinidine is only recommended in those cases in which digitalis has failed or in which the flutter has been converted to a type of fibrillation that does not readily revert to sinus rhythm.

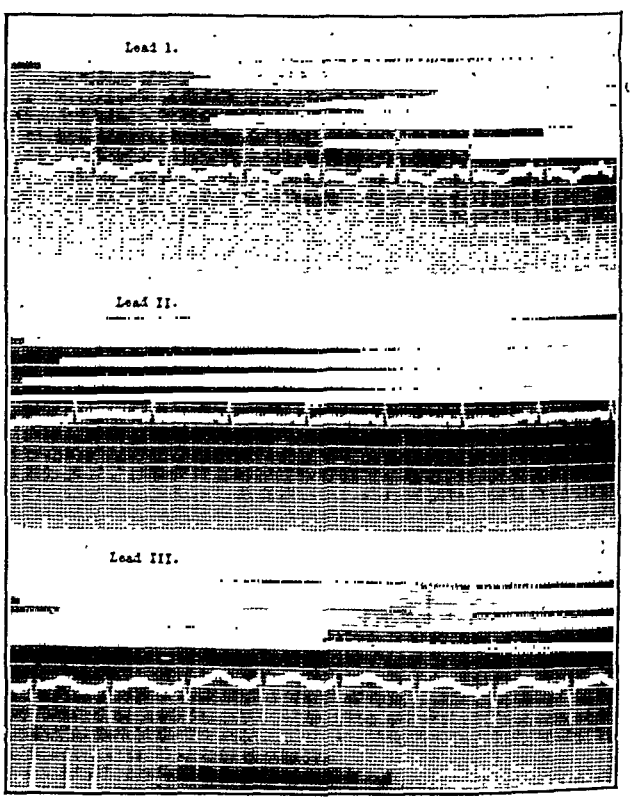


Jan. 30, 1929. Ventricular Paroxysmal Tachycardia—before quinidine administration.

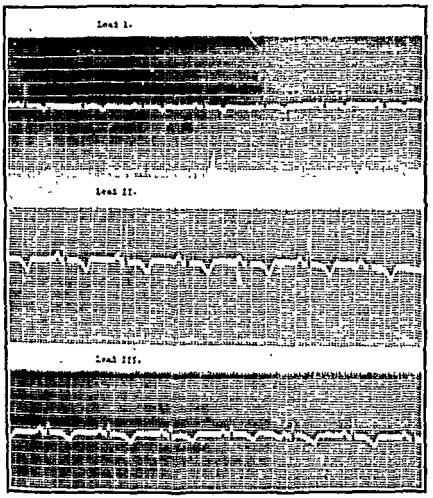


Feb. 1, 1929. Sinus rhythm after quinidine sulphate 1.6 gm. Note the deep inversion of T in leads II and III. No axis deviation.

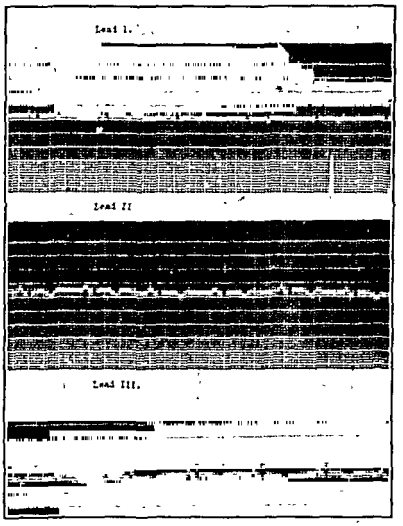
4. In the paroxysmal tachycardias, quinidine sulphate is rarely necessary in the auricular or



Feb. 2, 1929. Twenty-four hours after quinidine. Note the appearance of left axis deviation and T wave negativity in lead I.

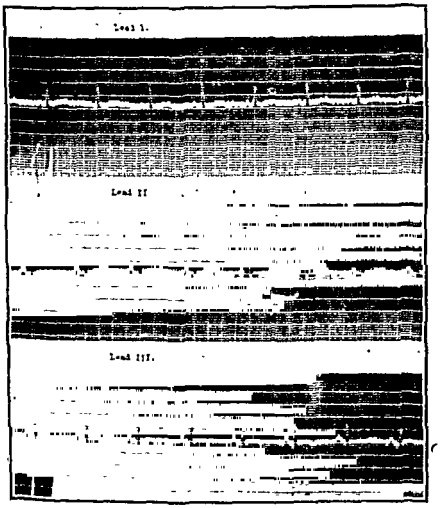


Feb. 5, 1929. Four days after quinidine. The axis deviation has disappeared and T waves are now inverted in all leads.



Feb. 8, 1929. Seven days after quinidine. The T wave negativity is less marked.

nodal types except to reduce the frequency of attacks. In the ventricular type, however, it is of great value and is the only specific means we have of ending these dangerous paroxysms. Its successful use in three cases is reported including a detailed description of one of these.



Feb. 21, 1929. Twenty days after quinidine. The T wave negativity has disappeared except in lead III.

5. In the treatment of premature contractions, the use of quinidine sulphate is recommended when simple reassurance and bromide medication have failed to relieve the patient of the subjective symptoms.

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N. Y. State J. M
November 1, 1931

THE GUTTADIAPHOT TEST*

By ISTVÁN GÁSPÁR, M.D., ROCHESTER, N. Y.

THE guttadiaphot is a new test for the detection of pathological changes of the blood. The name, guttadiaphot, means picture of a drop seen by transmitted light. The starting point of the whole idea was a fortunate observation of Meyer, a practicing physician in a country town. He observed a different behavior of the blood when a few drops were drawn into the salvarsan syringe, namely, the blood either sank or floated in the salvarsan solution, the first condition being in connection with a positive, the latter with a slightly positive or negative Wassermann reaction. Meyer tried to utilize this observation and simplify the Wassermann reaction, but the method did not work out in practice. Later on absorbent papers were used and the blood was dropped on them. Meyer stained the absorbent paper with sudan red, because he thought of catching the lipoids of the blood; while Bierast introduced a malachite green and an ocean blue stained paper strip. At this time the idea of substituting the Wassermann reaction was abandoned, and the thought was to bring out certain qualities of the blood in different diseases. Schilling replaced the third paper strip with a nile blue stained one and experimented on an abundant clinical material. He showed that the test is unspecific, but is a general and very sensitive indicator of disease.

The technic of the test is very simple. Three test papers, red, green and blue are placed in a little pasteboard frame, and kept ready for use in a dried condition. About one cc. of blood is withdrawn from the cubital vein with a perfectly dry syringe and needle. Immediately afterward two drops of blood are allowed to fall on the same spot on each of the test-papers. The blood drops will spread in a circular fashion. Now, the papers are kept in a horizontal position until the blood drops become dry. Technical mistakes should be avoided, because positive pictures may be simulated in a normal blood. Moist frames, or water mixed with the blood will cause much confusion.

The papers are read a few hours later; however, the blue strip is very often characteristically positive a few minutes after the test has been made. The dried drops are examined by transmitted light, by looking through them. The light is furnished either by daylight or by an electric bulb.

The healthy blood shows a characteristic picture. On the red strip, there is a dark red outline of the blood disc. The disc may be surrounded by a corona, which again is circled by a dark edge.

On the green strip, the disc is of a brownish red color and homogeneous. A corona with a sharp outline is not regularly observed.

On the blue strip, the reddish-green disc is bordered by sharp outline.

The picture of pathological blood presents numerous variations. The sharp edge of the disc may be repeatedly broken. There may be no distinct contour whatever, or a bright red corona without a sharp contour especially on the red strip.

The blood disc may clear up, indicating solution of the dyes in the blood, suggestive of anemia. In such instances the disc is lighter in color and may be mottled. An accumulation of color near the edge is most distinct on the blue strip. It appears here as a dark green edge, especially if viewed from above. Very strongly positive cases (sepsis, blood diseases, advanced syphilis, and tuberculosis) are accompanied by the formation of free light colored rings around the blood disc. This is due to the dissolved dye which has been carried beyond the extent of the red blood corpuscles. From a practical point of view the free colored rings mean pernicious anemia, but we have found an exactly similar picture in a case of undetected prostatic carcinoma with metastases to the ribs. The various discs represent only different gradations but not differential pictures.

In the mechanism of the reaction the red blood corpuscles are extremely important, because the blood serum or cerebrospinal fluid alone does not show different guttadiaphot pictures in healthy or diseased conditions.

Other factors which may have some important role in the reaction, are, electrolytic content, viscosity, surface tension of the serum and solubility of the dye in different serum components, and lipoid content of the serum.

According to Schilling a positive guttadiaphot indicates active infectious or anemic conditions or an endocrine blood disturbance (for instance due to hyperthyroidism) provided that physiological conditions, such as menstruation and pregnancy or faulty technic may be ruled out. In infections a positive guttadiaphot practically means activity. In chronic infections the test is more sensitive than the sedimentation reaction. In infectious conditions the anemia is also important to get positive reactions, but the parallelism is not absolute. Namely, there is a marked positive reaction even without a remarkable anemia in these conditions.

In a large majority of cases syphilis gives a

* Read at the Annual Meeting of the Medical Society of the State of New York, at Syracuse, N. Y., June 3, 1931.

positive guttadiaphot reaction. It also became evident that in a suspicious case of syphilis the guttadiaphot may almost be equal to the Wassermann reaction. This does not mean, however that it can be used as a substitute for the Wassermann reaction. Almost all cases of tuberculosis, which were reported, showed positive pictures. Mild, ambulant cases were similarly positive when tested with this method.

Anemias occurring in blood diseases give a strongly positive reaction. During the course of liver therapy the pathological pictures of pernicious anemia gradually return to normal, though marked neurological symptoms still may be present. Leukemias may give a negative reaction before anemia complicates them.

Non-infectious, internal diseases, especially unaccompanied by anemia or without endocrine disturbance show negative guttadiaphot pictures. An early diagnosis of malignancy by this test is impossible because the resulting blood changes are at first not remarkable.

In neurasthenia, neuroses, climacteric complaints, simulations and in health examinations a negative guttadiaphot confirms the functional nature of the complaints.

Our own experience, gathered at the Klinik of Prof. His in Berlin, and the results obtained in more than fifty selected cases at the Rochester General Hospital, showed that a negative guttadiaphot test was helpful in substantiating the functional nature of complaints in visceroptosis, in adult and child hysteria, in a case of fractured costal cartilage simulating gall bladder disease, and in a case of neurasthenia. On the other hand, a case of duodenal ulcer showed a positive picture with normal blood count, and a case of enlargement of the thyroid associated with nervousness presented a markedly positive reaction opposite to the basal metabolic rate, which was normal. In this way the functional nature of the nervousness was ruled out.

Though the test does not localize the disease and the reaction is uniform in widely different conditions, it is a valuable addition to our practical tests. It seems that the test will be used with success in the hospital and in the out-patient department. It seems, however that the practicing physician will gain much more.

With a simple office test his attention may be called to the presence of pathological conditions which might otherwise be overlooked. He may also use the test at the periodical health examinations or in compensation cases, and save the papers for a followup or as documents. A positive guttadiaphot will urge him to carry out more specific tests.

A SPLINT TO PREVENT TOE DROP IN POLIOMYELITIS

By T. WOOD CLARKE, M.D., UTICA, N. Y.

THE most important factor in the early treatment of poliomyelitis after paralysis has set in, is the prevention of deformities. The most common cause of deformity is the weight of bed clothing and gravity in cases of paralysis of the muscles of the leg, causing toe drop and resultant contraction of the tendoachilles.

To prevent this, physicians have made use of frames to hold up the bed clothing, boxes or sand bags below the feet, and bandages, splints, and plaster of Paris.

The frame, while keeping the clothing away from the toes does not offset the effect of gravity. Boxes and sand bags necessitates constant adjustment and immobility of the patient, a difficult accomplishment in children if the paralysis is not extensive. Bandages have too much play. Plaster of Paris is heavy and the ordinary ankle splints require the keeping in stock of a variety of sizes.

For the last fifteen years the author has been using a splint which combines rigidity and lightness, and can be made in a few minutes at the bedside to fit the individual case.

The material used is the fibre board* used by electricians. For a small child the board 1/32 inch in thickness is used. For adults 1/16 inch board is better. This fibre board has the characteristic of being very stiff in its normal condition, but after soaking in hot water for a few minutes it becomes soft and pliable. The large sheets can be soaked in hot water, cut into strips and rolled up into tight rolls which can be carried easily in a bag.

When the splint is to be made, a measurement is taken from one inch beyond the toes, over the heel, to the upper third of the calf. The roll of fibre board is soaked in hot water until it softens and unrolls, cut to the required length and width and the corners rounded off. A perpendicular cut is made opposits the tip of the heel from both edges, the two cuts coming to a point one to two

* The fibre board used by the author is that made by the Spaulding Fibre Co., Tonawanda, N. Y., and sold under the title of "black vulcanized fibre."

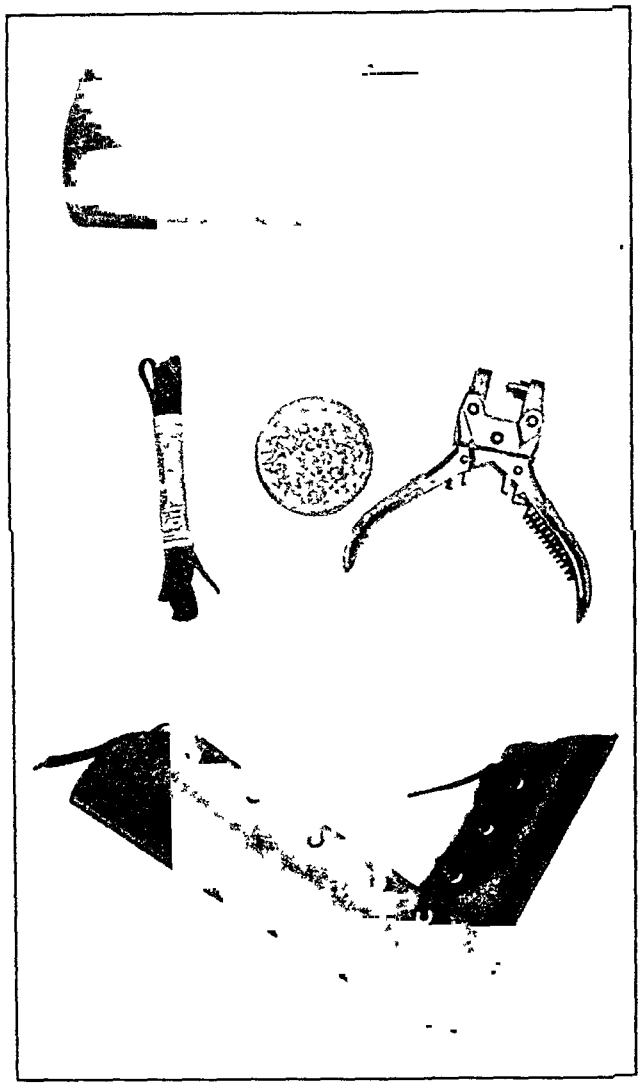


FIGURE 1
Materials used and Completed Splint
Above: Fibre board rolled for transportation.
Middle: Shoe lace, Box of Eyelets, Eyelet Pliers.
Lower: Completed Splint.

inches from each other according to the size of the patient. The splint is then bent at this point until it naturally stops at a right angle. The flap from the leg end should be outside, making a flat support for the heel. Near the upper edge of the angle so made, the two layers are held together by an eyelet applied with eyelet pliers** purchasable at any stationer's store. Usually one such eyelet at each side is all that is required, but for a large splint two may be needed.

Other eyelets are then inserted along the free edges of both the foot and leg portions of the splint through which are run shoe laces.

If the eyelets and eyelet pliers are not obtainable, the angle can be held in place by making several holes with a leather punch through both layers of fibre board and lacing these up with a shoe lace, and the holes for lacing the "shoe" may be made in a similar manner. These, however, do not hold the splint so firmly and the sharp edges of the fibre board, after drying, may cut the laces.

The leg and foot is then wrapped in absorbent cotton and bandage for warmth and protection, or if preferred, several thick stockings may be put on, the splint is applied and is laced up while still comparatively soft. It is well for a few hours to bind a small block or box to the sole of the splint to insure its flatness.

This splint being applied when the material is soft can be made to fit any foot, and in a few hours it becomes almost as rigid as steel. If the fit is not accurate, the splint can again be softened in hot water and remoulded to fit. Care must be taken that the heel slits are long enough so that the back of the heel is curved, not flat, as a flat heel may cause painful pressure against the child's heel. If this occurs the splint can be resoaked in hot water and a window cut in the back of the heel. The completed splint for a child of two years weighs one ounce and a half. These splints are intended for use only while the child is in bed or in a chair. They do not take the place of braces after the child is walking about.

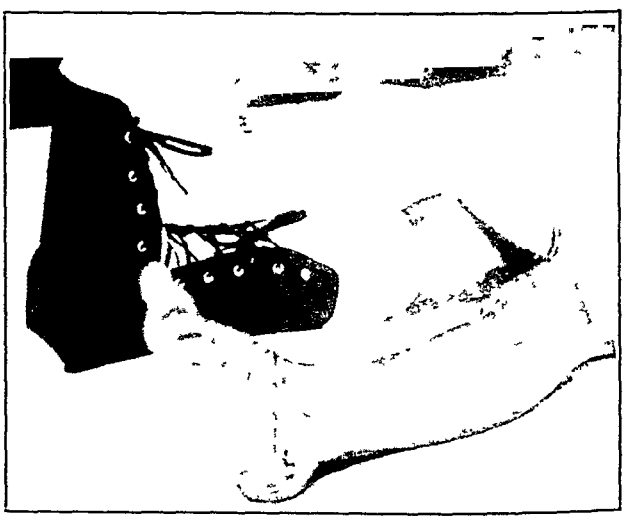


FIGURE 2
Splint Applied.

The accompanying illustration shows the materials used and the completed splint. The only other requirements are a pair of shears and a basin of hot water.

While the author has used this method of making a splint, especially for ankle splints in poliomyelitis, the same method can be used by surgeons and orthopedists in making splints for elbows or forearms.

** The eyelets and pliers used are those made by the Solidhed Company, Hoboken, New Jersey

WHAT HAS MODERN PROGRESSIVE PSYCHIATRY TO OFFER TO THE TEACHER-IN-TRAINING?*

By FREDERICK L. PATRY, M.D.

Neuropsychiatrist, State Education Department, Albany, N. Y.

IN a current editorial of an Albany newspaper the Prince of Wales's recent visit to South America was discussed in some detail. The Prince noticed that at least two things were necessary to success in selling goods for England. First, you must have what the people want and, second, you must let them know that you have it. Furthermore, he told a gathering engaged in trade and manufacture that "We must adopt, adapt and improve." The editorial wound up by stating that if your business is worth advertising (the art of transferring an idea from your mind to millions of other minds), get the best advertising agent you can to work at your problems. If you decide that your business is not worth advertising, advertise it for sale.

You, who represent the best fruits of the noble profession of teaching, may rightly protest that it is a far cry from the world of so-called "business" to that most important of all undertakings —the education of our nations most precious asset, its children and youths. Yet, I would ask your kind indulgence to reflect a moment on those somewhat mundane remarks of the Prince to consider if there is perhaps a modum of truth that might apply to some of the ramifications of progressive trends in education today. I refer particularly to the wisdom and perhaps necessity of "adopt, adapt and improve."

My purpose in joining with you today on this delightful occasion is not to beat the big drum in advertising a certain brand of psychiatry, but to communicate to you in brief a few of the rock-bottom, experience-born facts of common sense psychiatry as far as it is utilizable by those who have consecrated their lives to work with our school and college pupils.

What has psychiatry to offer our teachers-in-training? Allow me to arbitrarily select three aspects for you to mull over. First, practical psychiatry has to offer the student-teacher an important *point of view* regarding behavior and its deviations. Second, psychiatry has considerable worth while *information*, gleaned from years of diagnosing and treating the mentally ill, which may profit our students in their inevitable contact with such sick persons. Third, psychiatry can not only sensitize the teacher to *recognize* the importance of varying aberrations in mental health, but how to *help in handling* such problems in a more intelligent and fruitful manner.

If these three aspects of psychiatric contributions to education are absorbed and lived out by our teachers, there will be little room for such remarks, as I received this week by one of this nation's foremost psychiatrists, namely, "as a rule teachers are less socially minded than any other biological organism that I have met—at least among the vertebrates." Again within the past year, one of the world's most authoritative psychoanalysts, remarked to me that judging from his experience with teachers he has come to the conclusion that the pedagogue may be defined as a person who perpetuates his prejudices from one generation to another.

To what extent are such impressions true or justifiable? Are we as teachers too concerned in removing the mote from the eyes of our charges to the neglect of realizing our own defects and shortcomings?

As concerns the modern psychiatric viewpoint, let me first assure you that psychiatry has no dogma to offer. It builds upon a willingness to learn from experience and through creative experiment. It does not foster the "I tell you so" attitude. It claims no exclusive road to salvation. It begins with those who come to the physician on their own initiative, or that of others, because they are in trouble. It begins with the differences and variations in behavior in the intellectual and emotional tendencies, the lasting traits, the temperament and character, and the capacity to accumulate and use experience in their adjustment to life as they have to meet it.

The educator will immediately observe that the object of our problems are growth—and time-determined; that the body and minds with which we have to deal have a dynamic-genetic background, largely the result of environmental and educative influences of one sort or another. It is upon this common ground that the educator and the psychiatrist join hands in shaping the multifarious factors entering into the life development of our teachers and pupils.

In order to avoid arousing any discomfort in you by breaking cardinal principles of the science of education, I shall attempt to proceed from the known to the unknown and bring to the front the more concrete before branching off to the abstract. In view of the short time at my disposal my remarks will of necessity be of a general nature, although the specific aspects have not been lost sight of.

Dr. Charles E. Benson and Miss Louise E. Alteneder of the School of Education, New York University, have recently completed a survey of Mental Hygiene in Teacher-Training Institutions in the United States. It is a matter for congratulation to note that of the larger States of the Union, New York is easily in the

* Address before the New York State principals of Teachers Colleges and Normal Schools, Lake Mohawk, N. Y., May 23, 1931.

lead in the combined number of Teachers' Colleges, State and City Normal Schools and Private Institutions reporting regular courses and special lectures in Mental Hygiene.

Of our two Teachers' Colleges one reports special lectures; of eight out of nine of our State Normal Schools which sent data, two report regular course and five report special lectures; of our five City Normal Schools, one reports a regular course and five report special lectures; of seven out of eight private institutions sending data, three report regular courses.

It will be noted that the private institutions have a higher ratio of regular courses in Mental Hygiene than either the State or City Normal Schools or Teachers' Colleges. This is in keeping with the general tendency throughout the country for private institutions to have a higher percentage reporting psychiatric help available, mental hygiene clinics accessible, and opportunity for visiting institutions for feebleminded or other exceptional children.

Furthermore, this report brings to light the following facts:

A large and increasing number of teacher-training institutions realize the need and importance of including Mental Hygiene in their courses of study; in the introduction of courses in mental testing, and for teachers of mentally deficient and maladjusted children; in the recognition of the importance of mental hygiene and child-guidance clinics and in the increasing use of literature in the field of mental hygiene. In the large majority of these institutions the work of mental hygiene is under the department of psychology or in connection with work in that subject. In a number it is a part of the general health program. For the most part these courses are elective and are offered in the junior and senior years. The importance of reaching the pre-school child, and of educating parents, in order to make mental hygiene effective in the schools, is being more and more recognized by teacher-training institutions.

As compared with a similar survey made by Dr. Wm. H. Burnham in 1921, the present survey brings out the following data:

Emphasis in the field of mental hygiene has shifted from the abnormal to the normal, from the problem of treatment to that of prevention. The *individual* is becoming the focus of attention and education is striving to shape the school's curricula to the needs of the child. The significance of case studies must lie in the method and attitude employed. No two maladjustment problems can be treated alike. Environmental factors must be considered in the light of physical, mental (emotional as well as intellectual) and constitutional factors. Every teacher-training institution should include some work in the principles of mental hygiene in its curriculum. In order to keep the child normal and to adjust the maladjusted child, every teacher must apply the principles of mental hygiene in all her instruction and school relationships, and carry on her work with the mental hygiene point of view. It was the consensus of opinion that mental hygiene has given to child psychology and child guidance, and indeed all education, a new significance and greater responsibility to the work of the teacher. Richer and multifarious opportunities for pupil lifts and helps have been made known and put into daily classroom teaching experience.

Finally the survey revealed the following problems and difficulties encountered in carrying on mental hygiene work:

There is still some confusion as to just what mental hygiene covers and what needs it meets. There is some doubt as to the length and nature of a course to offer in a two- or three-year curriculum which is already overcrowded. The large amount of literature published in recent years covering various phases of mental hygiene makes it difficult to choose the best and most practical books and pamphlets for text and reference. Some institutions report that progress is impossible because of financial or administrative problems.

I merely bring the substance of this survey to you attention to give you a bird's-eye-view of the present general status of Mental Hygiene in teachers-training institutions, and not with the idea of offering a panacea for its specific problems. Perhaps the facts presented may suggest ways and means of furthering the inclusion and extension of this important aspect of education in the curricula of such institutions.

Realizing that I have already taken up too much of your valuable time, may I briefly mention what I consider to be the core of psychiatric contribution in a teacher-training-institution.

Appreciating the fact that there will always be problems of behavior, of personality difficulties and difficulties of well-being facing our teachers in the classroom, it behooves us to cause our teachers to become more psychiatrically intelligent.

In order to help others in difficulty of adjustment, the teacher must first grasp and accept the facts of her own genetic development and the many factors entering into it. Perhaps the best experience has shown that this can be most effectively developed by a thorough-going personality study of the teacher herself or of some one intimately known to her. This *personality study* should include a biographical sketch, a characterization of a few contrasting individuals, some preparation for heredity study and a general formulation of personality problems. This latter should include a general survey such as we might wish for when asked to advise and guide another person on the question of health, happiness and efficiency. This should include the enumeration and evaluation of past work, suc-

cesses and failures, daily routine and habits, recreations and hobbies, social activities, interests, strivings and ambitions, type of temperament, ratio of perception, dreaming, thinking and action, composure, estimation of self and others expectation of self and of life, and balancing the above in a satisfaction formula This personality study by the teacher should also include a special analysis of the psychological assets such as affective and emotional tendencies, topical processes, range and fluctuation of fitness with regard to the ratio of work, play, rest and sleep, social relationships, sex development and patterns, synthesis and balance of the personality, difficulties and handicaps, disappoints and reactions to them, special dynamic complexes or determining tendencies, etc

You will note that we start from what is within our immediate objective experience rather than from a text book course of more or less elementalistic and non personal experimental data We are primarily concerned in concrete performance, in what Adolf Meyer calls the experiment of nature and its reconstruction Our general formula for work in any problem is what are the facts, how do they work, how do they group themselves, under what conditions do they arise, what are the factors entering into them, what are the results, what has to be more or less accepted as unmodifiable, and what is modifiable or preventable

Applying this relativistic and inclusive formula to problems and situations which demand our attention it becomes obvious that we focus on *function* and *activity*, on the known rather than the unknown or theoretical, on the facts which have a meaning and which are *utilizable* Our perspective has a social background into which we strive to weave the maladjusted through capitalizing his assets, and balancing these with his habilities and opportunities in keeping with his capacity and needs

We would have the teacher in training realize and accept the fact that mind is not a separate entity from body Can you imagine a gastrointestinal tract or the brain stalking about without its host? Concepts of interactionism and dualism have already contributed too much in impeding the march of progress in the mental sciences It is high time that we realized that each of us reacts as an integrated unit, that mind is something more than the expression of one's intellectual faculties—reasoning, judgment, memory, and so forth Mind is the human being in action, and that action is started by a wealth of factors Mind as we use it in every day living is not something merely above the eyebrows It is you and I in action, it is the expression of the way we feel and think, it is the expression of our desires, cravings, anticipations, memories and a host of other factors—overt or implicit, involving primary and secondary symbolization We have learned that our mental life is so intricately bound up with our bodily functions of digestion, circulation, glandular activity and so forth that it would be the height of self deception to attempt to evaluate so called mental behavior without a grasp of all the facts entering into it—physical, mental, constitutional and environmental

It is very important that our students learn through their own personality study and of others that our behavior is chiefly dependent upon (1) the stuff out of which we are made, (2) the way in which environment and training—of home and school and neighborhood and church—have molded that stuff, (3) that although choice and decision mechanisms play a role in our life adjustments, we are not primarily guided by reason but by our emotions, cravings, desires and longings which often so subtly operate that our intellect is virtually hypnotized into doing almost anything they wish, (4) that habit training and habit patterns woven into the fabric of our lives during our most formative years to a large extent determine our successes and failures in adjusting to life

We perhaps copy and acquire as much as we inherit But our practical problem is what environment can give constitutional endowment its best chance of development, how may we best capitalize this experiment of nature in our midst so that we can help him to become a marketable product, a social asset

Psychiatry is not so much interested in judging behavior as it is in its interpretation—the unraveling of its causes and motivations, it is not our chief problem to classify human tendencies but to find out where they lead and direct them into wholesome, socially useful channels

The psychiatrist in the school system is not out with a spy glass tracking down candidates for a mental hospital He is primarily interested in bringing about a healthier balance of each pupil's personality integrated components in his efforts to adjust to life Where unwholesome traits and behavior characteristics show themselves, the psychiatrist concerns himself in shaping modes of approach for their modification He tackles the problems at hand without too much talk of prevention or raising alarmist ideas of what might happen if such and such a procedure is not carried out There are no reliable facts to substantiate any such program of propaganda We know that not all maladjusted or neurotic children turn out to be criminals or antisocial or "insane", and we also know that many adult delinquents and criminals and mentally sick persons showed no obvious abnormal traits when children Our chief concern is to handle in the best possible ways the problems and situations at hand

The psychiatrist feels he can be of considerable assistance in making the teacher's efforts

more effective and generally helpful through sensitizing her in the early recognition and handling of combinations of temperament and personality traits which psychiatric experience has found to be in many cases a liability and perhaps tend toward mental inefficiency or derangement. For example, experience shows that certain individuals withstand the strains of life poorly—the shy, timid, stand-offish, asocial persons, poor mixers, bad losers, those never able to talk of their difficulties, the hypersensitive, those with extreme emotional unevenness, the suspicious and exalted-ego types who fail to condescend to gain a consensus of opinion (in the sense of winning the approval of their best friends and judges) before embarking on some grandiose or revolutionary idea or program.

We want our teachers to appreciate the fact that there is no cut-and-dried formula in solving such behavior and personality difficulties; that before we can hope to guide or help them we must first have our own house in order and control; that it is absolutely essential that we learn to interpret behavior and shape our means of help in the light of individual, intellectual and personality limitations. I feel that this understanding can best be brought about by the concrete demonstration of problem children which teachers meet in their every day classroom experience; talks, lectures and writing articles are complementary but of secondary importance.

Finally let me urge upon you that no matter how vast our knowledge and so-called technique may become, we will never be able to dispense with critical common-sense. It is perhaps just as potentially dangerous to let loose upon our children highly trained teachers who have not learned to utilize trained common-sense as it is to possess the quintescence of common-sense without training.

Mr. H. L. Mencken has characterized the specialty of psychiatry as the weak-sister of medicine. Albeit, modern progressive psychiatry is rapidly becoming the cornerstone of sound medical practice. It is conservatively estimated that at least 40% to 60% of men and women who go to doctors with aches and pains are suffering from some personal, domestic, or economic worry which masquerades as a physical sensation of discomfort. Such symptoms are body protests to stress and strain of life for which the individual is inadequately prepared to meet. The proper application of efficient scientific therapy demands prerequisite thorough training and grasp of all the other biological and medical sciences in order to examine, evaluate and prescribe for the maladjusted or mentally sick person as a *total* individual.

Mental Hygiene is that aspect of preventive medicine and psychiatry which emphasizes the conservation and improvement of mental health and the prevention of mental ills of various degree. Its successful application necessitates the cooperation and sympathetic understanding of all community social agencies and especially the home, the church and the school.

The only justifications for my being a member of the State Education Department and talking with you today is to assure you that the fruits of what might be considered the best in psychiatric experience is at your disposal and that it is offered to you in the confident hope that it will be of vital service in the promotion of a larger measure of health, happiness and efficiency of our teachers and pupils.

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THE USE OF SULPHOCYANATE IN THE TREATMENT OF HYPERTENSION*

By WILLIAM GOLDRING, M.D., AND HERBERT CHASIS, M.D., NEW YORK, N. Y.

From the Department of Medicine and the Third (New York University) Medical Division, Bellevue Hospital, New York City.

THE reintroduction of the sulphocyanates in the treatment of arterial hypertension has in recent years attracted wide attention. A number of investigators have attested to its effectiveness, in lowering both normal and abnormally elevated blood pressures. On the other hand it has been stated, that in a large group, the sulphocyanates appear to exert no more beneficial effect on hypertension than do certain so-called non-specific measures of therapy, classed under the general heading of "psychic and sedative treatment." Furthermore the great tendency toward variability of raised blood pressures and the not infrequent spontaneous remissions observed in the course of essential hypertension often render the true interpretation of any so-called therapeutic endeavor particularly hazardous.

A number of commercial drug concerns have placed sulphocyanate at the disposal of the medical profession, making positive claims for its effectiveness in hypertension but omitting or mere-

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ly alluding to its toxic properties. Ever since Claude Bernard's first pharmacological investigation in 1857, there have been many references to the toxic properties of sulphocyanate, but in examining the literature it is noteworthy that, with a few exceptions, mainly its hypotensive property is stressed. The appearance of toxic manifestations 13 times in a series of 74 trials on 50 patients under investigation by us seemed of sufficient importance to report. In two of these 13 patients there was a fatal outcome. We believe that this is the first report of death in man from sulphocyanate administered for therapeutic purposes.

A review of the literature indicates firstly, that the toxic effects of sulphocyanate in man are known and have been repeatedly observed by independent investigators; secondly, that while a given dose proves harmless and perhaps therapeutically effective in the hands of one investigator, it may produce severe and often dangerous manifestations in the hands of another.

Fifty patients with hypertension were selected and subjected to 74 different trials with sulphocyanate therapy. Of these, 69 had hypertension of the essential type and in 5, the hypertension was associated with chronic diffuse glomerulonephritis. Forty-four trials were made in the out-patient clinic and 30 were observed during a stay in the hospital wards. All blood pressure readings were made by the same group of observers. Readings were consistently taken from the right arm only and a standard mercury manometer was used. The auscultatory method was invariably employed. A satisfactory period of mental and physical rest was insisted upon before blood pressure readings were made. With the arm cuff in position, five and often more readings were made before the blood pressure level was decided upon. Where for any reason doubt existed or when a decided change from the previous reading was noted, two and usually three observers made independent readings before a final estimate of the blood pressure level was accepted. While on sulphocyanate, out-patients were seen weekly and ward patients at least once daily.

Being aware of the great tendency toward spontaneous variability of blood pressure levels, control periods were extended as long as feasible and as many blood pressure readings were made as we felt were reasonably necessary on each patient. The length of control period was principally determined by the history of known duration of the hypertension and the degree of variability of the blood pressure noted under our own observation. That is, the longer the history of hypertension as obtained from the patient and the less the variability of the blood pressure under our observation, the relatively shorter control period seemed necessary.

Both the sodium and potassium salts were used indiscriminately in our series and no record was kept of the particular salt administered to each individual patient. Such a record did not seem necessary in view of the evidence that the effective radical is the sulphocyanate only. In accordance with our stated intention of subjecting sulphocyanate therapy in hypertension to a severely strict evaluation we accepted as effective only such instances in which both systolic and diastolic blood pressures after treatment, fell to within or almost within the normal range. Furthermore it was insisted upon that the treated blood pressure must have fallen below the lowest of the control blood pressure readings within an average range of 45 mm. Hg. systolic and 31 mm. Hg. diastolic. In those instances in which we discontinued sulphocyanate before either a therapeutic or toxic effect occurred, the total amount which had been administered was with few exceptions greater than the amount frequently reported by others as an effective dosage.

In recent years a number of substances have been advocated as useful in artificially lowering the blood pressure in hypertension. Their effectiveness in this regard has not been generally confirmed. Sulphocyanate, on the other hand, has apparently met with approval among a large number of independent investigators. One fact seems true from our data; that is, that sulphocyanate will effectively lower blood pressure in one of about every three persons with hypertension. Our percentage of effectiveness (32.4%) is lower than that observed by many other investigators, probably because of our insistence upon the strict criteria of effect as stated. It seemed to us that only by adherence to such strict criteria could the effectiveness of sulphocyanate as a hypotensive drug be properly evaluated. Almost invariably fall in blood pressure was accompanied by subjective improvement. However subjective improvement occurred in many patients on sulphocyanate therapy, in whom no lowering of blood pressure occurred. This led us to believe that such improvement was largely psychic in nature Still, exclusive of toxic effects from the drug itself, no obvious harmful effects were noted from persistent lowering of a previously high blood pressure. Whether or not harmful effects occurred which were not immediately obvious, we cannot say from the data available.

In those individuals, in whom sulphocyanate was considered effective, the artificially lowered blood pressure returned to its previous level within 7 to 110 days. There was no constant relationship between the persistence of the hypotensive effect and the amount of sulphocyanate administered.

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Where it is felt that sulphocyanate may be useful in a given patient the dose should not exceed 0.326 gm. (5 grains) daily. It is our expe-

rience that such daily dose may be effective in lowering blood pressure in as short a period as 14 days or it may be necessary to continue it as long as 78 days. At the first indication of toxic effect; fatigue, nausea and vomiting, or the first distinct fall in blood pressure, the drug should be discontinued. When the blood pressure, having responded by a satisfactory fall returns to its original high level, sulphocyanate may be safely readministered only when ferric chlorid added to the acidified urine indicates that the drug has been entirely excreted. If the blood pressure does not show a satisfactory fall after 26.16 gm. (5 grains daily for 80 days) have been taken, our data indicate that with few exceptions it is useless to continue the treatment.

The above scheme of dosage is purely arbitrary and based upon a consideration of our entire series as a group. However in considering individual patients, it must be concluded, that there is no constant dosage at which either toxic or therapeutic effects may be anticipated. Some of the inconsistencies observed are illustrated by the following: One patient who responded by fall in blood pressure on 3 successive occasions with 0.326 gm. (5 grains) daily subsequently failed to respond to a repetition of treatment with 0.326 gm. (5 grains) daily over a similar period of time. Another patient who responded by satisfactory fall in blood pressure on 0.326 gm. (5 grains) daily on 2 different occasions subsequently failed to respond to 0.652 (10 grains) daily given over a comparable period of time. A third patient who responded satisfactorily after a total dose of 13.2 gms. (202 grains), after complete elimination of the drug became severely toxic (hallucinations of sight and hearing, disorientation, etc.) on a subsequent total dose of 12.74 gms. (195 grains).

Our data lead us to believe that some individuals for reasons which are not clear, show a distinct susceptibility to sulphocyanate. This susceptibility manifests itself by certain symptoms of which the earliest are muscular weakness and nausea. It further appears from our observations that in certain individuals there is little or no margin of safety between the toxic and therapeutically effective dosage of sulphocyanate. At this time we know of no way of distinguishing those individuals who will exhibit susceptibility from those in whom the drug lowers blood pressure effectively without the development of toxic symptoms.

In an attempt to explain the occurrence of toxic phenomena, one is first concerned with the dosage used. It might be expected that toxic manifestations would occur only when the larger dosages were given. This is not so in the case of sulphocyanate. Severe toxic manifestations occurred in some individuals who had received less of the drug, both in total and average daily dosage, than others who developed no toxic signs.

Of the fifty patients with hypertension in this series, treated 74 different times with sulphocyanate, toxic manifestations occurred in thirteen. In eleven of these the toxic manifestations disappeared within a few hours to four days after discontinuance of the drug. The usual order in which the toxic symptoms made their appearance was as follows: muscular fatigue accompanied or followed by nausea; vomiting; disorientation and mental confusion; motor aphasia; hallucinations of sight and hearing, and in the two fatal cases progression to delirium; convulsive twitchings; coma and death.

Conclusions

Data are presented on 50 patients subjected to 74 different trials with sulphocyanate therapy. In 69 of these the hypertension was of the essential type and in the remaining 5, it was associated with chronic diffuse glomerulo-nephritis. Forty-four observations were made in the out-patient clinic and 30 with the patients confined to bed in the hospital.

Observations were made on the daily excretion rate of sulphocyanate in the urine and the number of days necessary for its complete elimination after continuous medication and after a single dose in patients with essential hypertension, nephritic hypertension and in normal persons. The slow excretion rate noted, indicated the marked tendency toward cumulation of the drug. This was most marked in the presence of glomerulo-nephritis.

Sulphocyanate was considered effective only when the blood pressure after treatment fell below the lowest reading of the control period within an average range of 45 mm. Hg. in the systolic and 31 mm. Hg. in the diastolic.

The dosage found to be the most effective in lowering blood pressure and least often attended by toxic manifestations, was 0.326 gm. (5 grains) given daily over a period of 14 to 78 days.

Thirteen patients showed toxic manifestations from sulphocyanate administered for therapeutic purposes.

Two of these patients died as a result of sulphocyanate poisoning. The order of appearance of the various toxic manifestations is noted.

Fall in blood pressure, occurrence of toxic manifestations, and death were found to be unrelated to the amount of residual drug in the body.

In some patients there is little or no margin of safety between the toxic and therapeutically effective dose of sulphocyanate.

Sulphocyanate effectively lowered the blood pressure in 32.4% of our series of 74 trials.

The incidence of toxic manifestations in this series was 17%.

RADIATION THERAPY OF RADICULITIS*

By LEE A. HADLEY, M.D., SYRACUSE, N. Y.

THE subject of radiculitis with its symptomatology and its association with spondylitis has been ably described by various authors in the English Literature. Results of its treatment by *X*-ray, however, have appeared almost entirely in the reports of European workers. It is then with the purpose of coordinating these that the following paper is presented.

Bechterew in 1893 and more recently Gunther and Kerr, Rosenheck, Mayer, Gordon, and others have mentioned the association of spinal arthritis with the radicular syndrome, i.e., a restricted mobility of the spine with motor or sensory alterations and root pains, aggravated by movement or coughing.

Neuralgic pains of this character may be of reflex origin; from systemic disease such as lues or anaemia; or from some local condition such as trauma, tumor or infection at any point of the tract from its origin downward. The most common pathology in cases of so-called radiculitis, however, seems to be a localized perineuritis at the foramen where the nerve leaves the cranium or spinal canal.

Gordon differentiates between radiculitis, i.e., inflammation of the nerve roots, and funiculitis or inflammation of that part of the nerve immediately beyond their junction: The roots are covered by the meninges and bathed in spinal fluid while the nerve is not. However, the clinical differentiation of these two is not readily made, the treatment is the same, and for the present consideration the term radiculitis will be used to include both conditions:

Anatomy and Pathology

Anatomically, the intervertebral foramen is bounded above and below by the pedicles of the adjacent neural arches, posteriorly by the superior and inferior articular processes and their interposed joint and anteriorly by the postero-lateral surface of the upper vertebral body, the intervertebral articulation, and to less extent the lower vertebral body. Above the level of the third lumbar occurs a strong ligament, not ordinarily described in the anatomies, crossing the intervertebral foramen dividing it into a small foramen below and a larger one above through which passes the nerve. Since this ligament extends from the lower part of the upper vertebral body to the superior articular process of the lower body it serves in the normal state to keep the nerve from coming directly in contact with the intervertebral articulation although of course the posterior articulation is in close relation to the nerve. Surrounding the nerve, within the foramen, are cellular tissue, lymphatics, the artery and a venous plexis, so that a congestive process, periostitis, inflammation or an osteophyte within this bony passage may cause radicular symptoms.

An early arthritic process may induce the localized neuritis or perineuritis of the intervertebral portion of the nerve, while chronic hypertrophic arthritis with spur formation may actually produce a narrowing of the lumen of its canal. Dorsal extension or lateral bending of the spine produces an encroachment upon the foramen by the superior articular process. Nathan as well as Bailey and Casamajor felt that the root symptoms were due to the mechanical irritation of pressure upon the nerve roots, but Parker and Adson who performed laminectomies on eight patients with nerve root and cord symptoms considered the process inflammatory with infection a common cause and trauma as a predisposing factor. This latter is the opinion of most writers on the subject. These authors also found that the hypertrophic bony process might be quite extensive without showing on the *x*-ray film.

This narrowing of the canal has been demonstrated by Nathan who produced a spondylitis experimentally in dogs by the injection of streptococci. This was characterized by hyperplastic changes about the joints, proliferation of connective tissue producing a nodular thickening of the periosteum, as well as organized epidural exudates within the intervertebral notches. These changes as well as the congested vertebral veins which he observed are said to correspond to the pathologic changes noted in spondylitis of man.

Clinical Picture

Most frequently encountered is that patient with midcervical radiculitis complaining of pain, aching or soreness, of the shoulder or arm. There may be a numbness or tingling of the fingers. Pressure of the arm, shoulder or along the course of the nerve is usually not painful. However, moderate pressure at different points along the two sides of the neck will elicit pain only over the corresponding nerve root. This is likely to be severe and constitutes a valuable diagnostic sign. The pain is usually aggravated by flexion or rotation of the cervical spine, hence the muscle spasm limiting spinal movements. It may be aggravated by sneezing, coughing, or increased intra-abdominal pressure, the so-called Dejerines sign which is said to be due to transmitted intraspinal pressure. This pain may be sharp or dull and occur in paroxysms or be constant. It seems to be influenced by weather, fatigue, exposure, toxemia, etc. Gunther and Kerr have demonstrated sensory changes to light touch. Muscle weakness and changed reflexes may also be present. When the condition is confined to the middle and lower

* Read at the Annual Meeting of the Medical Society of the State of New York, at Syracuse, N. Y., June 3, 1931.

cervical region it may be confused with bursitis or arthritis of the shoulder joint. In the absence of shoulder pathology, however, there is free passive movement of the arm and no tenderness upon deep pressure over the joint although the patient may complain of pain in the shoulder.

Pain is elicited upon deep pressure about one and one-half inches from the mid line of the back probably by the irritability of the corresponding spinal nerve roots, although tenderness of the posterior cutaneous nerve branches may be a factor. Discomfort is noted in the anterior chest when the patient bends or twists the back.

With involvement at different spinal levels the characteristic picture above described may vary somewhat. Upper cervical radiculitis produces occipital headache reaching upward to the vertex, frequently with painful palpable, nodules of increased tonicity in the muscles at the back of the neck. If the lesion is within the first five dorsal spaces, pain is complained of upon pressure between the scapulæ while the radicular distribution corresponds to the side of the chest and over the precordium. It is said that right-sided involvement is as frequent as left, but does not cause as much apprehension on the part of the patient. Intrathoracic diseases must be differentiated. Cases with severe pain down the left arm and anterior surface of chest probably constitute the so-called pseudo angina pectoris.

With radiculitis of the lower half of the dorsal and upper lumbar region the patient suffers abdominal distress, epigastric pain, burning, heaviness or gas pressure. Pain over the gall bladder, kidney, appendix or pelvic area may be complained of. These patients are the subjects of multiple, negative, laboratory tests and examinations. With pain referred to the ileoinguinal or ileohypogastric distribution they may be subjected to a cystoscopic and pyelographic examination. In search of relief for their pain, which is very real, they submit to multiple abdominal operations upon the appendix, pelvic organs, adhesions, etc., but they usually remain unrelieved and are finally labeled neurotics.

Carnett, in attempting to explain the 40% of failures to relieve chronic lower abdominal pain by appendectomy, concludes that this pain is often parietal, due to intercostal neuralgia and independent of any intraabdominal lesion. He states, "In my experience nearly all the patients who have multiple abdominal scars and are still complaining of abdominal pain and tenderness present definite signs of intercostal neuralgia." This author states that voluntary tensing of the muscles in the abdominal wall protects the intra-abdominal organs from palpatory pressure. So that, if the abdominal pain is still present when the patient raises the head or extended legs from the table it may be assumed as parietal, originating in the abdominal wall and will be associated with a tenderness of the corresponding intervertebral spaces.

With arthritis of the upper lumbar region the patient may complain of a burning pain on the lateral surface of the thigh corresponding to the distribution of the lateral cutaneous nerve. This symptom, the so-called meralgia paresthetica is considered by Rosenheck in a report of twenty-five cases as of radicular origin secondary to the arthritis.

And finally, involvement of the lower lumbar and first two sacral segments may produce pain over the gluteal region, the back of the leg, and especially the outer side of the lower leg if the fifth root is involved, a clinical picture which may be confused with sciatica. The nerve is not usually painful to deep pressure. Danforth and Wilson from studies of twelve anatomical specimens and twenty-one clinical cases conclude that the pain particularly with disturbance of the Achilles tendon reflex is a symptom or arthritic change at the lumbo-sacral junction or the inter vertebral canal between the fourth and fifth lumbar vertebrae. Arthritis of the sacro-iliac joints does not seem to be a factor in this condition. These writers also observed a definite tightening of the third, fourth, and fifth lumbar roots when the thigh was flexed with the knee extended. Hyperextension of the thigh or flexion of the knee appeared to relax these nerve roots.

There may be a progressive involvement with remissions or with different spinal root areas attacked at different times, the condition being one of considerable chronicity.

Protective muscle spasm may cause the patient more discomfort than the primary lesion and manifests itself as a myalgia of the neck or back muscles.

Treatment

Therapy is carried out along three lines: relief of symptoms, prevention, and treatment of the underlying pathology. For symptomatic relief, rest, sedatives, and heat in some form, diathermy, infra-red, therapy light or baking followed by massage to relax the muscle spasm are indicated. Strapping the back may afford additional relief. Prevention of recurrent attacks may be favored to some degree by wearing a supporting belt or jacket, or the development of an increased muscular tone and proper posture by corrective exercises.

The greatest measure of relief, however, is afforded by the use of radiation therapy applied to the nerve roots. While the *x*-ray cannot influence the bony changes that have already taken place, different authors state that it is able to produce an absorption of the localized inflammatory process about the nerve at the spinal foramen. Babinski in 1908 was the first to report the attenuation of neuralgic pain due to spondylitis by means of *x*-ray therapy, although the analgesic effect of

x-ray obtained in trigeminal neuralgia had been reported by Gocht as early as 1897. Carter, Richards, Del Buono, Walter and Cottenot also treated Tic Doulereux with good results providing surgery or alcohol injection had not been previously used. Following these therapeutic measures, however, radiation was not as efficacious and therefore should be used first since it is less radical and produces relief in about seventy-five per cent of the cases.

Mode of Action

The pain is said to be due to compression of the nerve by inflammatory swelling within the unyielding bony canal and may be temporarily aggravated for a few hours following the x-ray treatment; this however, is considered a favorable prognostic sign. Different authors state that the young radiosensitive cells of the inflammatory infiltration are destroyed by the radiation with a resulting decompression and disappearance of the pain. The younger cells are extremely radiosensitive which explains the superior results achieved in recent cases and by the use of only small doses of x-ray.

There seems to be general agreement as to the value of the method, the dosage, and the percentage of patients relieved, and while most authors state that the effect of the ray is upon the inflammatory cells other theories have been advanced to explain the clinical results observed. Langer, also Delherm and Beau believe that the effect is upon the sympathetic system, while Leonard and Desjardins feel that there is some specific analgesic action upon the nerve cells which are ordinarily resistant to x-ray. Phillips explains the effect by assuming that x-ray can stimulate the metabolic processes of the nerves. Hesnard and Pfender believe that connective tissue surrounding the nerve is softened while Boner, speaking of the effect of x-ray upon inflammatory conditions, explains that effect by the dynamic property of radiant energy.

There is a paucity of experimental evidence to explain the results observed. Schaefer, Businco and Motojima hastened the absorption of acute inflammatory reactions in experimental animals by x-ray while Maximo and Hesnard produced softening of chronic inflammatory tissue by this means. The latter treated eighty French war-wounded having nerves involved by scar tissue; of these, eighteen were completely cured and fifty more partially relieved. He then undertook animal experimentation and discovered that scar tissue subjected to x-ray became softened and that the incarcerated nerve after treatment could be readily separated by blunt dissection much the same as a normal nerve in a clean field. This was in marked contrast to the control scars involving nerves and not so treated. He also noted lessened infiltration following the radiation.

Technique

Both Heidenhain and Holzknecht urge the use of small doses at intervals of four to six days for a month if necessary. The radiation is applied to the nerve roots, not to the areas of pain distribution. If there is a complicating neuritis it may occasionally be necessary to radiate the peripheral nerve. A fairly high voltage with ample filtration is recommended. Improvement is usually noted about seven to ten days after instituting treatment, but may appear as early as twelve hours.

Results of X-ray Therapy

As previously stated most of the serial reports have come from European Clinics. Stembo in 1900 reported twenty-eight cases of neuralgia treated with x-ray of which seventy-five per cent were cured. Barre and Gunsett treated twenty cases with sixty per cent relieved and fifteen per cent improved. Cottenot treated one hundred and eight cases with almost identically the same percentages. Other than chronicity there has apparently been no explanation offered to account for the fifteen per cent failures that appear in nearly all reports. Recent Advances in Neurology for 1930 states as follows: "X-ray not only removes the neuralgic pain but also removes its cause by freeing the involved nerve roots from the pressure exerted by obstructed veins, connective tissue or swollen periostium. The results of this radiation are brilliant. The more recent the inflammation, the more sensitive the tissue and the more rapid the success of the treatment."

Personal Observations

The writer has treated 83 cases of which 70% were relieved, 24% partially relieved, and 6% received no benefit whatever.

Certain patients had more than one area involved. There were 53 cervical, 22 dorsal, 22 lumbar, 7 facial, and 2 trigeminal. Each patient received an average of 3.36 x-ray treatments, the number ranging from 1 to 10. 61 patients received diathermy and 49 massage in addition to x-ray. These improved more rapidly than those receiving x-ray only, although one of the cases of facial neuritis had not responded to heat treatment alone, but began to improve promptly following x-ray. Duration of symptoms varied from 2 days to 15 years, those of longer duration being more resistant to treatment.

One patient receiving 10 treatments was not benefited the condition being post-traumatic following an auto accident two months before. Another patient with trigeminal involvement was only partially relieved by 4 treatments. Hormone dysfunction was probably a factor since at repeated pregnancies she was entirely free of symptoms throughout the period of gestation. One patient only partially benefited was markedly anaemic.

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One patient receiving 10 treatments was not benefited the condition being post-traumatic following an auto accident two months before. Another patient with trigeminal involvement was only partially relieved by 4 treatments. Hormone dysfunction was probably a factor since at repeated pregnancies she was entirely free of symptoms throughout the period of gestation. One patient only partially benefited was markedly anaemic.

Four patients returned for treatment of recurrence. *X*-ray in each case revealed advanced arthritic changes in the spine. Three of them had both dorsal and cervical involvement at different times. Those having definite *X*-ray evidence of arthritis were somewhat more resistant to treatment and the result in 5 of the 14 cases was not entirely satisfactory. Two of these patients were men with lumbar involvement and did not improve until spinal support was supplied.

On nervous patient with an extensive scar following chemical removal of the breast received little benefit from 8 treatments. Her pain may have been partially reflex in origin.

Another patient complaining of sciatica of six months duration whose *x*-ray showed a lumbosacral arthritis was temporarily relieved by three treatments, but later developed a malignant tumor of the corresponding ishium.

In certain cases the patient's pain was worse the day after treatment. This temporary aggravation, however, was always followed by improvement.

Conclusions: Radiculitis, usually associated with spondylitis, is characterized by pain in those peripheral areas supplied by the corresponding nerve roots, aggravated by coughing, sneezing, or twisting the back, and reveals tenderness to deep pressure along the spine. This condition is frequently relieved by fractional doses of *x*-ray applied to the nerve roots.

The treatment may well be supplemented by diathermy, rest, and support.

Factors apparently limiting the effectiveness of the treatment are: Advanced arthritis, anaemia, and continued toxic absorption.

There is no contraindication to radiation therapy in the small dosage used.

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EXOPHTHALMIC GOITRE IN CHILDREN*

By GEORGE E BEILBY, M D, AND JAMES G CARLTON, M D, ALBANY, N Y

EXOPHTHALMIC goitre in children has always occasioned particular interest, both because of its comparative rarity and from the peculiar problems that naturally arise in its treatment Our interest was recently directed anew to this question by a case of true exophthalmic goitre in a child two years and nine months of age It seemed to us in reporting cases of goitre in children and reviewing the literature there should be a clear definition, first, as to the type of goitre considered, and, second, the age period in which the cases fall Because the development of children varies so greatly with age, it seemed proper to include only cases arising before puberty in the childhood group, and therefore in this report only such cases have been included We have not taken into consideration cases of adolescent goitre or colloid goitre with mild hyperthyroidism but only cases of exophthalmic goitre which have come to operation and in which the diagnosis has not only been proven clinically but by pathological report

In our own clinic in a series of 1,600 cases we have had five cases of exophthalmic goitre before puberty Their respective ages were one case two years and nine months, one case nine years, two cases eleven years, one case thirteen years The youngest child in this group was of particular interest because of the rarity of the disease at this age In reviewing the literature we were able to find only eight cases of exophthalmic goitre in children under five years of age Six of these cases only were three years of age or under Our own case therefore seemed of sufficient interest to place on record and at the same time to report briefly the other four cases occurring before puberty

While exophthalmic goitre is rare under five years of age it cannot be considered at all unusual under fifteen years of age or during the adolescent period We have had a considerable number of cases under fifteen years of age Most of these occurred between ten and fifteen years The eight cases five years of age or under found in the literature or by personal communications were as follows

Mayo Clinic[1]—Two cases, one five and one three years

Lahey Clinic[2]—One case, three years

DeWitt Sherman,[3] Buffalo—One case, two and one half years

Baird[4] of London—One case, two and one-half years

Barrett[5]—One case, two and one-half years

Klaus[6]—One case in infant nine months old

Schkarin[7]—One case, four and one-half years old

A report of the five cases which form the basis of this study follows

Case 1—J S Female Age Two Years, Nine Months

First seen January 27, 1931 Both parents living and well No history of goitre in the family For the past year the mother had noticed that the child's heart beat very rapidly and forcefully About the same time she also noticed that the child seemed to be shaky, and if she became excited would frequently drop anything she might have in her hand She was ravenously hungry all the time and very active There was no dyspnea She had great difficulty in keeping the child covered at night Previous to this illness the child had always been well She had had none of the usual diseases of childhood She was a normal full-term child, weighing 8 lbs 9 oz at birth, breast fed for six months, and her development was normal At about the age of two years two months the mother thought the eyes were staring She gradually became more nervous and irritable and her appetite seemed to increase She did not gain weight No medical advice was sought for about six months, at which time there was marked exophthalmos and on calling the family physician she was promptly referred to our clinic She was admitted to the Albany Hospital January 31, 1931

Physical Examination On admission the child weighed 32 lbs, rectal temperature 99 degrees F Pulse 130, respiration 24 She was well

* Read at the Annual Meeting of the Medical Society of the State of New York, at Syracuse, July 2, 1931

nourished and well developed but very hyperactive. Skin was warm and moist. There was a tremor of all extremities. Exophthalmos was marked. Von Graefe, Stellwag and Moebius signs were all present. There was no nystagmus. Pupils reacted normally to light and accommodation. Eye grounds were negative. Examination of nose and ears was negative. There was a fine tremor of the tongue. Teeth were in fairly good condition. Tonsils were hypertrophied and cryptic. Tonsil glands were palpable. There was a diffuse, rather firm enlargement of the thyroid gland. Trachea was in the mid line and there was no evidence of pressure. There was a marked bruit over the gland but no thrill. Examination of the thorax showed a symmetrical development with expansion equal. Percussion and auscultation were normal. There was no widening of the upper mediastium. The heart was moderately enlarged to the left. A systolic murmur was heard over the precordium. The abdomen was negative. Blood pressure systolic 100, diastolic 0.

Laboratory Findings: Urine showed specific gravity of 1015, reaction acid, trace of albumin, sugar negative. Microscopic examination negative. Blood count showed, R.B.C. 4,950,000; W.B.C. 14,400. Differential count—polymorphonuclears, 35%; small mononuclears, 57%; large mononuclears, 7%; basophils, 1%. Several attempts to get a basal metabolism rate were unsuccessful. Finally a fairly satisfactory rate of plus 94 was obtained.

X-ray examination of the chest showed cardiac enlargement measuring 8.5 cm. in the greatest transverse diameter. Lungs were negative. There was no evidence of an enlarged thymus. *X*-ray of the skull was negative. In the preoperative period the pulse ranged from 110 to 150, averaging about 130. The rectal temperature averaged about 100 degrees F. Respirations normal. The child was very hyperactive and slept poorly. She was given luminol, grs. ½, every night for one week. On February 5th she was given Lugol's Solution, mm. 2, T.I.D. She was kept in bed with a high caloric diet and high fluid intake. On February 10th Lugol's solution was increased to M. 5, T.I.D., and she was allowed to be out of bed for a short time each day. Her nervousness decreased and she was not as hyperactive. She also began to gain weight. On February 18th her temperature rose to 101 F. and on the 19th to 102 F. At this time we could find no reason for the elevation. On the 20th her temperature was down but on the 21st was again elevated and the left ear drum was reddened. On the 22nd her temperature was 104 F. and the drum was edematous and bulging. A myringotomy was performed under very light ether anesthesia. Drainage was profuse and temperature returned to normal. On the 24th the same condition developed in the right ear and this likewise had to be opened. On the 27th her temperature had returned to normal. At this time she had lost all the weight she had gained. On March 1st Lugol's Solution was increased to M. 10, T.I.D., and on March 10th her pulse was ranging from 100 to 120, and we felt that we had obtained the maximum benefit that could be derived from treatment, and therefore on March 12th a bilateral subtotal thyroidectomy was performed under ether anesthesia. The operation was done in the usual manner and about the same amount of thyroid tissue removed as in an adult case. During the operation her pulse ranged from 100 to 128—it was regular and of good quality. The entire operation required 24 minutes and 1½ oz. of ether were used. Post-operative reaction was not severe, pulse ranging from 130 to 150 and rectal temperature from 100 to 102.

Pathological Report—Gross: Thyroid tissue in two portions of about equal size, and together weighing 17 gms. The portions are similar in appearance, each being partially covered by a thin fibrous capsule. The tissue appears dark red and meaty. One portion measures 5 x 2.5 x 1.7 cm. and the other 5 x 2.5 x 2.3 cms. The tissue is roughly lobulated. The cut surface appears to be finely lobulated, rather granular, and of a grayish-red color. Small colloid droplets can be seen. Fibrous septa incompletely divide the tissue into lobules of various sizes. There are no cysts, hemorrhages, areas of degeneration, or discrete adenomatous nodules.

Microscopic: Exophthalmic goitre.

The child was up and about the ward in a week and continued to improve satisfactorily and returned home in about three weeks after the operation. Up to the present time improvement has been steady. All symptoms have disappeared. On March 31st basal metabolic rate of plus 19 was obtained. We have not been able to obtain a satisfactory reading since that time.

Case 2—L. M. Age Nine. Female

First seen April, 1922. There was nothing of importance in the family histary. During the seven months preceding the mother had noticel a gradual increase in the size of her neck and that the child was becoming more nervous. She perspired freely and lost weight in spite of a ravenous appetite.

Physical Examination: Well developed, well nourished child, very nervous and hyperactive. Skin was moist. Slight exophthalmos present. Bilateral symmetrical enlargement of thyroid gland. Heart very rapid. Lungs negative—abdomen negative. Blood pressure 120/30.

Laboratory Findings: Urine negative. Basal metabolism plus 51. Preoperative treatment consisted of rest in bed, high caloric diet and high

fluid intake On the third day bilateral subtotal thyroidectomy was performed Post operative reaction was not severe and she was discharged from the hospital the 8th day after operation Microscopical examination confirmed pre operative diagnosis of exophthalmic goitre The child remained well and up to the present time has had no return of symptoms

Pathological Report—Microscopic Hyperplastic thyroid

CASE 3—M. L AGE ELEVEN FEMALE

First seen October, 1929 Mother first noticed swelling in the anterior part of neck two years previous At that time she was given a little iodine which seemed to help her and decrease the swelling About six weeks ago the patient began to lose weight and have slight muscular incoordination She perspired freely and tired very easily Her appetite increased in the last month History otherwise negative

Physical Examination Child well nourished and well developed Skin warm and moist Eyes slightly staring Thyroid gland shows a symmetrical enlargement, rather firm and of moderate degree Heart—slight enlargement to the left Rate, 120 to 130 Lungs, negative Abdomen, negative All tendon reflexes were hyperactive

Laboratory Findings Urine, negative Blood count, normal Basal metabolism plus 41 Pre operative treatment consisted of Lugol's Solution, rest in bed, high caloric diet, increased fluid intake and several hours each day in the open air On the 12th day after admission a bilateral subtotal thyroidectomy was performed Post operative reaction was not severe and the child was discharged on the eleventh day after operation This patient had no return of her symptoms at all and was well until December, 1930, at which time the mother thought she showed some of her former symptoms On examination we find some evidence of a recurrence of the hypertrophy Basal metabolism showed a rate of plus 20 This child is being kept under observation and it is quite possible that a second operation may be necessary

Pathological Report—Gross Hemorrhagic, glandular tissue External surface is covered partially by a smooth membrane On section tissue is firm and slightly edematous

Microscopic Hyperplastic thyroid gland with considerable colloid

CASE 4—M K AGE THIRTEEN FEMALE

First seen in August, 1929 Well developed and well nourished girl, with rather marked exophthalmos Family history negative Patient had always been well until June, 1929, when she had a dry nonproductive cough and began to sleep poorly Soon after this she began to lose weight, and her mother noticed that she was very nervous There has been a tremor of her hands, excessive perspiration, and increased appetite Her eyes have become more prominent for the last six weeks

Physical Examination Well developed and well nourished female child, very hyperactive Skin warm and moist Moderate exophthalmos Von Graefe, Stellwag and Moebius signs were present Ears, teeth, nose and throat negative There was a firm symmetrical hypertrophy of both lobes of the thyroid and the isthmus Examination of chest and lungs negative Heart was not enlarged Soft systolic murmur heard over the entire precordium—rate very rapid—abdomen negative Extremities—fine tremor of fingers Tendon reflexes were all hyperactive Blood pressure 140/60

Laboratory Findings Blood count, hemoglobin, 85%, R B C, 4,500,000, W B C, 9,000 Clotting time, 2 minutes, 20 seconds Urine, negative Basal metabolism, plus 55 Pre operative treatment consisted of Lugol's Solution M 10 T I D, rest in bed, fresh air, high caloric diet and high fluid intake On admission pulse rate was 140 Under treatment this came down to between 90 and 100 in nine days On the tenth day a bilateral subtotal thyroidectomy was performed She had a very quiet convalescence and was discharged on the 12th day after operation This patient has remained well and has had no return of symptoms Her exophthalmos also improved

Pathological Report—Microscopic Exophthalmic goitre

CASE 5—M P AGE ELEVEN FEMALE

First seen in November, 1925, complaining of nervousness Family history negative For the past three years there has been a slight swelling in her neck During the past year this has increased in size She has lost weight, sleeps poorly, and is irritable and has a tremor of her hands

Physical Examination Well developed and well nourished girl, very restless and irritable Skin warm and moist Eyes prominent Von Graefe, Stellwag and Moebius signs present Ears and nose negative Thyroid gland shows a firm, bilateral smooth hypertrophy Chest and lungs negative, heart slightly enlarged to the left Sounds snapping with systolic murmur over the precordium Pre operative treatment, rest in bed, high caloric diet, high fluid intake, Lugol's, M 10, T I D A bilateral subtotal thyroidectomy was performed on the 10th day There was a moderately severe post operative reaction Patient was discharged on the seventh day after

operation. She has been in good health and has developed normally up to the present time.

Pathological Report—Microscopic: Diffuse, moderately hyperplastic thyroid with lessened colloid and pronounced acinar, hyperplasia and some epithelial metaplasia.

It will be seen, therefore, that primary hyperthyroidism or exophthalmic goitre in children differs in no way in its symptomatology and course from the disease in adults. The thyroid gland shows the same characteristic enlargement. Exophthalmos, tachycardia, tremor, hyperactivity, irritability and nervousness with increased appetite and weight loss are present in the same manner and to a degree proportionat to the severity of the intoxication, just as we find it in the adult patient.

The diagnosis of the disease is not difficult in children; in fact, all of the symptoms stand out more prominently in the youthful patient. Because the disease is apt to progress rapidly in children early recognition is extremely desirable before serious complications develop.

In approaching so serious a disease as exophthalmic goitre in childhood we have always had a feeling of extreme caution and conservatism. In our early experience with these cases we had little to guide us. Very few cases had been reported under puberty—and many questions and doubts naturally arose in our minds. Usually every method of treatment had been tried, without success, before the case had come into our hands. We were therefore left with no alternative but an operation. A determination had to be made of the best method of procedure—whether single or multiple stage operation was best suited to patients of this age. Our experience with primary goitre in children under puberty has not been great in point of numbers, but these five cases operated upon and followed, some of them for eight to ten years during their periods of adolescence and development, have given us an opportunity to formulate some rather definite conclusions.

First, as to the operation itself—it is my belief that the same principles should guide us as in the handling of the adult case. I think it might be said that after a long period of hospitalization (and I believe these cases should have a longer period as a rule than an adult) we are practically free from one serious element which contributes to the operative risk, and that is fear on the mental state. I think it is recognized by all operators that fear contributes greatly in adults to the operative risk. This has been one great advantage of the lengthening the pre-operative preparatory period, made necessary by the administration of Lugol's Solution for ten days or two weeks before operation. These patients become acclimated, so to speak, gain confidence and largely lose the fear of an operation which they almost all have on admission to a hospital. Since the advent of Lugol's Solution in the preparation of toxic as well as primary goitre cases we have had no severe post-operative crises in these young patients. The complete operation has been done in every instance. In fact my personal feeling is that multiple operations are very rarely necessary, either in children or adults, where a sufficient time is given for preparation. I believe, where one is in doubt, it is better to add a week or two or even more to the preparation than it is to do an incomplete operation and require a patient to submit to a second or a third operation in a few weeks or months. I have always felt that where a part of a hyperactive gland is left following an operation that the post-operative reaction is more severe than where the complete operation is done. The added time required is usually but a few minutes and is more than compensated for by completely ridding a patient of a hyperfunctioning gland. The only exception I think should be where some serious complication arises during the operation which necessitates a rapid termination of any further operative procedure for the time being.

Another important problem in connection with subtotal thyroidectomy in children is the amount of gland tissue that should be removed. I think if we are to obtain as high a percentage of cures as we do in adult patients, we must be guided by about the same principles. Realizing the important role which the thyroid gland plays in the physical and mental development of children we have always been somewhat more conservative and left behind slightly larger amounts of the gland than is our practice in adults. We can better take the risk of a second operation than to deprive a growing child of needed thyroid function. Experience may teach us that thyroid tissue regenerates more readily in the young individual and that we can safely remove an amount at least proportionate to the older patient. In the five cases which we have reported, three of them have remained well, with no evidence of recurrence for periods of two to nine years. Development has been normal. One case operated upon two years ago has a slight recurrence. The fifth case is of too recent date to determine the final outcome.

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Annual meeting Buffalo, May 23 25, 1932

MEDICAL SERVICE

The immediate problem before the medical profession of the State of New York is that of an increased participation of the State in giving medical service to the people Medical service consists not merely in the professional assistance rendered by the family doctor and the consultant It also consists in providing the means for applying that service, such as hospitals, laboratories, public health nursing and social service These accessory services are needed not only by the indigent but often by those of moderate financial means, and even by the rich in emergencies These services do not conflict with the private practice of medicine but they are welcomed by doctors generally They are the subject of constructive investigation by the Joint Committee which is considering the report of the Governor's Health Commission

AMERICAN COLLEGE OF SURGEONS

The Clinical Congress of the American College of Surgeons held in New York City and Brooklyn during the week beginning October 12, was an outstanding event in American medicine. This was the annual meeting of the College, and was attended by over 2,900 leaders in that half of medical practice called surgery. The headquarters of the College, the principal meetings, and the exhibits were held in the new Waldorf-Astoria Hotel, which housed the Congress comfortably. The Grand Ball Room with its spacious corridors and its connecting rooms were fully occupied with the meeting, the exhibits and the demonstrators.

The Congress was composed of three distinct features:

1. The clinics.
2. The exhibits.
3. The meetings.

The very name of the Congress emphasized its *clinical* feature, for the daily practice of a surgeon is largely in hospital operating rooms and wards. The great magnet that draws surgeons together is the opportunity to see the routine activities of the several hospitals of a great city, in which work of the highest standard is exemplified.

Teaching clinics were held daily and almost hourly, in practically every hospital in Greater New York. Even those in Nassau County, adjoining the city on the East, were included as illustrations of the high class of surgical work done by the rank and file of surgeons, in distinction from those of wide fame in the large cities. It is in hospitals of the smaller communities that the majority of surgeons are working; and the results attained in them are equal to those of the teaching hospitals of the great cities, as is attested by the admission of these surgeons as welcome members of the College.

Simply to enumerate the hospitals and clinics required about thirty feet of column space in the announcement; and the amount of information dispensed was encyclopedic.

The collection of exhibits was the feature which first struck the eye of the visitor at the headquarters. These exhibits were both scientific and commercial; but scientific information was emphasized at the commercial booths as well as those devoted to purely scientific demonstrations.

Of special interest were the numerous pieces of apparatus used in treating fractures of bones and dislocations of joints. An intensive study of this part of the exhibit for half a day would well repay any doctor who does emergency work in either the city or the isolated community.

The scientific meetings were open to all physicians, and the addresses were front page news to the metropolitan daily papers. Every morning paper of the better class gave at least half a page to the proceedings of the Congress, and reported the addresses with remarkable wisdom and restraint. Every business man took an interest in the Congress to such an extent that his usual greeting of a doctor friend was "I suppose you are on your way to the medical convention."

The crowning event of the sessions was the meeting on Friday evening when new members were initiated into the College with an impressive ritual and ceremony.

The annual Congress is a prelude and inspiration to its major work which is carried on by the members throughout the year, as they perform their daily tasks in accordance with the high standards which they themselves have voluntarily adopted. Two of those standards apply to hospitals. In order that a hospital may receive the approval of the College, the members of the staff must—

1. Hold regular meetings at least once a month at which all cases of death are reported and discussed.
2. The history of every patient shall be written in full form, so that anyone reading it may get a clear picture of the sickness.

These standards are great incentives to good work, both surgical and medical, for the record of every doctor affects all the other members of the staff. Developing a consciousness of these standards in the minds of all doctors is perhaps the most outstanding accomplishment of the College.

The Medical Society of the State of New York was honored by the election of its President-elect, Dr. Charles Gordon Heyd, as Vice-President-elect of the College.

THE FAMILY DOCTOR

No one need to be told to consult a doctor in the presence of severe pain or a crippling condition; but when the immediate crisis is over, both the patient and the doctor are usually willing to end their professional relations.

A family doctor is the medical advisor in health as well as in sickness; but the doctor hesitates to impose his advice unasked, for ignorance and financial economy deter the people from seeking medical advice between periods of acute sickness.

A typical example of the need for so-called preventive advice is that of a child who has recurring attacks of mild disturbances, either respiratory or digestive The doctor calls only during the attacks, and gets credit for the relief which would have come spontaneously anyhow Here are two distinct conditions

1 The acute attack

2 The underlying cause or susceptibility

People are not accustomed to submit to the inconvenience and expense of securing a diagnosis of the underlying cause of the attacks

A family doctor is not accustomed to study the patients in the intervals between the attacks. Possibly the examinations can be done only by an expert, or a series of laboratory tests may be needed In any event the doctor is likely to develop an inferiority complex and to tell the family "If there were anything possible to do, I would do it" If the doctor confesses his helplessness, of course the people do not seek his services in preventive lines

The people are ready and willing to cooperate with the doctor in an investigation of susceptibility between acute attacks of sickness Whatever examination may be needed, an accurate history is always necessary, and is often more valuable than an expert physical examination A history is not a history until the facts are written and the record placed on file If a mother makes a crude record of certain facts relating to her child's daily life at home, that record has a greater value than a similar record made by an expert physician and nurse in the artificial environment of a hospital or sanitarium

When a mother keeps such a record of her child, she will expect the doctor to make use of it, but the initiative must come from the doctor

It is not sufficient that a family doctor advise a parent to take a child to a specialist, for the first thing the expert will ask for will be an accurate history What must be the mother's opinion of her family doctor when he cannot answer the simple questions of the case history which the specialist emphasizes? The general practitioner has the opportunity to restore himself to the honored position of family doctor, provided he shows himself to be interested in the individuals during health as well as in their acute diseases

The people a half century ago had confidence in their family doctor because he "Understood their constitutions" The modern doctor will acquire the same reputation when he practices the periodic health examination

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LOOKING BACKWARD

This Journal Twenty-Five Years Ago

Reciprocity in Medical Licensure This Journal of November, 1906, contains an editorial on reciprocity in licensure, which says

"The preliminary education required for admission to the medical schools must be the same in each State, and the certification of the education department of the State as to standards maintained by secondary schools will be accepted by the education department of other States The effect of this agreement between licensing medical bodies will be to harmonize the requirements for admission to the other professions, thus bringing about reciprocal relations between the stronger States in the licensure in law, dentistry, pharmacy, veterinary medicine, etc

"The agreement between the State mentioned is undoubtedly the beginning of a movement in the direction of medical reciprocity which will spread from State to State until the State lines, so far as the legal right to enter into medical practice goes, shall be obliterated It is fortunate that this movement has begun with the high standard of New York State as the index of requirements, and we are glad that our own regents have been instruments in inaugurating this important action"

The fulfillment of the prophecy regarding uniform medical licensure throughout the United States is as remote as ever New York has reciprocity with eight States,—California, Delaware, Indiana, New Jersey, Ohio, Utah, Virginia, and Wisconsin

MEDICAL PROGRESS

Intracranial Extension of Sinus Infections Treated by Roentgen Therapy.—According to E. J. Hirtz, unquestionably objective anomalies have been revealed by many roentgenograms of the skull which could not be interpreted otherwise than as an index of increased density of certain tissues (fibrosis, calcification, hyperostosis) due to the irritant action of chronic infections which, originating in the deep sinuses, have penetrated into the cerebral ventricles and the midbrain, possibly by way of the cerebrospinal fluid. Such infection, generally occurring very early, and expressing itself in acute attacks at intervals during the course of the life, has given rise to troubles of slow, progressive development. Prominent among the symptoms, in addition to chronic coryza and posterior sinusitis, are headaches of various intensity, including migraine; vertigo, neuralgia, auditory and ocular disturbances, psychic and motor troubles, epilepsy, vascular spasms, vago-sympathetic disturbances, and various glandular symptoms. Treatment in such cases consists of irradiation by rather deeply penetrating roentgen rays (0.30 m. spark-gap), well filtered (0.5 and 1 mm. aluminum); dosage per field very weak. Four portals of entry are used, limited by a leaf of anti-*x*-ray perforated tissue: one frontal, two temporo-sphenoidal, of about 40 sq. cm. each, and one much larger in the occipital and upper cervical region. Sittings given twice a week may be continued over a long period (100-200 sittings) without any injury to skin or blood. The rays reach not only the deep sinuses but also the brain and its integuments. In the great majority of cases the treatment causes no reaction; if such appears at the outset, it is mild and disappears rapidly. Hirtz has used this treatment on over 200 patients since the beginning of 1925. In 35 the symptoms have entirely disappeared; improvement has been striking in 70, definite in 33 others; slight in 18, none at all in 2; there was intolerance in 2, and in 17 the treatments have as yet been insufficient. Disappearance of headaches and migraine has been especially striking in 59 of 74 cases. The soothing effect upon the nerves has been one of the most notable results. On an average it takes 3 months to show a distinct improvement. The favorable response of psychoneuroses opens up interesting perspectives for psychiatry.—*Bulletin de l'Académie de Médecine,* July 7, 1931.

Modified Prolonged Sleep Treatment in States of Depression.—A report is made by Ferdinand Segerath and Theo. Wember on 80 mental patients whom they have treated by the prolonged sleep method. Of these, 21 were suffering with schizophrenia, 9 with various psychoses (mania and paranoia), 1 with severe hysteria, 1 with compulsion neurosis, and 48 with states of depression, including simple melancholia, melancholic insanity, and depressions of the climacteric and postclimacteric. The results were not very satisfactory in the schizophreniacs, but were considerably better in states of depression of the cyclic series, in simple melancholia, and in depression of the climacteric, three-fourths of whom showed improvement or cure. The treatment lasted 12 to 15 days, and was as follows: At 7 a.m., 0.4 gm. phanodorm; 10 a.m., 0.3 gm. luminal; 1 p.m., 0.2 gm. phanodorm; 3 p.m., 15 gtt. somnifen (replaced at a later time by 0.2 gm. luminal); 6 p.m., 0.4 gm. somnacetin; 8 p.m., 0.3-0.5 gm. veronal. It is to be noted that an innovation was used in the substitution of less dangerous substances for the somnifen usually employed. More powerful substances must be used in the insane than in normal persons, since the former have a morbid insensibility toward irritants of the vegetative nervous system. It is important that the patients be awakened at intervals and set upright in bed for their nutriment, to promote better aeration of the lungs and to prevent danger of hypostatic affections. No patient over 55 should be given the treatment, nor any person suffering with cardiac, pulmonary, or renal debility. As a test of the profoundness of the sleep the reaction to a call was found more satisfactory than the corneal reflex. Even in the modification used by the authors the sleep treatment is a method not devoid of danger. It should accordingly be undertaken only upon strict indications, and the patients should be carefully watched by a trained personnel. Relatives should always be informed of the degree of danger to life involved. The treatment should be undertaken only when the disease is very severe and when the alternative of a long or permanent stay in an institution has to be taken into account. There is good reason to expect that safer methods of applying the therapy will by degrees be achieved, as a wider experience demonstrates the best combination and strength of the drugs to be employed—*Deutsche medizinische Wochenschrift,* July 10, 1931.

Tuberculosis and Morale.—W. Froehlich, writing in the *Schweizerische medizinische Wochenschrift* of August 1, 1931, declares that there is a general conviction today that the first symptoms of a tuberculous lesion do not appear

until long after the contamination has occurred, being awakened to activity by one or another occasional factor. Among such factors the chief are of a mental or psychic nature. A study of the history of many tuberculous patients reveals a mental factor as the cause in more than 75 per cent of cases. The parallelism of tuberculosis and mental misery is apparent to anyone who makes a systematic examination of the social, familial, intellectual, and moral conditions of these sufferers. The removal or relief of the psychic factor determines the removal or relief of the tuberculous manifestations, and conversely, the reappearance of the former is capable of provoking a relapse. Ancient and modern writers have drawn attention to the pernicious rôle played by that state of mind commonly defined by the word "disgust." The study of conjugal tuberculosis has clearly established that tuberculosis of the wedded partner was the result not only of contamination by cohabitation but also of a state of mind rendered unhappy by discords and material difficulties Many victims of this disease are subjects who are by nature hyperemotive and who suffer with exaggerated susceptibility. Modern teaching places them among the neuropathic and sympathicotonic. The classification matters little; the essential thing is the fact that an excess of emotionality and sensitivity, plus an intellectual exhaustion, overworks the nervous system if not compensated by intervals of repose and contentment. The same hyperemotivity is habitually present in the parents of the subject and in the general family atmosphere; thus he finds in his family not only the germ of the disease but also a constitutional mental atmosphere which will favor its development. The same observations apply to adolescents. The state of mind of the child and that of his associates exercise an immense influence upon his health, and especially upon his predisposition to tuberculosis. The physician should examine the mental condition of every tuberculous patient as one of the principal causes of the disease, and should provide an adequate therapy, taking into account not only the patient but also his origins, environment, associates, family, and his daily occupations and preoccupations.

Cancer, a Compensatory Phenomenon in the Organism.—In order to understand the genesis of cancer, says Erich Simons, writing in the *Schweizerische medizinische Wochenschrift* of July 11, 1931, we must first establish what we mean by predisposition, by the influence of irritation at a given place, and by the significance of irritation in the development of cancer. We must know why irritation without predisposition does not produce cancer, and vice versa. In Simons' opinion irritation has been incorrectly judged according to its action, when the really important thing is the reaction, the response of the organism. Irritation is of no interest until the organism answers back. The word provocation is more exact in this connection. The organism responds to the provocation with a process of regeneration. We know that a regenerative process that will not come to a halt may result in a cancer. Cancer predisposition may properly be termed an absence or lack of trephones in the organism—the name given by Carrel to the substances contained in embryonal cells, which promote growth processes. In the organism predisposed to cancer these important substances are wanting. If a wound will not heal, it may be assumed that an absence of trephones is thereby shown, which is accordingly a presupposition for cancer development. Thus the observation of processes of regeneration may make the early diagnosis of cancer possible; in other words, it may establish predisposition. Irritation is of interest to the student of cancer only as giving opportunity for a regenerative process. If trephones are wanting, and an irritation is applied to the organism at any point, we may deduce that the latter sends cells of higher function to the site of injury to replace the functions of the weakened cells. The increased function is shown sooner or later in a proliferation of cells. This is the beginning of cancer, which is, accordingly, only a compensatory phenomenon. These replacement cells which do compensatory work are called by Simons precancerous. They do not always lead to cancer, for we know that spontaneous healings can occur. The increased function of these cells is definitely for the purpose of supplying the wanting trephones to the body. This explains why spontaneous tumors are not readily transplantable into a healthy organism: the latter has no need of more powerfully functioning cells.

Late Results of Operative Treatment in Toxic Goiter.—In a follow-up of 42 patients who had been operated upon for toxic goiter, Charles S. C. Don found that there were 18 in whom exophthalmos had been well marked. In five of these patients this symptom was absent, in 11 it was much improved, while in two there was no change; in these, toxic symptoms were still present. He concludes that the disappearance of exophthalmos does not necessarily follow the complete relief of hyperthyroidism, yet a diminution of toxicity is usually followed by an improvement in this sign. Exophthalmos is likely to persist in those cases in which the metabolism has not dropped to within normal limits. Nervousness and tremor, which were present to a greater or lesser degree in every case before operation, were greatly improved in 39 of the 42 patients. The majority of patients gained in

weight after the operation, yet occasionally an otherwise successful result was not accompanied by any increase. Failure to gain in weight is at times associated with glycosuria, which is sometimes seen in Graves' disease, and may become more severe after operation. In only 23 of the 42 patients in this series was the metabolic rate determined before operation. In 21 of these 23 patients there was an immediate fall in the rate after operation. There are cases in which the metabolic rate remains above normal limits in which no increase of thyroid tissue can be detected, and in which no focus of sepsis can be discovered; worry and too little leisure are probably the factors which prevent a good result in these cases. Removal of one lobe of the thyroid was followed by relief of hyperthyroidism in three cases in this series. A satisfactory result also followed ligation in two cases, so that the complete operation was not required at a later date. Ligation alone is not regarded as a curative measure, and while it is of interest to note that a normal metabolic rate can follow this simple procedure, it is probable that the operation had little effect on the ultimate outcome. If the clinical condition of the 42 patients, their ability to do work, and the rhythm and rate of the pulse are considered in conjunction with the basal metabolic rate, the result of operative treatment has been good in 28 cases, with improvement in nine, while in five the operation has been of little value.—*British Medical Journal,* August 15, 1931, ii, 3684.

Anesthesia in the Second Stage of Labor in Primiparæ.—Jane . King and Joyce Morgan, writing in *The Lancet,* August 15, 1930, ccxxi, 5633, present a study of the comparative safety and efficiency of chloroform-ether, a mixture of chloroform (2 parts) and ether (3 parts), and nitrous oxide-oxygen in the second stage of labor in primiparæ. In each case a record was kept of the character, duration, and frequency of the pains, pulse rate, and fetal heart rate, and the condition of the mother and child after delivery. The tabulated results of the investigation indicate that there is a definite advantage in the use of gas oxygen in the second stage of labor. Relief of pain was evident in all cases. Uterine contractions increased in length and efficiency in 50 per cent of the cases. There was a definite decrease in the length of the second stage with gas and oxygen in comparison with the other anesthetics employed. There were no deleterious after-effects on the mother, and no serious effects on the child, though slight cyanosis was not uncommon. The anesthetic is pleasant to take, easy to give, and the depth is readily controlled. The disadvantages are the expense, the special apparatus, and the fact that the services of an anesthetist are required. The method employed was as follows: A mixture of four parts of nitrous oxide and one part of oxygen was given at first, the proportion of the two gases being varied to meet the needs of the individual patient. The patient was instructed to take two deep breaths of the mixture at the beginning of each pain, administration being continued throughout the contraction. Toward the end of the second stage, deep anesthesia was required, and the anesthetic was continued between the pains. The percentage of oxygen was increased at this point, because if the patient were allowed to become cyanosed there was a chance of the infant being rather blue.

The Rôle of Grippe in the Genesis of Fatal Infections in Puerperal Women.—H. Pigeaud calls attention, in the *Journal de médecine de Lyon* of August 5, 1931, to a relation existing between epidemics of grippe and the mortality from infection in obstetrical services. On the basis of 33 such cases that he has personally observed during 10 years at the Lyons Charité, he states that a certain number of women already infected with grippe at the time of their arrival at the hospital die of influenzal septicemia soon after their delivery. An interesting feature in six of the cases was the uterine and periuterine localization of the infection. During epidemics of grippe the increased mortality among these women is especially marked. This is due to the existence of (*a*) endogenous puerperal infection carried through the blood stream, and (*b*) exogenous puerperal infection, transmitted by neighbors or attendants who are carriers. The infection may be due to the influenzal virus itself, but frequently it is apparently due to a streptococcus rendered hypervirulent by its association with the pathogenic agent of grippe. During the winter of 1918 a total of 32 women who died with generalized puerperal infection represented a mortality of 25 per 1,000 puerperal cases. During the same epidemic the general grippe mortality in Lyons was approximately only 2 per 1,000 of population. The contrast between these two rates shows what a dangerous period the puerperium is for women during an epidemic of grippe, and what an increase of mortality results among lying-in patients under such conditions. That the high mortality was not due to the fact of hospitalization with its milieu essentially favorable to infection is proved by that fact that in the surgical wards of the same hospital the mortality from grippe was only 4 per 1,000. One is therefore justified in saying that influenzal infection runs a particularly severe course in puerperal women, and frequently terminates fatally. In several of the author's cases, the infection was observed to begin in the nasopharynz and a few days later to become localized in the periuterine tissues, which from that time on became the cen-

ter of the picture. The interest of these cases lies in the fact that they appear to prove the reality of puerperal infections by way of the blood stream, thus constituting true endogenous infections which to a certain extent defy such prophylaxis as is ordinarily exercised in obstetrical cases.

Why Terminal Cancer?—S. S. Marchbanks, writing in the *Southern Medical Journal*, September, 1931, xxiv, 9, asserts that it is largely the fault of the public that so many persons are dying of cancer. While the public is becoming more and more interested, it has not yet arrived at the point where it can be separated from enough money to supply the seriously needed hospitals for cancer work. Further, the profession as a whole is not prepared accurately to diagnose, and even less to treat, cancer. It is believed that the fact that we do not know the specific cause of cancer is largely responsible for the failure to raise money for hospitals. For the information of possible donors of hospitals and for the purpose of getting on with a program of treatment while waiting for a fundamental discovery, Marchbanks states that cancer is caused by irritation, mechanical, chemical, thermal, and the irritation of infection. The first three are predisposing causes, infection being the immediate cause. The irritants break down the normal defenses and allow the entrance of micro-organisms which produce the direct irritation to the cells, leading to an exaggeration of the repair mechanism. The number of different kinds of germs likely to be implicated in the process is very great. The personal habits of the individual which are more or less necessitated by the stress and strain of modern life are the principal factors tending to produce cancer. However, moderation, temperance, simple life, and physical examinations once a year will go far toward prevention. It is the consensus of opinion among those who have made a study of the facilities the world over for cancer service that a very definite improvement in the service must precede any substantial progress in cancer control. The new methods of cancer therapy require deliberate conference between the surgeon, the pathologist, and the roentgenologist. These three, assisted by members of other branches, can give the best service only when they can work in properly equipped institutions and hospitals. Dr. James Ewing, with Drs. Greenough and Gerster, acting as a committee of the American Society for the Control of Cancer, have recommended a plan for cancer service, which includes cancer institutes strategically situated and costing about $10,000,000 each. Affiliated with the larger institutes there should be special cancer hospitals, state, municipal, university, and private, as well as organized cancer service in general hospitals. As to the treatment of cancer the people need to know that the authoritative consensus of opinion is that the family physician is the key man, that diagnosis must be made earlier, and that the only treatments thus far justified are surgery, radium, and *x*-rays.

The Relations between Vascular Lesions, Exostosis and Traumata.—Writing in the *Riforma medica* of July 27, 1931, E. Fiorini describes a case that presented unusual difficulties of diagnosis, with reference to a claim for industrial insurance. A stonemason, 29 years of age, with a history of malarial and syphilitic infection but with negative Wassermann reaction, a heavy smoker and drinker, bearing an exostosis of the left humerus on the median surface of its upper third, said to be of 10 years' duration, had lately received a blow from a falling beam on the external surface of the same humerus, and likewise at its upper third. Shortly afterward he began to perceive disturbances throughout the entire limb, with arrest of arterial circulation and threatened gangrene of the hand. The question to be decided was, which of the etiological factors cited (malaria, syphilis, nicotine, alcohol, trauma, exostosis) could be held responsible for the disturbances of arterial circulation. Upon surgical removal of the exostosis, the humeral artery, which was almost without pulsation, was found transformed into a hard cord, but was so disposed as not to have undergone any compression or stretching. Rarely is an exostosis alone the cause of circulatory disturbances, and the lack of improvement after its removal dismissed it from the list of possible causes. On the other hand a course of vasodilator and antiluetic treatment, combined with rest, massage, and diathermy, produced distinct benefit. The arsenobenzols were avoided because of the labile state of the vascular apparatus. With the antiluetic mercury and bismuth was associated a treatment with acetylcholin, atropine, histamine and sodium citrate, to diminish the viscosity of the blood. Disappearance of the pains, reappearance of the obliterated pulse, restoration of the part to nearly normal conditions, confirmed the utility of the treatment adopted. But it is impossible to exclude the possibility of the nicotine and alcoholic intoxication having predominated over the luetic factor, or that the time elapsed between the lues and the appearance of endarteritic symptoms might seem too brief. Furthermore the Wassermann was not positive, and the antisyphilitic treatment alone did not suffice to cure the case. None of these etiologic and pathogenetic considerations can be disregarded when one reflects that these forms of gangrene are those which offer hope for the success of physical and pharmaceutical treatment.

LEGAL

CONFIDENTIAL COMMUNICATIONS—AN INTERESTING CASE

By LORENZ J. BROSNAN, ESQ.
Counsel, Medical Society of the State of New York

"A person duly authorized to practice physic or surgery, or a professional or registered nurse, shall not be allowed to disclose any information which he acquired in attending a patient in a professional capacity, and which was necessary to enable him to act in that capacity; . . ."

This language is taken from Section 352 of the Civil Practice Act of the State of New York. The statute is a wise and salutary one. It has been stated by one of the higher courts of this State that the purpose of the statute is to "protect the relationship of physician and patient, and to save the patient from possible disclosure by his physician which might result in his embarrassment or disgrace. It was supposed that the good accomplished by preventing disclosures by a physician and by inspiring confidence between patients and their physicians would outweigh the injustice in particular cases which might be caused by the exclusion of the physician's testimony under the provisions of such statute."

Certain statutes or ordinances of this State impose upon the physician a legal duty to report to the health authorities the presence of contagious diseases. But suppose a physician acting in good faith, with a view to the protection of others, reports the disease to a person other than the health authorities, can it be said that he has thereby violated the statute safeguarding confidential communications? We do not know of any reported case on this subject in the State of New York, but in one of our Western States the court had occasion to pass upon this interesting question on the following state of facts:

The plaintiff, who was an employee of a large corporation, was stopping at a small hotel in a town in the West operated by a Mrs. B. He was a stranger in the town. Becoming afflicted with sores on his body, he consulted the defendant who was the hotel physician and the family doctor of Mrs. B. The physician took his history from the plaintiff, gave him a thorough physical examination and informed him that he had reason to believe that the disease from which the plaintiff was suffering was syphilis. The physician stated, however, that it would be impossible to be positive without Wassermann tests, but that he had no equipment for making these tests. He also advised the plaintiff of the danger of communicating the disease to others at the hotel and requested him to leave the hotel, which the plaintiff agreed to do.

The next day the doctor called upon Mrs. B, who was ill, and discovered that the plaintiff had not kept his promise and was still at the hotel. The physician then told Mrs. B that he thought the plaintiff was afflicted with a contagious disease, warning her to be careful and to take particular care of his bed linen, etc. The woman, heeding the warning, fumigated the room, put the plaintiff's things out into the hallway and forced him to leave the hotel.

Going to another town, the plaintiff consulted a second physician who made a single Wassermann test which was negative. The patient then sued the first physician claiming that the law absolutely forbids the disclosure of any confidential communication under any circumstances, and that the breach of the duty of secrecy gives rise to an action for damages in the patient. At the trial the facts were undisputed. The second physician testified on the trial that a single Wassermann test was not conclusive as to the presence or absence of syphilis, and further that the defendant had acted reasonably upon the history and symptoms under the circumstances. At the close of all the testimony the court directed a verdict in favor of the defendant physician, and the plaintiff appealed.

In the State in which the case arose, the statute on confidential communications was contained among the acts of unprofessional or dishonorable conduct justifying the revocation of a physician's license. In the language of the statute, such a license could be revoked where there was a "betrayal of a professional secret to the detriment of a patient." The court defined the purpose of the statute in question to be as follows:

"By this statute it appears to us, a positive duty is imposed upon the physician, both for the benefit and advantage of the patient, as well as in the interest of general public policy. The relation of physician and patient is necessarily a highly confidential one.

It is often necessary for the patient to give information about himself which would be most embarrassing or harmful to him if given general circulation This information the physician is bound, not only upon his own professional honor and the ethics of his high profession, to keep secret, but by reason of the affirmative mandate of the statute itself A wrongful breach of such confidence and a betrayal of such trust, would give rise to a civil action for the damages naturally flowing from such wrong '

The court then took up the interesting question as to whether under the facts of this case the statute was subject to any qualifications or exceptions It should be kept in mind that in this situation there was no positive express legal enactment imposing upon the physician the strict duty to report the disease in question to the person to whom this information was communicated In holding that the decision of the court exonerating the physician was correct and that no liability attached to the physician in the case under consideration, the appellate court said

"The doctor's duty does not necessarily end with the patient, for, on the other hand, the malady of his patient may be such that a duty may be owing to the public and, in some cases, to other particular individuals Recognition of that fact is given by the statutes in this State which delegate power to the State Board of Health, and to municipalities generally to require reports of, and provide rules of quarantine for, diseases which are contagious and dangerous

"When a physician, in response to a duty imposed by statute, makes disclosure to public authorities of private confidences of his patient, to the extent only of what is necessary to a strict compliance with the statute on his part, and when his report is made in the manner prescribed by law, he of course has committed no breach of duty toward his patient and has betrayed no confidence, and no liability could result

"The statute making the 'betrayal of a professional secret' misconduct on the part of a physician is in derogation of the common law and should be strictly construed We believe, the word 'betrayal' is used to signify a *wrongful* disclosure of a professional secret in violation of the trust imposed by the patient

"No patient can expect that, if his malady is found to be of a dangerously contagious nature, he can still require it to be kept secret from those of whom, if there were no disclosure, such disease would be transmitted The information given to a physician by his patient, though confidential, must, it seems to us, be given and received subject to qualification that, if the patient's disease is found to be of a dangerous and so highly contagious or infectious a nature that it will necessarily be transmitted to others, unless the danger of contagion is disclosed to them, then the physician should, in that event, if no other means of protection is possible, be privileged to make so much of a disclosure to such persons as is necessary to prevent the spread of the disease A disclosure in such case would, it follows, not be a betrayal of the confidence of the patient, since the patient must know, when he imparts the information or subjects himself to the examination that, in the exception stated his disease may be disclosed "

The court then pointed out that in order that such a privilege of making a disclosure be available to a physician, he must have had ordinary skill and learning as a physician and must have exercised ordinary diligence and care in making his diagnosis, otherwise he could have been subjected to an action for negligence in making a wrongful report The court further laid down three tests to be used in *determining whether the physician would* be free from liability in a situation of this kind First, that he must prove that a disclosure was necessary to prevent the spread of the disease, second, that the communication was to one who it was reasonable to suppose might otherwise be exposed, and third, that he himself acted in entire good faith, with reasonable grounds for his diagnosis and without malice

We believe that the decision under the circumstances here disclosed is a sound one It appears patent that to hold a physician liable under the circumtances of this case would be to work an injustice, not only upon him, but upon the public as well It is, of course, impossible to say whether the decision would be followed by our New York courts if the question were squarely presented to them It should be noted that the statute in the Western State upon which this decision was based made "a betrayal of a professional secret to the detriment of a patient" an act of misconduct on the part of the physician, whereas the New York statute forbids a physician to disclose any information acquired by him in a professional capacity It would seem, however, that the decision in question would be a persuasive precedent in favor of the physician if the question were squarely raised in one of the courts of this State

NEGLIGENT TREATMENT OF EMPYEMA

A boy about ten years of age was stricken with pneumonia and was under the care of his family physician for about two weeks when the boy developed signs of empyema. The family physician upon discovering this called in the defendant, a physician and surgeon who specialized in surgery. He diagnosed the case as one of empyema and suggested an operation. The parents consenting, the boy was removed to the hospital where the doctor made an incision between the ribs and drained considerable pus. He attended the child until the boy was able to return to his home about two weeks later.

Several days thereafter the child's temperature rose to 103 and the defendant was again called to treat the boy by the physician who was attending him at his home. The defendant doctor probed the wound carefully and there was evidence of an obstructed pus pocket. He advised immediate *x*-rays, and it was agreed that an *x*-ray should be taken and the pictures submitted to him. This was never done, however, and the defendant never saw the child again in a professional capacity.

Thereafter suit was instituted against the defendant doctor to recover damages for alleged malpractice. It was claimed that at the time of the call at the child's home the defendant had negligently inserted his fingers into the incision which had been made in connection with the first operation, without washing or cleaning his fingers in any way, and that he had pushed the ribs apart and twisted his fingers around in the child's body in search of pus, causing the child great agony and a resulting infection. It was claimed that by reason of such negligence a subsequent operation had become necessary to remove pus. The action came on for trial before a judge and jury and the evidence on both sides having been submitted, the jury rendered a verdict in favor of the defendant, terminating the matter in the doctor's favor.

ALLEGED NEGLIGENT TREATMENT OF TONSILS

The defendant in this case, a general practitioner, was called to attend a three-year-old girl whom he found to be in bed suffering from fever and sore throat. The doctor after examining the child found a condition of badly diseased and inflamed tonsils and prescribed certain medications and ordered cold compresses for the neck and forehead. The patient responded to the treatment and the inflammation subsided but the fever persisted. The doctor tested the child's urine and found that she was suffering from pyelitis. He prescribed certain other medicines and her condition improved.

Some time later he was again called to attend the child and found similar symptoms together with a condition of abscess on the middle ear. The ear condition was treated and improved promptly, and the pyelitis subsided satisfactorily. The child, however, continued to suffer from tonsil trouble and the doctor advised the removal of both the tonsils and adenoids. This was consented to. The doctor in charge of the case brought a throat specialist into the case who performed an operation removing the tonsils and adenoids, which operation was uneventful. Some time later the child was brought into the first doctor's office, the parents complaining that the child had a running nose and a swelling in the neck. He prescribed the application of hot camphorated oil on cotton. At this time he advised the parents he feared there was possibly an abscess in the throat for which the doctor expected to return to treat further, but the child was taken by his parents to a doctor who supplanted the physician who originally had charge of the case.

Some time thereafter a suit was instituted against both the first doctor and the surgeon who operated, in which it was claimed the operation was negligently performed and that both doctors were negligent in failing to disclose to the parents of the child the fact that the adenoids and tonsils were not completely removed by the said operation, and that because of the negligence by the defendants, surgical treatment had been necessary for the child. Investigations showed that about four months subsequent to the operation a retropharingeal abscess had developed in the child's throat which had been incised, but which had promptly healed up.

The case came on for trial before a judge and jury and after all the evidence had been put in, the plaintiff having failed to convince the court that there was any failure on the part of the defendants to follow approved practice, the court, on motion of the defendant, dismissed the complaint.

NEWS NOTES

EXECUTIVE COMMITTEE

The regular monthly meeting of the Executive Committee of the Council of the Medical Society of the State of New York was held on the afternoon of Thursday, October eighth. Reports from the several standing and special committees were received.

Venereal Diseases: Dr. James N. Vander Veer, liaison officer in venereal diseases with the Division of Social Hygiene of the State Department of Health, gave a report of his activities along the lines described on page 712 of this JOURNAL of June 1, 1931. Since April he had visited the following fifteen county societies accompanied by Dr. Albert Pfeiffer, Director of the Division of Social Hygiene of the State Department of Health:

Cortland	Schoharie	Yates
Onondaga	Seneca	Jefferson
Ontario	Tompkins	Rockland
Otsego	Warren	Washington
Saratoga	Wayne	Sullivan

In addition he addressed the Suffolk County Medical Society and Dr. Pfeiffer addressed the Herkimer and Columbia County Medical Societies. Dr. Vander Veer's report continues:

"While we were on these trips we have visited local clinics, and have consulted and advised the health officer and local doctors of the changes in laws and procedures, especially those requiring physicians to report the diseases as contagious, and those providing for compensation for doctors treating patients who are unable to pay. It has been the policy of the Committee to inform doctors of the provision of the law requiring the community to provide the means by which the doctor is assured of his pay.

"A doctor need not treat cases in his private practice beyond their ability to pay and thus carry them as nonpaying or indigent cases later, for the law now puts the nonpaying or indigent type of case squarely upon the local health officer to treat or provide treatment, at the expense of the local board of health. In a few instances a local health officer has informed his board of health that he could not adequately treat syphilis, or was unfamiliar with its treatment, and through his records and recommendation, funds have been voted by the local board of health for such treatment, and outside physicians have benefited economically.

"In a number of instances, the local health officer would prefer to see such an arrangement made whereby some physician better acquainted with the diagnosis of syphilis would take this upon himself for the extra economic gain. Or again, we have interested some physicians in taking up the study of syphilis in the smaller communities, to which the local health officer, or board of health can refer these cases and thus the patients get earlier, better, more systematic, and longer treatment, as we know is now necessary for the control and cure of this disease—to the betterment of the community, the control of the disease, and to the increased income of a doctor.

"We have also told physicians that they can obtain standard makes of the arsphenamines of soluble and insoluble bismuth, and in needed cases tryparsamide, free from the Division of Social Hygiene of the State Department of Health, in return for which they are simply asked to report at the end of each month how many packages they have drawn and the number of cases treated, so that the Division may, in this manner, be kept advised as to whether the cases are receiving sufficient treatment.

"In our talks before county societies, and with individuals, we have stressed the importance of a dark field examination of each suspicious lesion; and of the necessity of a Wassermann on all persons seen for the first time in the regular first physical examination made; and of Wassermann examination in every case of suspected syphilis, every case of gonorrhea, and every case of chancroid, over a period of time, thereby hoping that as physicians we may pick up quickly the 'silent case,' especially in pregnant women, which may so readily be a spreader of infection, or from the congenital type which may thus saddle later upon a community, and upon us as tax payers, the latent cardiovascular, and neuro-syphilides, now crowding our local and state institutions, to say nothing of our recognizing the disease in its inception.

"We have been called upon to answer many questions extraneous to our talks, mostly of economic bearing; and having spoken in rural counties mostly, we believe the frequent visitations of state and district society officers, who keep themselves up by contact and reading with the present day trend of medical practice in its social and economic features, will do much to advance the position of the everyday doctor, who is at present at sea in his thoughts as to his rights and privileges."

Press Publicity: A Press Publicity Committee was appointed in accordance with the action taken

by the House of Delegates on June first (see this JOURNAL, July 1, 1931, page 830). The resolution provided for a Special Committee of sixteen members, two from each District Branch. Those appointed by the Executive Committee were as follows:

Samuel J. Kopetzky, Chairman.

First District:
Samuel J. Kopetzy, New York
Edward C. Povdin, Bronx

Second District:
Alec N. Thomson, Brooklyn
Carl Boettiger, Long Island City

Third District:
James N. Vander Veer, Albany
Arthur J. Bedell, Albany

Fourth District:
Edwin MacD. Stanton, Schenectady
Leo F. Schiff, Plattsburg

Fifth District:
Hyzer W. Jones, Utica
Lynn B. Chase, Morrisville

Sixth District:
Charles D. Ver Nooy, Cortland
Arthur S. Chittenden, Binghamton

Seventh District:
Walter A. Calihan, Rochester
John R. Williams, Rochester

Eighth District:
Louise Beamis, Buffalo
Peter J. Di Natale, Batavia

This committee was given general powers to devise its own methods of investigation and procedure in "providing the press with authentic medical news and placing the views of organized medicine before the public."

Committee on Public Health and Medical Education: Dr. Thomas P. Farmer, Chairman of the Standing Committee on Public Health and Medical Education, reported on the activities of the committee during the months of June, July, August and September.

Poliomyelitis: Dr. Farmer's committee and a sub-committee of experts, cooperated with the State Department of Health in organizing the physicians of the State under their county societies, as described in the JOURNAL of August 15, 1931, page 1048. The services were planned along three lines:

1. Medical Society meetings for discussing the subject of poliomyelitis.

2. Immune serum, its collection, control, and use.

3. A consulting diagnostic service.

Meetings were immediately arranged for all the county societies in the region of the Hudson River. These meetings were addressed by Dr. George Draper, whose services were secured by the State Department of Health. The meetings, however, were arranged by Dr. H. L. K. Shaw for this committee and included the following county societies: Schenectady, Albany, Rensselaer, Saratoga, Warren, Washington, Ulster, Sullivan, Orange and Dutchess-Putnam. Dr. Ayer of Syracuse addressed the counties of Broome, Tompkins, and Chenango. Dr. Ludlum arranged for a meeting in Kings County, and a meeting was held in New York County.

A meeting was also held in Nassau County and was addressed by Dr. Lloyd Aycock of Boston (see page 1048 of the August fifteenth JOURNAL).

"The Medical Society of the State of New York can take credit to itself for the way in which its members prepared themselves to handle a greater outbreak of the disease had it occurred. The sub-committee on poliomyelitis will probably meet once again during the fall to review the records of the disease and make recommendations for the control of future outbreaks."

The sub-committee also issued a statement on the diagnostic signs of poliomyelitis during the pre-paralytic stage, when treatment was most effective. (See this JOURNAL, August fifteenth, 1931, page 1038.)

Governor's Health Commission: On June thirtieth the chairman of the committee met with the Public Relations Committee at which time the latter committee discussed the proposed study of the Report of the Governor's Special Health Commission. The Committee on Public Health adopted the method of dividing this report into sections for study by its individual members. On September eleventh the first meeting of the committee was held in Albany for this purpose and it voted to join with the Committee on Public Relations as one committee for this study.

Graduate Education: The graduate courses to be given to county societies during the fall of 1931 are as follows:

Monroe, Pre-clinical Medicine, September 21, 1931. (With Livingston, Genesee and Ontario.)

Rockland, Internal Medicine, October 14 and 23, 1931.

Cortland, Traumatic Surgery, October 16, 1931.

Schoharie, Dermatology and Syphilology, October 13, 1931.

Otsego, Dermatology and Syphilology, October 13, 1931.

Seneca, Traumatic Surgery, October 8, 1931.

Wayne, Traumatic Surgery, October 8, 1931.

At the request of the Schoharie and Otsego County Societies, lectures will be given in their courses each month. The Monroe county course

was arranged especially so as to provide instruction on pre-clinical medicine to the profession preparatory to a campaign in that county for periodic health examinations. The subjects were outlined by Dr. Nellis B. Foster.

The Committee has arranged during the summer for speakers at regular meetings of the Wayne and Greene County Societies and also arranged for speakers in the Fifth, Sixth, and Seventh District Branch meetings. The chairman of the committee has attended meetings of the Wayne and Oneida County Societies, the Executive Committee of the Sixth District Branch, and the annual meetings of the Sixth and Seventh District Branches.

The Committee on Public Health and Medical Education has suffered a great loss in the sad and sudden death of Dr. John O. Polak. Because of his vast knowledge of matters of public health and medical education he was an unusually helpful member in the work of the committee. It is not too much to say that a large part of the credit for any real accomplishments of the committee belong to him. Dr. Polak's record as a member of the committee stands out because of his faithful and devoted attendance at the committee meetings. He was never absent unless he was a long distance away from New York State by reason of attendance at some scientific meeting; never allowing private work to interfere with what he felt was his obligation to the State Society. He willingly accepted tasks no matter how inconvenient or difficult they might be to handle. The Committee most of all will miss Dr. Polak, however, because of his agreeable personality and pleasant companionship.

JOINT COMMITTEE ON THE GOVERNOR'S HEALTH COMMISSION

The Joint Committee on the Report of the Governor's Health Commission held its second meeting on Thursday, October 8, 1931, in the building of the New York Academy of Medicine, with fourteen members present. The Committee devoted the greater part of the session to a consideration of the broad features of the proposal for the establishment of a county health department in every county that shall take the place of the present system of a local board of health in every village and town. The recommendations of the Governor's Commission on the County Health Unit appears on page 1211 of the October first issue of this Journal.

The Joint Committee plans to hold sessions in several sections of the State and to invite representatives of the County Medical Societies to be present and express their views on any or all the subjects discussed in the report of the Governor's Health Commission. Ample notice of the sessions will be sent to the societies in order that the members may prepare themselves with constructive suggestions.

The Committee requests that each physician or delegation prepare and present a written abstract of the plans and arguments that are advanced, in order that they may be clearly understood and recorded.

The following schedule of hearings has been arranged:

October 27—Hotel Statler, Buffalo, at 2 P.M.
November 10—Hotel Syracuse, Syracuse.
November 17—DeWitt Clinton Hotel, Albany.
November 24—New York City.

MEDICAL FILMS, 16 mm. SIZE

Moving pictures on medical subjects have a recognized value, and are used more and more widely with the increasing number of those available. Moreover, the use of the sixteen millimeter film brings the movies within the reach of the smaller societies, for two reasons:

1. Projectors are available in every village.
2. The film is non-inflammable and may be shown without restrictions of permits or licenses.

County medical societies and hospital staffs would doubtless use the sixteen millimeter medical movies frequently if they had a list of films from which to choose. The best list, and indeed the only comprehensive one, that has come to the attention of the editors of this JOURNAL, is that compiled by the Educational Division of the Bell and Howell Company, 1801 Larchmont Avenue, Chicago, Illinois, manufacturers of moving picture apparatus. The company has issued a mimeographed list of twenty-six pages containing descriptions of 362 films. It also gives the names and addresses of forty-eight producers of the films, and the prices for their sale or rental. Some excellent films are owned by commercial companies, who will send the films free of charge and even supply a projector and an operator. At the other end of the scale are films for sale only, at prices ranging from a small sum to over one hundred dollars. The films are divided into two classes:

1. Technical, for medical men.
2. Popular, for lay audiences and students in public schools and colleges.

An indication of the scope of the professional pictures is shown by the following list from the first two pages of the catalogue:

Alpha Film Laboratories, 4 films on cell development.

Amateur Cinema League, Inc., eight films on a variety of medical topics for exchange among the members.

American College of Surgeons, fifteen films.

American Heart Association, a film on the acting valves of a steer's heart.

American Society for the Control of Cancer, the "Canti" film, and one on living cancerous cells.

The list is by no means complete, for it includes only those which are publicly listed as generally available to all who apply. The Bell and Howell Company does not deal in the films, or assume any obligation for supplying them; but will send the mimeographed catalogue to any county medical society that will apply for it; or to any health organization that sponsors public meetings.

An editorial suggestion is that every secretary who sends for the catalogue shall preserve it with care, ready for use on a moment's notice.

A similar list of dental films is also available.

FIFTH DISTRICT BRANCH

The twenty-fifth annual meeting of the Fifth District Branch of the Medical Society of the State of New York was held on September 29th, in the Marcy State Hospital, at Marcy, near Utica, with 170 members registering and over 200 in all present. The large attendance was undoubtedly due partly to the fine weather. Some of the Watertown doctors flew to the meeting by airplane—something new in medical transportation in New York. The President, Dr. A. B. Santry, presided.

An address of welcome was given by Dr. William W. Wright, Superintendent of the Marcy State Hospital.

The following papers were read:

"Pernicious Anemia, Differential Diagnosis and Treatment," Kenneth R. McAlpin, M.D., New York City.

"Modern Methods of Treating Syphilis of the Nervous System," Charles W. Hutchings, M.D., Marcy State Hospital.

Joseph Colt Bloodgood, M.D., Baltimore, Md., talked on cancer for one hour and forty minutes, and held everyone's attention closely with lantern slides.

An address on "Some of the Compensation Problems Encountered in Surgical Practice," by Percival K. Menzies, M.D., and a talk on "Compensation Law and the Physician," by Mark A. Daley, General Secretary, Associated Industries of New York, Buffalo, N. Y., closed the session. There was considerable discussion from the floor on most of the papers.

Dr. W. D. Johnson, President of the State Society, Dr. D. S. Dougherty, Secretary, and Dr. John A. Card, Speaker, explained some of the problems of the State Society.

At the election held following the luncheon at one o'clock, Edward R. Evans, M.D., Utica, was moved from First Vice-President to President, William A. Groat, M.D., Syracuse, from Second Vice-President to First Vice-President. Le Roy Hollis, M.D., Laconia, N. Y., was elected Second Vice-President.

Dr. Fred C. Sabin, M.D., was elected Secretary in place of William J. McNerney, M.D., Syracuse, who held the office twelve years.

Hermann G. Germer, M.D., was re-elected Treasurer.

RURAL MEDICAL PUBLICITY

One of the poliomyelitis consultants for the State Department of Health in one of our rural counties reports the following incident illustrating how news can travel in rural sections.

"Making a call with a local doctor about thirty miles from town, we found patient "A," a small boy, suffering with meningitis following internal ear infection, and decided to send him to the hospital. The doctor asked me to go with him to see patient "B" from whom he had just received a call for suspicious poliomyelitis. On arriving at the home of patient "B," I undertook to telephone to the hospital about the meningitis patient. The telephone was on a party line with some twenty extensions, and the following conversation attracted my attention:

"There's one case has it up at the corner. The doctor put a sign up yesterday, and Brown's has it too, I guess. They had Dr. C. yesterday for two of them, and there's two more sick there today, I hear. I haven't seen

the doctor there yet today. And I hear they've got it at B.'s and are going to have the State Doctor."

"Yes, he's there now with Dr. A. and a nurse. Don't you think they ought to close the schools?"

It was necessary to interrupt the talk and ask for a chance to use the telephone. When the message to the hospital was put through, it was almost impossible to hear or to be heard. The local doctor said that was because as soon as the "State Doctor" put in a call, every receiver on the line was down and the whole countryside listened in. Quarantine placards, he stated, were practically unnecessary, as the telephone broadcast spread the news so rapidly. By the way, patient "B" did not have "it."

WASHINGTON COUNTY

At the Washington Medical Society meeting at the Hudson Falls Court House on October 6th, Dr. Russel C. Paris, of Hudson Falls, one of the older practitioners of the county, having received his degree in 1883, was presented with a memorial in the form of Da Costa's "Modern Surgery." The book was inscribed with a dedication as follows:

"Presented to Dr. Russel C. Paris by the Medical Society of Washington County as a token of their respect and esteem for him as a man and a physician. Also in grateful appreciation of his long and faithful service as a member and officer of this society. Official record: Treasurer from 1911 to 1920 inclusive; vice-president in 1921; president in 1922; treasurer from 1923 to 1930 inclusive."

The book was autographed by all the physicians present as follows: B. C. Tillotson, president; Silas J. Banker, secretary; Charles A. Prescott, treasurer; D. F. MacArthur, J. Leonard Brynes, W. C. Cuthbert, William L. Munson, W. A. Leonard, H. W. Gillette, Denver M. Vickers, John H. Ring, Arthur E. Falkenbury, J. E. Armstrong, Z. V. D. Orton, Samuel Pashley, Jr., L. R. Oatman, Samuel Pashley, J. T. Park.

Dr. Samuel Pashley, Sr., who was the chairman of the committee in charge of the memorial, made the presentation, and Dr. Paris responded.

S. J. BANKER, *Secretary.*

GREENE COUNTY

The annual meeting of the Medical Society of the County of Greene was held on October 13th at the Kaksakee Inn in Coxsackie, N. Y., with fifty per cent of the membership present. Dinner was served at 6.45 o'clock. The President, Dr. Atkinson, presided, and the business session was held immediately after dinner.

There was no scientific session, it being felt by the officers that there were several matters of interest that should be attended to, and that if proper consideration was to be given, all the time available would be required.

Reports were received from the Chairman of the Legislative Committee, and the Committees on Public Relations and Public Health. The Treasurer reported the financial condition of the Society.

The Chairman of the Public Relations Committee introduced a resolution requesting that the Board of Supervisors appoint physician members of the Public Health Nursing Committee from a list submitted by the Society; and that in the future arrangements be made for the payment of physicians conducting clinics, as had been done in the past in certain cases; also urging the appointment of physicians to membership in the various lay organizations engaged in Public Health Work.

A second resolution was introduced by the same Committee urging uniform fees for medical school inspections, pre-school examinations and immunization clinics.

After a thorough discussion these resolutions were adopted.

An amendment to the by-laws was offered by Dr. Rapp, whereby the term of office of the officers of the society would be two years instead of one.

The following recommendations relative to County Health Departments were adopted:

1st. Approval of the fundamental idea of County Health Units.

2nd. That all counties under 30,000 be permitted to have a full-time County Commissioner of Health.

3rd. That all Health Officers be retained in office at the discretion of the county board of health.

4th. That a majority of the county board of health be physicians.

5th. That only cities be excluded from County Health Units.

6th. That county boards of health meet at least every two months for the consideration of health matters.

W. M. RAPP, *Secretary.*

DUTCHESS-PUTNAM

A dinner meeting of the Dutchess-Putnam Medical Society was held Wednesday evening, October 7, 1931, at the Nelson House, Poughkeepsie, N. Y. The officers of the Medical Society of the State of New York were entertained. There were addresses during the evening by Drs. William D. Johnson, President, D. S. Dougherty, Secretary, C. Gordon Heyd, T. P. Farmer, F. E. Sondern, J. N. VanderVeer, Joseph D. Lawrence, and John A. Card. Doctor William A. Krieger presided.

The meeting adjourned at 11:00 P.M.

The following members and guests were present: Drs. J. N. VanderVeer, F. E. Sondern, R. P. Folsom, D. S. Dougherty, C. Gordon Heyd, T. P. Farmer, William D. Johnson, Joseph D. Lawrence, Albert Pfeiffer, Dineen, C. T. Caldwell, C. E. Lane, G. S. Tabor, C. O. Davison, H. St. John Williams, R. H. Breed, Nelson Borst, John I. Cotter, M. Gosse, C. K. Deyo, J. J. Toomey, James Harrington, J. F. Rogers, L. E. Rockwell, C. A. Crispell, A. W. Thomson, H. Percy Dawe, Earle W. Voorhees, V. A. Bacile, Aaron Sobel, H. P. Carpenter, H. A. Benson, Donald Malven, W. A. Krieger, E. G. MacKenzie, J. E. Sadlier, G. E. Lane, J. M. Cronk, John A. Card, J. H. Dingman, E. A. Stoller, M. B. Morrison, B. E. Roberts, T. J. Morrison, H. Weston, B. Stibbs, J. N. Boyce, H. J. Christensen, W. T. Rivenburgh, J. Coborn, and Mr. Charles Murray—50 in all.

H. P. CARPENTER, M.D., *Secretary.*

COLUMBIA COUNTY

A special meeting of the Columbia County Medical Society was held on September 22, 1931, for the purpose of considering the advisability of recommending to the Board of Supervisors, the establishment of a County Health Department. The following resolution was passed:

"Resolved, that the Columbia County Medical Society go on record as in favor of the establishment of a County Health Department, to include the entire county, under the provisions of the present County Aid Law applying thereto, on the conditions that four of the members of the County Board of Health be chosen from a list of its members selected by the County Medical Society and also that the county's share of the expense shall not exceed the present cost of administration of health activities in the county."

L. VAN HOESEN, *Secretary.*

The annual meeting of the Columbia County Medical Society was held on October seventh, in the Worth House, Hudson, beginning at 11 o'clock. The following officers were elected:

President: Samuel James Post, Philmont.

Vice-President: S. V. Whitbeck, Hudson.

Secretary-Treasurer: L. Van Hoesen, Hudson.

Censors: W. D. Collins, L. J. Early, N. D. Garnsey, E. Niver, L. M. Niesen.

Dr. G. E. Stevens was elected to membership.

After a noon luncheon the following scientific program was carried out:

Cases of Undulant Fever: Dr. L. J. Early.

The Importance and Interpretation of Chemical Studies of the Blood, Dr. Arthur Wright.

Moving Picture: The Diagnosis and Treatment of Infections of the Hand.

L. VAN HOESEN, *Secretary.*

RENSSELAER COUNTY

A meeting of the Medical Society of Rensselaer County was held on the evening of October 13, in the Medical Center in Troy, N. Y. Dr. W. B. D. Van Auken was appointed reporter for the Society.

Dr. A. J. Hambrook, past delegate to the State Society, spoke of the desirability and advisability of a county society retaining its delegates, if they are good ones, from year to year. He stressed the importance of the delegate's actual attendance at the State meetings.

The attention of the Society was called to a recent advertising scheme of a newspaper published in a nearby city. It was pointed out that complimentary biographies of physicians could be published in the columns of this paper for $25.00.

Some of the members had been inviegled into the scheme. A warning was issued.

Dr. Edward H. Hume of the Harvard Medical School, gave an address on "The Significance of Graduate Study to the Practitioner." Dr. Hume emphasized the social and community effects that will follow the demonstration and application of scientific medical developments in the daily practice of physicians. Dr. Hume said: "Medicine does not mean scientific contacts primarily, but a social relationship which can be furthered only when public confidence in the doctor is thoroughly entrenched."

Dr. W. Irving Walsh of Troy discussed "The Present Status of Syphilis."

Dr. Harry W. Carey spoke on the subject of "Hereditary Syphilis."

W. B. D. VAN AUKEN, *Reporter.*

NASSAU COUNTY

The first regular meeting of the fall season of the Medical Society of the County of Nassau was held on the evening of Tuesday, September 29, 1931, at the Garden City Hotel, with about 75 members present. As is the custom of the society, the meeting was preceded by an informal dinner at 7:30 o'clock.

The scientific session was furnished by two excellent men. Robert A. Cooke, M.D., Assistant Professor of Applied Immunology at Cornell Medical College, spoke very completely on allergy, enumerating the many manifestations which we now know to be of allergic nature. He offered concise and worthy suggestions for diagnosing and managing such conditions.

William L. Sneed, M.D., Attending Surgeon at the Hospital for Ruptured and Crippled, New York City, and Consulting Orthopedic Surgeon at Nassau and North Country Community Hospitals in Nassau County, delivered a timely address on the after-care of poliomyelitis. He stressed the hopeful prognosis of the cases which have occurred this summer where early immobilization was secured in the paralyzed part, followed by proper massage, and quoted excellent results from the newer surgical procedures familiar to all orthopedic surgeons.

Dr. Ernest Dickey, of Rockville Center, reporting for the Public Health Committee, stated that in Nassau County to date were 214 cases of poliomyelitis, with a mortality of 15. Serum had been administered to 130 pre-paralytic children.

Resolutions were adopted thanking the Long Island Lighting Company for donating a Drinker Respirator for the use of physicians of the county in combatting bulbar cases of poliomyelitis, and thanking the North Country Community Hospital for the excellent way in which it handled the 34 cases of poliomyelitis which were admitted to the hospital.

H. G. WAHLIG, *Secretary.*

SULLIVAN COUNTY

The annual meeting of the Medical Society of the County of Sullivan was held at the Lenape Hotel, Liberty, N. Y., on October 14, 1931.

The meeting was preceded by a dinner which was tendered to the Society by its President, Dr. J. M. Rosenthal of Monticello, N. Y.

At the business session which followed the dinner, the following officers were unanimously elected to serve for the ensuing year.

President: J. M. Rosenthal, M.D., Monticello.
Vice-President: George F. Herben, M.D., Loomis.
Secretary-Treasurer: Luther C. Payne, M.D., Liberty.
Board of Censors: V. G. Bourke, M.D., Livingston Manor, N. Y.; S. W. Wells, M.D., Liberty; J. H. Moore, M.D., Loomis; Harry Jacobs, M.D., Hurleyville; Benjamin Abramowits, M.D., Monticello.
Chairman on Public Health and Relations Committee: Harry Golembe, Liberty.
Chairman of Committee on Legislation: R. S. Breakey, Monticello.
Delegate to State Society for Years 1932 and 1933: L. C. Payne, Liberty.
Alternate: R. S. Breakey, Monticello.

A heated discussion on ethical "advertising," especially as it relates to the peculiar conditions existing in Sullivan County during the summer, was held. Dr. Herben of Loomis was appointed a committee of one to draw up a resolution in regard to this matter,—the resolution to be presented and discussed at the next meeting of the Society.

The Society voted to have as its next postgraduate course a group of six lectures on internal medicine. These lectures will be delivered by eminent specialists from New York. The secretary was also instructed to try and arrange a course of lectures on physio-therapy. The chair appointed as a committee of arrangements Dr. Harry Golembe, Liberty, Dr. J. H. Moore, Loomis, and Dr. Benjamin Abramowits, Monticello.

HARRY GOLEMBE

THE DAILY PRESS

LEISURE FOR THOUGHT

An editorial writer in the New York *Times* of October 15 comments on the opportunity for thought afforded by enforced leisure and says:

"Some philosophers have seen in the prolonged depression the incidental benefit of causing many people to use their brains as they never did before. It is undoubtedly true that there is a new army of thinkers abroad in the land. Never were there so many of what Carlyle called 'great thoughts' put forward as a solution of all our troubles. Panaceas are, in fact, thicker than blackberries.

"Among so many it might seem invidious to single out one. But the originality of the proposals put forward by one analyst of our woes fairly demands their citation. One of them is the adoption of a 'universal calendar.' This is recommended as one of the ways to bring about the 'actual end of the present world business depression.' Another is adjustment of the world's currencies to a 'Universal Numismatic Standard.' Still more striking, and presumably effective, is 'The Equalization of the Barometric Systems of the World.' This work alone is guaranteed to 'employ millions from all classes.' Only a bold man would deny this—if he understood at all what was meant.

"Truly this is an age of self-expression. But the question is whether the self-expressers have anything worth expressing."

SEA FOOD

The New York *Herald Tribune* of September-13, has an interesting editorial on the abundance of the leading sea foods in the New York markets, and says:

More than a hundred varieties of sea food have a commercial value in the United States, according to the most recent tabulation by the Bureau of Fisheries of the Department of Commerce, but twelve of these groups constitute 80 per cent of the entire annual yield of more than 2,600,000,000 pounds. Of first importance is the salmon, basis for the gigantic canning industry of the Pacific Northwest, while the second on the list is the pilchard, which in California is canned as a sardine. Haddock is only the third in importance and is used mainly for the manufacture of filets, now widely shipped by the fresh and frozen fish trade. Sea herring, the Maine sardine, is fourth in order; oysters, the gourmet's delight, are fifth, while shrimp, cod, mackerel, flounder (customarily the basis for "English sole"), tuna fish, halibut and crabs complete the list.

YOUTHFUL OLD AGE

An editorial in the New York *Times* of Octobe 16 comments on an address by Dr. Mayo at the American College of Surgeons, on the subject of prolonging life, and says:

"When the Sibyl was promised by Apollo anything that she might ask, she took a handful of sand and said: 'Grant me to see as many birthdays as there are grains of sand in my hand.' But she forgot to ask for enduring youth, and her body shrank with the years till she was lost to sight and nothing remained except her sayings. So if the years which Dr. Mayo says have been added to the average life by taking thought—that is, by giving heed to hygienic and medical science—have given more birthdays to millions, they have not brought freedom from age's withering touch.

"Tennyson's Tithonus asks as a gray shadow:

"Why should a man desire in any way
To vary from the kindly race of men,
Or pass beyond the goal of ordinance
Where all should pause, as is most meet for all?"

"But the answer is the passion for life almost universally strong in man even in death. And science has, after all, not only robbed the added years of labor and sorrow, but made them the crowning glory of life.

"What causes greatest anxiety for many is the fear not of the 'destruction that wasteth at noonday,' which one can fight in the open, but of the insidious diseases that walk in darkness (referring to cancer).

"As for extending youth with the years, that can be only if, as Dr. Mayo says, 'we begin to care for our health in early life.' To be young when old, one must be old when young."

VITAMIN, THE FAIRY

One would think that vitamins were intelligent fairies, judging by the panegyrics written in their honor by popular health authors. James J. Montague praises them in the following matter-of-fact verses in the *New York Herald Tribune* of September 9:

"Unseen, unhonored and unsung,
In times beyond our ken
When our now aging race was young,
You've been the friend of men.
You've never flinched nor begged for terms,
You've never sought repose,
But sternly battled with the germs
That were your mortal foes.

"Man never knew, when he lay ill,
Afraid that he might die
From some mephitic form of chill,
That you were standing by,
The role of ally to assume—
In unrelenting strife
To hound the microbes to their doom
And thus to save his life.

"But all the while, like guards on post,
Through anguished days and nights,
You've flung yourselves upon a host
Of microscopic mites.
You never asked as much of him
As three good grateful cheers
When your amazing pep and vim
Prolonged his earthly years.

"But now your worth we recognize;
We know that day by day,
Infinitesimal though your size,
You hold the germs at bay.
But though we praise and honor you
And your heroic brood,
There's nothing we can ever do
To show our gratitude."

PSYCHIATRIC EXAMINATIONS

The New York *Times* of October 14 comments editorially on the impracticability of some psychiatrists, and gives examples as follows:

"A 'psychiatric social worker' struggled to analyze a 'problem boy' who was unhappy, unmanageable and always getting into fights. His father and mother were the white janitors of an apartment house for colored people in Harlem. After five weeks of tests, the investigator decided: 'It begins to look as if there would have to be a change of environment.' Another boy who didn't get on well at school was taken to a clinic where he was submitted to intelligence tests, emotional tests, test of his reflexes, and a thorough going-over of his school and family history. Finally, an examination revealed that he needed eye-glasses.

"In the examination of a man whose commitment for insanity was sought, a New York jurist halted proceedings to say that the pronouncement of the experts 'doesn't mean much to me.' 'What's wrong with this man, anyway?' The reply was: 'He has no insight into his condition.' 'Then half the people in the world must be crazy,' replied the judge, and the man was discharged.

"When elaborate 'happiness tests' in college laboratories reach such astounding conclusions as that happiness and health 'tend to accompany each other,' and that worry, ill health and sex difficulties generally cause unhappiness 'in even the smallest groups,' a protest against ponderous hocus-pocus and high-sounding verbiage seems in order."

NEW CHEMICAL ELEMENT

News of a scientific discovery is sometimes found in the daily press before it is available in scientific journals. The New York *Herald Tribune* of October 16 carries the announcement of the discovery of element 87, leaving out number 85 not yet identified among the 92 possible ones listed in the chemistries. The discovery was made by Dr. Jacob Papish, professor of spectroscopy in Cornell University, working with a mineral called samarskite. The *Herald Tribune* says:

"Samarskite is a mineral rich in rare alkalis. It is found in Norway, Siberia, a[illegible] States of this country. Element No. 87 has certain definite characteristics. It is an insoluble solid and cannot be isolated because of its high inflammability. It is unusually sensitive to light, and because of this fact it may have interesting possibilities for use, say, in connection with photo-electric tubes, and the like.

"Its presence in the samarskite sample used was in such small proportion, one part element 87 to 2,000,000 parts of the material, that Professor Papish believes it will never be abundant in the [illegible]"

BOOKS RECEIVED

Acknowledgment of all books received will be made in this column and this will be deemed by us a full equivalent to those sending them. A selection from this column will be made for review, as dictated by their merits, or in the interests of our readers.

CLINICAL DIETETICS: A Textbook for Physicians, Students and Dietitians. By HARRY GAUSS, M.S., M.D. Octavo of 490 pages, illustrated. St. Louis, The C. V. Mosby Company, 1931. Cloth, $8.00.

AMERICAN PHYSICIANS AND SURGEONS: A Biographical Directory of Practicing Members of the Medical Profession in the United States and Canada. Prepared by JAMES CLARK FIFIELD. Quarto of 1737 pages. Minneapolis, The Midwest Company, [1931]. Cloth, $30.00.

A TEXTBOOK OF MEDICAL DISEASES FOR NURSES INCLUDING NURSING CARE. By ARTHUR A. STEVENS, A.M., M.D., and FLORENCE ANNA AMBLER, B.S., R.N. Octavo of 503 pages, illustrated. Philadelphia and London, W. B. Saunders Company, 1931. Cloth, $2.75.

A CLINICAL STUDY OF ADDISON'S DISEASE. By LEONARD G. ROWNTREE, M.D., and ALBERT M. SNELL, M.D. 12mo of 317 pages, illustrated. Philadelphia and London, W. B. Saunders Company, 1931. Cloth, $4.00. (Mayo Clinic Monographs.)

PROCTOSCOPIC EXAMINATION AND THE TREATMENT OF HEMORRHOIDS AND ANAL PRURITUS. By LOUIS A. BUIE, B.A., M.D. Octavo of 178 pages, illustrated. Philadelphia and London, W. B. Saunders Company, 1931. Cloth, $3.50. (Mayo Clinic Monographs.)

SURGICAL CLINICS OF NORTH AMERICA. Volume 11, No. 3, June, 1931. (New York Number.) Published every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues): Cloth, $16.00 net; paper, $12.00 net.

THE ANATOMY OF THE NERVOUS SYSTEM from the Standpoint of Development and Function. By STEPHEN WALTER RANSON, M.D., Ph.D. Fourth edition. Quarto of 478 pages, illustrated. Philadelphia and London, W. B. Saunders Company, 1931. Cloth, $6.50.

COLLECTED PAPERS OF THE MAYO CLINIC AND THE MAYO FOUNDATION. Edited by MRS. H. M. MELLISH-WILSON, RICHARD M. HEWITT, B.A., M.A., and MILDRED A. FELKER, B.S. Volume XXII, 1930. Octavo of 1125 pages, illustrated. Philadelphia and London, W. B. Saunders Company, 1931. Cloth, $13.00.

INJURIES AND SPORT: A General Guide for the Practitioner. By C. B. HEALD. Octavo of 543 pages, illustrated. New York, Oxford University Press, 1931. Cloth, $8.00. (Oxford Medical Publications.)

GOULD'S MEDICAL DICTIONARY containing the words and phrases generally used in medicine and the allied sciences, with their definition, pronunciation and derivation. By GEORGE M. GOULD, A.M., M.D. Third edition, revised and enlarged, based on recent medical literature. Edited by R. J. E. SCOTT, M.A., B.C.L. Quarto of 1538 pages, illustrated. Philadelphia, P. Blakiston's Son & Company, Inc., 1931. Fabrikoid, Plain, $7.00; with Thumb Index, $7.50.

MEDICINE, SCIENCE AND ART: Studies in Interrelations. By ALFRED E. COHN. Octavo of 212 pages. Chicago, The University of Chicago Press, 1931. Boards, $4.00.

CUNNINGHAM'S TEXTBOOK OF ANATOMY. Edited by ARTHUR ROBINSON, M.D., F.R.C.S. Sixth edition. Quarto of 1554 pages, illustrated. New York, William Wood and Company, 1931. Cloth, $11.00.

DIAGNOSIS IN JOINT DISEASE: A Clinical and Pathological Study of Arthritis. By NATHANIEL ALLISON, M.D., F.A.C.S., and RALPH GHORMLEY, M.D. Quarto of 196 pages, illustrated. New York, William Wood and Company, 1931. Cloth, $11.00.

MEDICAL CLINICS OF NORTH AMERICA. Vol. 15, No. 1, July, 1931. (Mayo Clinic Number.) Published every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues): Cloth, $16.00 net; paper, $12.00 net.

DISEASES OF THE GUMS AND ORAL MUCOUS MEMBRANE. By SIR KENNETH GOADBY, K.B.E., M.R.C.S. Fourth edition. Octavo of 496 pages, illustrated. New York, Oxford University Press, 1931. Cloth, $13.00. (Oxford Medical Publications.)

THE CAUSATION OF CHRONIC GASTRO-DUODENAL ULCERS: A New Theory. By J. JACQUES SPIRA, M.R.C.S., L.R.C.P. Octavo of 78 pages. New York, Oxford University Press, 1931. Cloth, $2.50. (Oxford Medical Publications.)

ENCEPHALITIS LETHARGICA: ITS SEQUELAE AND TREATMENT. By CONSTANTIN VON ECONOMO. Translated and adapted by K. O. NEWMAN, M.D. Quarto of 200 pages, illustrated. New York, Oxford University Press, 1931. Cloth, $6.00. (Oxford Medical Publications.)

FRACTURES OF THE JAWS. By ROBERT H. IVY, M.D., D.D.S., and LAWRENCE CURTIS, A.B., M.D. Octavo of 180 pages, illustrated. Philadelphia, Lea & Febiger, 1931. Cloth, $4.50.

A TEXTBOOK OF PATHOLOGY. By FRANCIS DELAFIELD, M.D., LL.D., and T. MITCHELL PRUDDEN, M.D., LL.D. Fifteenth edition, revised by FRANCIS CARTER WOOD, M.D. Octavo of 1339 pages, illustrated. New York, William Wood and Company, 1931. Cloth, $10.00.

MODERN PROCTOLOGY. By MARION C. PRUITT, M.D., L.R.C.P. Octavo of 404 pages, illustrated. St. Louis, The C. V. Mosby Company, 1931. Cloth, $8.00.

CUTANEOUS X-RAY AND RADIUM THERAPY. By HENRY H. HAZEN, A.M., M.D. Octavo of 166 pages, illustrated. St. Louis, The C. V Mosby Company, 1931. Cloth, $3.00.

COMMUNICABLE DISEASE CONTROL. Report of the Committee on Communicable Disease Control, George H. Bigelow, M.D., Chairman. White House Conference on Child Health and Protection. Octavo of 243 pages. New York, The Century Co., [c.1931]. Cloth, $2.25.

BOOK REVIEWS

THOMSON & MILES' MANUAL OF SURGERY By ALEXANDER MILES, M D, LL D, and D P D WILKIE, M D, F R C S Eighth edition Volume 1, General Surgery 12mo of 574 pages, illustrated New York and London, Oxford University Press, 1931 Cloth, $3.80 (Oxford Medical Publications)

This is the first volume, devoted to General Surgery of the eighth edition of a well known manual It is deserving of highest praise Concise, detailed, well illustrated and excellently phrased, it is highly recommended as a text book to all medical students and as a table reference book to the practitioner

GEO WEBB

A TEXTBOOK OF MATERIA MEDICA FOR NURSES By GEORGE P PAUL, M D, C P H Sixth Edition, thoroughly revised Octavo of 356 pages Philadelphia and London, W B Saunders Company, 1930 Cloth $1 75

As a textbook for nurses this excellent volume deserves a place among the standard works on this subject It is well written, concise, and gives the student nurse in a practical way exactly what she is required to know regarding this important branch of medicine In addition, it does not burden the student with a lot of material that is beyond her comprehension, a fact that is so often lost sight of by authors and teachers

F S

HANDBOOK OF THERAPEUTICS By DAVID CAMPBELL, M A, M D 12mo of 411 pages New York and Edinburgh, William Wood & Company, 1930 Cloth, $4 50

This book is a valuable asset to the library of both student and practitioner It embraces, in concise form the salient facts regarding modern therapeutics There are chapters devoted to diet, biological products, physical methods of treatment, and the use of water, heat, cold and climate as therapeutic agents

The various chapters devoted to the specific infectious diseases and those of the nervous system, heart, lungs, kidneys, etc, are of special interest to those who want a quick and ready reference without reading the more voluminous textbooks on this subject

F S

BACTERIOLOGICAL TECHNIQUE A Laboratory Guide for Medical, Dental, and Technical Students By J W H EYRE, M D M S Third edition Octavo of 619 pages, illustrated New York, William Wood & Company, 1930 Cloth, $7 50

This book is an excellent addition to any laboratory library and is invaluable to the advanced student or technician in bacteriology The author gives in exact detail the more advanced unusual procedures as well as those in common use The work is profusely illustrated

It is rather surprising, however, that the author does not mention such subjects as the typing of pneumococci nor the Widal and Wassermann reactions

I COHN

THE INTERNATIONAL MEDICAL ANNUAL A Year Book of Treatment and Practitioner's Index Editors CAREY F COOMBS M D, and A RENDLE SHORT, M D Forty ninth Year, 1931 Octavo of 551 pages, illustrated New York, William Wood and Company, 1931 Cloth, $6 00

It is manifestly impossible for a reviewer to discuss more than but a few of the many topics summarized in this latest issue of the Medical Annual Whatever the virtues or shortcomings of these many novel remedies may be, one is left with the impression of ceaseless energy in all branches of medical practice A cursory review of the material shows much of it to be in the nature of repetition of well established data There are, however, a number of articles which do reflect a distinct progressive trend

The routine use of digitalis in lobar pneumonia is now disparaged as being useless and dangerous, while formerly its omission in the regimen of the pneumonia patient would have been regarded as ignorance or criminality Dextrose seems to win praise in definitely lowering the mortality rate of that disease

Rickets seems to be becoming more and more complicated with the growth of pediatric research The latest addition to medical terminology is renal rickets, a rare symptom complex

Medical students and practitioners often fail to recognize the potential seriousness attending every contusion of the eyeball but rely on external signs in judging prognosis Detachment of the retina is one of the serious considerations of every ophthalmologist, and in recent years a number of successes in replacing this detachment have been effected by the galvano cautery method of Gonin

Scarlet fever antitoxin which prematurely gained such prominence as a reliable therapeutic agent is now dealt with rather cautiously

In the prophylaxis of tuberculosis the BCG vaccine of Calmette is subjected to much criticism' in spite of the fact that about 400 000 infants have been vaccinated without apparent ill results

The treatment of burns by spraying a freshly made aqueous solution of 2½% Tannic acid until the skin has become tanned is now widely adopted

The problem of giving insulin by mouth is definitely set at rest with the terse statement that "at present there is no other way of therapeutic administration of insulin but with the needle '

There are encouraging reports on the beneficial effects of r ray therapy in selected cases of Pituitary tumors

EMANUEL KRIMSKY

INSOMNIA An Outline for the Practitioner By H CRICHTON-MILLER, M A, M D Octavo of 172 pages London, Edward Arnold & Company, New York, Longmans, Green & Company, 1930 Cloth $4 20

Genial well written, interesting, and admirably printed The author grants we know nothing of sleep,—and yet discusses it at length and with great wisdom Mental harmony adjustment equilibrium balance stability are emphasized as prerequisites of slumber Many cases are noted, some in detail and English in type His literary jottings range all the way from Kipling and Yale locks to French quips, with sly play of humor In fact his style is more French much as some Americans since the War love an Anglo philiac pose

His choice of hypnotics when forced to use them is duly conservative, though he takes little account of arterial or psychic tension, i e, of physiologic suitability

His inability to give material aid to the depressed (cyclothymics) is more frank than encouraging, though he incidentally notes the grave danger in the common practice of urging travel

He makes extensive references to Pavlov Freud and Jung and a brave effort to find some use of their theories to his field

A table of Contents and a consulting Bibliography but no Index

W

MEDICAL CLINICS OF NORTH AMERICA. Published every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues): Cloth, $16.00 net; paper, $12.00 net.

Vol. 14, No. 1. July, 1930. (University of California Number.)

This issue is contributed entirely by Dr. Lewellys F. Barker and the material is based on lectures he delivered at the University of California in 1929. The first chapter deals with a now rare case of typical Typhoid Fever.

The chapter on Polyposis of the Colon should be of interest to the general practitioner for it depicts in convincing words and by *x*-ray pictures how this malady can be specifically cured by *x*-ray therapy.

The rest of this volume is a clinico-pathologic consideration of certain chronic ravaging diseases which unfortunately do not lend themselves to prevention or to medical treatment. Such diseases include, for example, progressive muscular atrophy, chronic epidemic encephalitis, and cirrhosis of the liver.

Vol. 14, No. 2. September, 1930. (New York Number.)

This issue of the Medical Clinics has been of far more absorbing interest to the reviewer than any of the recent numbers. A number of the common maladies met with in everyday practice are brought to the reader's attention with consistent advice as to their best management. And even though there may not be much in the way of news it is consoling to find some of the established ideas reiterated in systematic practical fashion.

For example, in cases of myocardial disease, Dr. Williams admits that it is a "land of mystery." But an electrocardiogram will occasionally clarify matters. In the chapter on the pathogenesis of peptic ulcer we are again reminded that "quite a large percentage of recurrences occur after medicine or surgery." The chapter on diseases of the thyroid gland is a splendid article on that subject. The practitioner is advised in clear terms when to use iodine and when to avoid it. The writers of this article have witnessed many cases of iodine poisoning and thyroid intoxication from its indiscriminate use. The chapter on "Object Lessons in Pediatrics" has one or two valuable pointers which will offer a surprisingly different outlook to some established routine practices.

Vol. 14, No. 3. November, 1930. (Mayo Clinic Number.)

This issue deals in a practical way with certain of the office cases seen by the average practitioner. The controversial question of the significance of gastric secretion as regards cancer of the stomach is settled by one contributor who holds that "high acidity in the absence of free hydrochloric acid is invariably significant of carcinoma." Duodenal ulcer of the perforating type, it is stated, is most benefited not by medical treatment but by early surgical intervention. Splenomegaly associated with chronic ulcerative colitis is discussed and although the reason for the splenomegaly cannot be accounted for, the writer warns his readers against splenectomies because of the danger of a complicating nephritis.

The comparative responses of various tumors to irradiation are considered and the respective diagnoses interpreted on the bases of these characteristic responses. Typhoid vaccine is conclusively stated to be far less effective in the treatment of neurosyphilis than malarial injections.

There are a number of chapters which may be of academic interest. For example, systemic blastomycosis; electrocardiographic localization of myocardial infarcts; and fistula between the oesophagus and the tracheobronchus.

Vol. 14, No. 4. January, 1931. (Philadelphia Number.)

This number is not quite as instructive or progressive as its immediate predecessors. In fact the average practitioner will take issue with some of the methods advocated for various maladies because they are so directly contrary to established practices and because they seem so impractical. For example, in visceroptosis the writer advises against abdominal supports and instructs his patients to lie generously on the left side and to eat five meals daily.

Not satisfied with our already pregnant terminology one contributor has chosen to make a further contribution in a review of 26 cases which he has diagnosed as "duodenitis," but he admits that the "diagnosis has not been proved in any of these 26 cases." One contributor states that "for more than fifteen years I have used colon (bacillus) vaccine, and I believe that I have seen very definite clinical improvement in certain cases." In the light of increasing skepticism with regards to questionable vaccines what should the attitude of the general practitioner be in the absence of unsupported facts?

One writer convincingly tells us of the need for cystoscopy in suspicious urogenital cases and illustrates by case histories typical clinical mistakes as proven by cystoscopy. And while he urges the more frequent use of the cystoscope he also warns the ambitious worker that the "nephritic, anemic patient beyond the age of 50 . . . is sometimes killed by the passage of the cystoscope."

We often associate achlorhydria with a cancer of the stomach. Hitzrot has studied 100 random cases of achlorhydria and found it to occur very often as part of or in association with gastritis, cholecystitis, neurosis, and other entirely unrelated disorders. Even though he insists that "adequate treatment of achlorhydria demands more than the mere prescribing of hydrochloric acid" he nevertheless includes it as a major part of his treatment. Pepsin is avoided.

Vol. 14, No. 5. March, 1931. (Chicago Number.)

Much of the material in this number is an academic presentation of certain common clinical conditions and the information in general does not deviate much from that of previous numbers.

For example, one chapter records a study of 309 cases of ringworm but the writer does not know its etiology or its treatment. Some of the contributors in the absence of definite means of therapy suggest attacking foci of infection. Possibly an investigation of the effects of the eradication of foci of infection might be a much saner method of research. In the chapter on rheumatic fever we are told that "extraction of one badly diseased tooth was followed by no serious consequence. The extraction of a second was followed by an embolism which terminated the patient's life."

Vol. 14, No. 6. May, 1931. (New York Number.)

The case reports depicted in this issue of the Medical Clinics conform more to the types encountered in everyday clinical practice than a number of its predecessors. Gonorrhœa, rheumatism, pneumonia and their respective clinical features occupy quite a proportion of the text. And while there is nothing strange in the type of information offered it should nevertheless serve to refresh the practitioner's mind with certain important details which may well be forgotten, and at the same time keep him on his guard for some of the more unusual complications which may follow any of these diseases.

The problem of low basal metabolic rates is further evaluated in conjunction with constitutional asthenia without hypothyroidism, such as allergic asthma and psychoneurosis. The ever-interesting problem of renal glycosuria is again interpreted for us from the prognostic standpoint through case reports.

EMANUEL KRIMSKY.

AN INTRODUCTION TO PHARMACOLOGY AND THERAPEUTICS By J A GUNN, M D, D Sc Second edition 12mo of 233 pages New York and London, Oxford University Press, 1931 Cloth, $1 50 (Oxford Medical Publications)

This small book of pocket size provides in a condensed form the principal facts of the subjects of which it treats and is convenient for a quick general review, as for examinations

In this edition there is a new chapter dealing with the action of drugs on the respiratory system and additions to some of the other chapters have been made

W E MCCOLLOM

THE COMMON SENSE OF DRINKING By RICHARD R PEABODY Octavo of 191 pages Boston, Little Brown and Company, 1931 Cloth, $2 00

Whether or not you believe that prohibition is a boomerang which has made drinking fashionable, if you have hit the booze until you can't leave it or take it and are shot to pieces unless you are loaded up, read Mr Peabody's book It holds no brief either for or against prohibition or for the morality of drinking Nor does it undertake to explain the physical ills which may arise from drinking These are subjects which Mr Peabody prefers to leave to what he terms more authoritative sources

There are individuals who can drink normally and safely Others exhibit a reaction to drink so extreme and abnormal that they cannot afford to indulge unless they are willing to sacrifice everything to drink As a result of extended experience in treating chronic alcoholism, Mr Peabody is primarily concerned in showing how the drinker who is slipping his hold on business, health and personal relationships may cultivate abstinence and like it 'It is a far easier task than the alcoholic has any idea of," Mr Peabody asserts

Mr Peabody's approach is psychological His discussion will go far toward helping the 'continuous drinker' and 'the bad actor" to understand themselves Incidentally the book will help the drunkard's family to understand also The book should be of value to general practitioners who may be called upon to be of assistance to patients in any walk of life who, though they would recoil horrified at addiction to the hypodermic needle, need advice about excessive drinking

FREDERIC DAMRAU

PRACTICAL ANAESTHETICS for the Student and General Practitioner By CHARLES F HADFIELD M B E, M A Second edition Octavo of 336 pages illustrated New York, William Wood & Company, 1931 Cloth, $3 50

The author justifies this second edition on the ground that the new methods introduced within the past eight years have materially affected the art if not the science of his subject, even though he decries the tendency toward mechanization ' Inasmuch as the book is written mainly for the student and the general practitioner" its key word is 'simplicity" Yet it is not so simple and rudimentary but that the expert anaesthetist will keenly relish the evident indications of the experience and skill of the author which the manner and method of its matter affords Hadfield's extended service at St Bartholomew in teaching students gives him peculiar qualification to determine what they need to know Likely he had their nebular knowledge in mind when he wrote the "fear of the matter" into the opening chapter "Anaesthetics may, then be regarded as poisons, the use of which demands not only all the skill and knowledge at the command of the administrator, but also the greatest care and attention throughout" So, consistently, while careful explanation is made of the scientific aspect of the subject, the author, page after page, in needed detail takes up the manner, and gives the reason for the manner of the administration In all this the American readers are compelled to think in terms of our own armamentarium, this is of course a bother, and to that extent interferes with ready understanding However to one who knows the subject there is a sympathetic appreciation of the author's triumphs over common difficulties, and the tricks which we must all develop to protect our patients as well as to keep the operator happy

The new subject matter is mainly the recently adopted Ethylene and the several preliminary drugs but particularly four chapters on regional and vertebral methods Hadfield's book is not merely another book it is another good book

A F E

THE HARVEY LECTURES Delivered under the auspices of the Harvey Society of New York, Series 25, 1929 30 Octavo of 225 pages Baltimore, Williams & Wilkins Co, 1931 Cloth, $4 00

With this volume the series of lectures of the Harvey Society of New York attains the quarter of century mark of these publications They form an interesting and valuable contribution to the medical literature of this period This volume, like its predecessors, covers a varied group of subjects such as Water Metabolism, Cardiac Output of Man, Filterable Virus Diseases, Immunity in Syphilis, Pituitary and Thyroid Glands, Pathogenesis of Tuberculosis, Electrical Phenomena in Living Cell These lectures are presented by such well known scientists and teachers as Ernest Pick, E K Marshall Jr, E W Goodpasture A M Chesney, Philip E Smith, Esmond R Long, Winthrop Osterhout In connection with the twenty fifth anniversary of the founding of the Society this volume contains a very interesting lecture by Rufus Cole on the 'Progress of Medicine during the past twenty five years as exemplified by the Harvey Society Lectures"

Comparatively few are privileged and able to attend these lectures but it is fortunate that they are made available in book form to the many who cannot be present to hear them delivered

F

HYPERTENSION AND NEPHRITIS By ARTHUR M FISHBERG, M D Second edition Octavo of 619 pages, illustrated Philadelphia, Lea & Febiger, 1931 Cloth, $6 50

The first edition of Fishberg's Hypertension and Nephritis appeared about one year ago It soon acquired the well deserved reputation of being the most complete and reliable presentation of the subject available The enormous literature was reviewed in a masterly manner, and presented so smoothly that the reader was surprised to find that so many references had been cited, when he came to the table at the end of each chapter (There are over seventeen hundred references in the new edition) This vast material was woven into a story that read simply and clearly It was of course dominated by the author's own experience and judgment and this was done in a very well balanced manner Debatable points were squarely labelled as such, even though the author had an opinion of his own upon the subject On the other hand he did not hesitate to contradict tradition if the evidence pointed to such a conclusion

The new edition incorporates some important developments of the past year It necessitates the enlargement of the book by about fifty pages The teacher or specialist will find in it the most complete exposition of the subject, and the general practitioner clean cut clinical pictures and sound advice

F H

OUR NEIGHBORS

MALPRACTICE SUITS IN TEXAS

The September issue of the *Texas State Journal of Medicine* devotes a lengthy editorial to "The Malpractice Damage Suit," as it affects Texas. While the principles of defense are the same throughout the nation, yet Texas handles the cases somewhat differently from New York. Texas does not begin to have as large a proportion of malpractice suits as New York. The editorial says:

"Before the State Medical Association undertook to defend its members against such unjust damage suits, the industry was not really a very thriving one. Our investigations at the time disclosed that there had been nine suits filed for each of the previous two years. Last year, according to the report of our Council on Medical Defense, eighteen cases were filed. That is a one hundred per cent increase. Doubtless the figures are not accurate in either instance. It is rather customary now for physicians to carry indemnity insurance, and the cases filed against such physicians are not all reported to the Council, for the reason that the Council does not assume financial responsibility in such cases."

The eligibility for defense by the Texas State Society is as follows:

"The Council on Medical Defense is not required to defend cases as they arise. Indeed, it is required to defend only those cases which investigation discloses nonculpability on the part of the defendant physician. It may fairly be concluded, therefore, that when the Council on Medical Defense defends a physician or cooperates with an insurance company in defending him, the defendant is not guilty. There is a vast difference of opinion as to what constitutes guilt in such cases."

Examples of suits are given:

"Nor should any physician feel that he is beyond the reach of the damage suit lawyer. He is not. No physician is who practices medicine, whether general or special. Our records show that a physician was sued for malpractice because he dropped a gum lancet in a child'e eye. There were several cases of suits following burns from water bottles. There is now pending a case for mistreatment for snake bite. A patient reacted unfavorably to potassium iodide, and she sued her physician. A physician performed an autoposy without proper authority. He had been told to go ahead, but not by the proper party. He was sued. Incidentally, few insurance companies will defend such a case. Our Council on Medical Defense decided that it was a proper case for our Council to defend. There is a case pending in which it is alleged that the practicing physician was negligent in the care of a child's eyes at the time of birth. Another physician gave a dose of pituitrin at the time of childbirth, and was subsequently sued for malpractice. These are cases any one of which might easily be that of the average practitioner of medicine."

While the Texas State Society advises every member to take out indemnity insurance, it does not seem to assume the leadership in the choice of the company as New York does:

"The Council does not assume control in cases where there is indemnity insurance. This position of the Council is frequently misunderstood. It is not altogether a matter of saving money, even though it would seem foolish for the Council to furnish additional legal services to those furnished by a reputable insurance company which stands to lose several thousand dollars in the instance of failure. It is deeper than that. Should the Council intervene and assume any part of the control of a case where there is indemnity insurance, the insurance company might easily refuse to pay the indemnity should there be a verdict against the defendant. Always the Council offers to co-operate, and more frequently than otherwise it is given opportunity to do so. Should it be shown that a member is inadequately defended and the member involved is willing to take a chance on the indemnity feature of the case, the Council will not hesitate to take charge of such a case.

"The Council on Medical Defense unhesitatingly advises our members to provide themselves with indemnity insurance. It advises, however, that such insurance be taken out with reliable companies only, and that the policies purchased be carefully read and thoroughly understood. It is of great importance to the insured to know that when his time of trouble comes, there will be money in the hands of the insurance company with which to defend him and to pay any loss incurred through court verdict. . . . . Sometimes insurance companies are so busy with other and more important lines of work that they take little or no interest in such small matters as malpractice indemnity suits. We have known of such cases. It is also important, and most important, that an indemnity policy provide that no compromise should be effected in any case except upon the consent of the policyholder. It is unquestionably a fact, as we have already said, that

(*Continued on page* 1358—*Adv. xvi*)



The new reduced price of Mead's Viosterol in Oil 250 D in the original 50 c.c. bottle now makes vitamin D available to the patient at a cost of only 2 to 2½ cents per day. This economic phase is important at all times but is especially important during times of unemployment and financial stress.

Not only has the price of Mead's Viosterol been reduced, but the bottle has been improved. As packed, it is capped with the metal cap shown at the left. The patient removes this and replaces it with the combination dropper-and-stopper shown in the bottle illustration. This has a screw thread and fits tightly when not in use.

For vitamin D therapy, the new reduced price of Mead's Viosterol when prescribed in the original 50 c.c. bottle, makes it less expensive to the patient than Mead's Standardized Cod Liver Oil or any cod liver oil concentrate. For vitamin A therapy, Mead's Standardized Cod Liver Oil continues to be 4 to 11 times as economical as cod liver oil concentrates.

(*Continued from page* 1356)

success in one suit will tend to produce other suits, either against the same physicians or other practitioners."

The Texas law of statute limitations seems to be different from that in New York.

"It is important that those physicians who carry indemnity insurance preserve their old policies for at least twenty-three years. This advice seemed ridiculous at first thought, but it is a matter of legal limitation as to time. An adult cannot sue a physician for malpractice, for instance, after the lapse of two years. It is different in the case of a minor. The limitation does not begin to apply until the minor has attained his majority. A Texas physician was recently sued for alleged damage to a throat in a tonsil operation several years ago. Plaintiff in the case was twenty-two years old at the time suit was filed, hence only one year of the period of limitation had expired. The defendant in this case carried indemnity insurance at the time of the operation, but he had changed his company several times and had thrown away his old policies."

The Texas Editor advises prevention as more effective than defense, as it says something that New York doctors may well heed:

"In the malpractice scourge, as in contagious diseases, prophylaxis s the thing. There can be little doubt but that a large proportion of malpractice suits are incident to thoughtless or unintended expressions of physicians. Certainly, prophylactic treatment is applicable here. All the physician needs to do is to keep his mouth shut if he cannot conscientiously enter into a defense of his fellow-practitioner. Frequently a physician is so certain of conditions that he fails to take universally used precautions. Ninety-nine times out of a hundred that is all there is to it, but it is the hundredth case in which there is an unfortunate development, which may or may not be the result of negligence. Whether it is or not, the shrewd lawyer can make it appear so."

POLIOMYELITIS WORK IN MICHIGAN

When poliomyelitis threatened the people of Michigan, the physicians immediately responded to an appeal of the State Commission of Health in a way that is described in the October issue of the Journal of the Michigan State Medical Society, as follows:

"On August 20, telephone information came

(*Continued on page* 1360—*Adv. xviii*)

...There is a reason why Pil. Digitalis (Davies, Rose) have become the choice of Cardiologists...



. . . They are digitalis in its completeness—physiologically tested leaves in the form of physiologically standardized pills, giving double assurance of dependability.

. . . Each pill contains 0.1 gram, the equivalent of about 1½ grains of the leaf, or 15 minims of the tincture.

. . . Convenient, uniform, and more accurate than tincture drops.

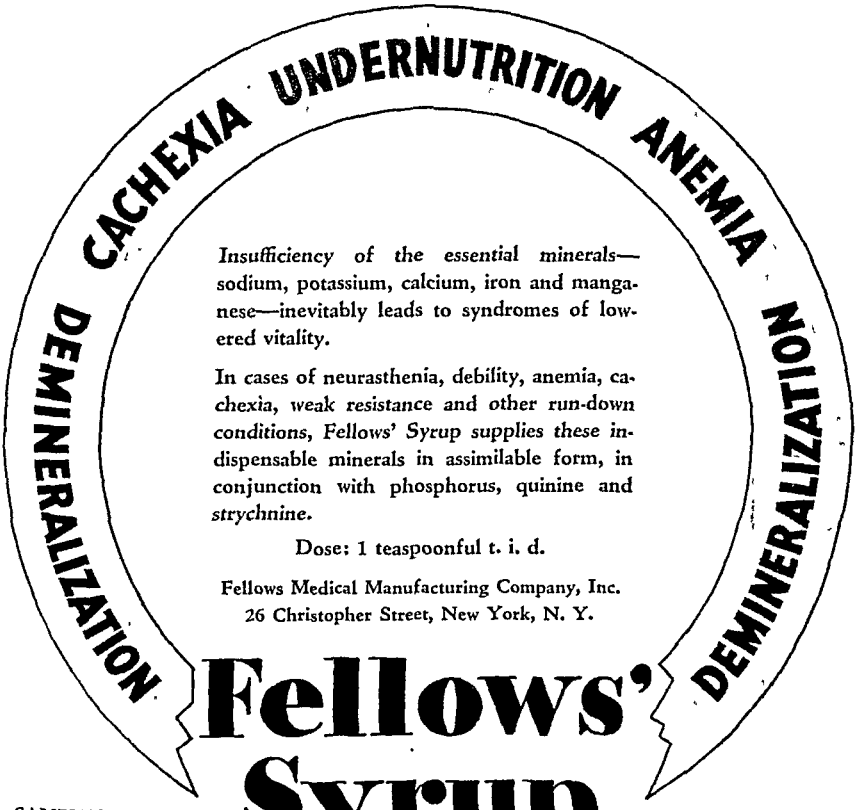
Sample and literature upon request.

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D15

Break the vicious circle



Insufficiency of the essential minerals—sodium, potassium, calcium, iron and manganese—inevitably leads to syndromes of lowered vitality.

In cases of neurasthenia, debility, anemia, cachexia, weak resistance and other run-down conditions, *Fellows' Syrup supplies these* indispensable minerals in assimilable form, in conjunction with phosphorus, quinine and *strychnine.*

Dose: 1 teaspoonful t. i. d.

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Fellows' Syrup

SAMPLES ON REQUEST

IT SUPPLIES THE ESSENTIAL MINERALS

(*Continued from page* 1358—*Adv. xvi*)

from Lansing expressing apprehension that a poliomyelitis epidemic was threatening. It was intimated that the State Society might render effective assistance by warning the doctors to be alert and endeavor to make an early diagnosis in suspected cases.

"This cooperation and assistance to the State department of health was immediately accorded in the following manner:

"Within twenty-four hours a poliomyelitis bulletin containing a table of diagnostic symptoms and a request that members be alert when called to suspicious cases was mailed to 3,800 doctors.

"Representatives of the Society met with the Commissioner of Health for the purpose of instituting preventive plans, consultant services and laboratory assistance and the formation of a state commission.

"On August 24 it was deemed desirable to hold an educational clinic and such a clinic was arranged for on the twenty-seventh. Again within twenty-four hours 3,800 cards were sent to our members notifying them of this clinic and the program that would be carried out.

"From the letters received and the response made by our members we feel that this mobilization of doctors throughout the State created a corps of men who were on the alert to abort what promised to be an epidemic of considerable magnitude. It also revealed the Society's willingness to respond to and cooperate with health officials. This response re-affirms the statement frequently made that the greatest success of any health movement or activity is dependent upon the cooperation of the practicing physician—the bedside doctor."

The same Journal describes a commission on infantile paralysis of seven members, and tells of the plans as follows:

"The plan of work of the commission includes providing diagnostic assistance upon request and furnishing convalescent serum for treatment of cases.

"The State has been divided into eight districts, with a regional consultant in charge of each district.

"These consulting physicians are prepared to go themselves or to send a physician who is capable of clinical diagnosis and doing spinal puncture if indicated. Any physician who desires this service should call the regional consultant of his district.

"The collection of blood from convalescent cases for the preparation of serum is being handled for the most part by health officers and rep-

(*Continued on page* 1362—*Adv. xx*)

the chemical symbol of

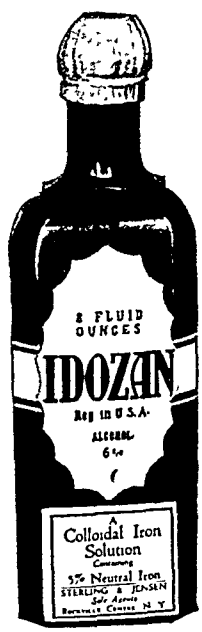
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The full clinical value of iron is dependent on its prompt availability in conditions of iron insufficiency, and for this reason *colloidal iron therapy* represents a significant advance over the old iron preparations.

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IDOZAN is a colloidal iron solution, *neutral*, and contains 5% of iron. IDOZAN is an active iron preparation in the sense that it will produce a definite rise in the hemoglobin.



Professional Sample and literature mailed to physicians on request

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Sole Agents for U. S. A.
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electric lights  to old oil lamps

 and motor cars  to the

horse and rig  of an earlier

age  because we get results

more quickly and more efficiently.

Similarly in constipation—a modern day has developed a modern way—AGAROL. To meet every modern need, Agarol combines efficiency with palatability. No oily taste, no artificial flavoring to get used to.

AGAROL is the original mineral oil and agar-agar emulsion with phenolphthalein. It softens the intestinal contents and gently stimulates peristalsis.

Effectiveness must be experienced.
A supply gladly sent for trial.

AGAROL *for Constipation*

WILLIAM R. WARNER & COMPANY, Inc. 113 West 18th Street, New York City

Please mention the JOURNAL when writing to advertisers

(*Continued from page* 1360—*Adv. xviii*)

resentatives of the Michigan Department of Health. The serum is distributed at the discretion of the regional consultant. A payment of $10 is made to each donor. The serum is furnished only for pre-paralytic cases, upon a diagnosis confirmed clinically and by spinal fluid test. It is not for sale, and no charge is made for it, but those able to contribute toward its cost are invited to do so. The cost is from $15 to $20 per patient. The supply of serum is limited, and it is not given to cases already showing paralysis or for immunizing purposes.

"One of the first activities of the Commission was the holding of a clinic on infantile paralysis on August 27 at Herman Kiefer Hospital. Between three and four hundred doctors from all over the State attended.

"The work of the commission is being financed jointly by State and voluntary agencies."

BIBLIOGRAPHIES IN NEBRASKA

The question of publishing a bibliography at the end of a medical article is frequently discussed in the State medical journals. The policy of the *Nebraska State Medical Journal* is stated in the July issue as follows:

"That bibliographies are a valuable part of reports of research work need not be discussed—it is freely admitted. Medical editors and publishers have been brought face to face with the problem of space required to publish bibliographies, especially when the references are numerous. To give a specific instance: Very recently we saw an article in an exchange with a bibliography of five and one-half pages in seven point appended. It will be admitted that giving so much space to a bibliography is an injustice to the average reader who is willing to take the facts stated in the body of the article for granted and cares nothing for the bibliography. Several years ago the *Journal of the A.M.A.* declared against voluminous bibliographies and has cut them down to a minimum. The position is taken that if the author desires all the references he may have them appended in the reprints. Space in the *Nebraska State Medical Journal* is not so plentiful that we can afford to publish pages of references to articles. It shall be the policy hereafter to cut references to a possible half dozen or dozen, and authors will kindly govern themselves accordingly."

LIQUID PEPTONOIDS WITH CREOSOTE

COMBINES the active and known therapeutic qualities of creosote and guaiacol with the nutritive properties of Liquid Peptonoids and is accordingly a thoroughly dependable product of definite quantities and recognized qualities as shown by the formula:

Each tablespoonful represents

ALCOHOL (By Volume)	12%
PURE BEECHWOOD CREOSOTE	2 min.
GUAIACOL	1 min.
PROTEINS (Peptones and Propeptones)	5.25%
LACTOSE AND DEXTROSE	11.3%
CANE SUGAR	2.5%
MINERAL CONSTITUENTS (Ash)	0.95%

It acts as a bronchial sedative and expectorant, exhibiting a peculiar ability to relieve *Bronchitis—acute or chronic.* It checks as well a persistent winter cough and without harsh or untoward effect. It is agreeable to the palate and acceptable to the stomach—with merit as an intestinal antiseptic. Supplied in 12 oz. bottles.

Samples on request

THE ARLINGTON CHEMICAL COMPANY

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CHIROPRACTOR IN OKLAHOMA HOSPITAL

It seems incredible that a chiropractor should be given the privilege of treating his patients in a public hospital. Aside from the matter of "schools" and scientific qualifications, there are two cogent reasons that the chiropractor should be excluded from a hospital:

1. Hospitals conform to the standards of the American College of Surgeons—that a complete history of every case be written and kept on file for study, with a diagnosis conforming to a standard list of diseases and conditions, such as that used by the Medical Department of the Army of the United States; and, further, that every case be subject to review at a monthly staff meeting.

2. Physicians have a standard of ethics not only in their conduct toward their patients, but also toward one another; and it is extremely unwise to compel the members of a professional staff of a hospital to recognize as an associate one who lacks the fundamental experience and knowledge which even a trained nurse possesses.

Yet a chiropractor was forcibly injected into the staff of the Hospital of the University of Oklahoma in the manner described in the September issue of the Journal of the Oklahoma State Medical Association:

"On July 27th, 1931, the Governor issued an executive order that a chiropractor be admitted to the University Hospital for the purpose of treating a patient in the free teaching service. This was done immediately after a telephone conversation with Dr. LeRoy Long, Dean, with the Governor refusing to permit Dr. Long to present reasons opposing such an order, and which order Dr. Long protested most earnestly and vigorously. Two or three days later the President of the University advised Dr. Long that the Governor had turned the entire matter over to the Board of Regents to be settled according to law. It was then urged that the President of the University ask the Board of Regents to meet and take action, the President later advising that he was unable to get the Board together."

Then follows a description of the efforts of the authorities of the Hospital to secure a meeting of the Regents, but without success The article continues:

"In the meantime the chiropractor was going to the hospital, students were asking for their credits, interns were greatly disturbed, and the general morale was bad.

"After careful consideration, on August 7th, Dr. Long called the faculty together, briefly went over the situation, telling them he would resign the next day, and advised them to elect a chairman so they might consider the emergency in an orderly manner. This was a very trying time for Dean Long, for about a score of those in the meeting were with the school when he took charge of

(*Continued on page 1363—Adv. xxii*)



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Adaptation
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ANALYSIS

Comparative Analysis of S. M. A. and Breast Milk

Chemical and Physical Analysis	S. M. A.	Breast Milk
Fat	3.5-3.6%	3.59
Protein	1.3-1.4%	1.23-1.5
Carbohydrate	7.3 7.5%	7.37
Ash	0.25-0.30%	0.215-0.226
pH	6.8-7.0	6.97
Δ	0.56-0.61	0.56
Electrical Conductivity	0.0023 0.0024	0.0023
Specific Gravity	1.032	1.032
Caloric Value		
per 100 c c	68.0	68.0
per ounce	20.0	20.0

Write for samples and literature

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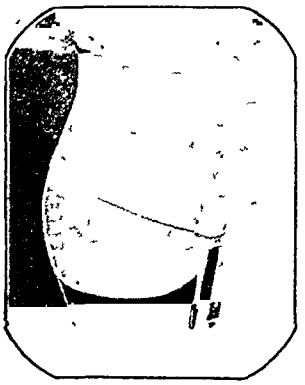
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LAXATIVE-ANTACID

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THE CHAS. H. PHILLIPS CHEMICAL CO.
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"STORM" The New "Type N" STORM Supporter



One of three distinct types and there are many variations of each. "STORM" belts are being worn in every civilized land. For Ptosis, Hernia, Obesity, Pregnancy, Relaxed Sacroiliac Articulations. High and Low operations, etc.

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THE ABDOMINAL SUPPORTER CO.

47 West 47th Street New York City

As a General Antiseptic

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TINCTURE OF IODINE

Try

Mercurochrome-220 Soluble

(Dibrom-oxymercuri-fluorescein)

2% Solution

It stains, it penetrates, and it furnishes a deposit of the germicidal agent in the desired field.

It does not burn, irritate or injure tissue in any way.

Hynson, Westcott & Dunning

Baltimore, Maryland

(*Continued from page* 1363—*Adv. xxi*)

it about sixteen years ago. Many feeling speeches were made in which Dr. Long was urged to reconsider his decision. A motion expressing confidence and urging him to remain was passed unanimously, but Dr. Long thought that it was best under the situation, that he resign and for the following reasons:

"1. The Governor had, by a formal executive order, interferred with the fundamental functions of the school and hospital without giving the faculty an opportunity to be heard.

"2. Dr. Long felt that his resignation was the only possible way to secure prompt action by the Board of Regents.

"3. It was necessary to emphasize the actual scope and purpose of legitimate medicine as opposed to the cults.

"The resignation went in August 8th and it was almost immediately announced there would be a meeting of the Board of Regents on August 12th. Dr. Long and his committee, under authority given them by the Council, employed Ex-Justice of the Supreme Court, Thomas H. Owen, who, after exhaustive investigation, prepared a brief in which he stated that, under the law, the cults could not be admitted to University Hospital.

"The Board of Regents met at the School of Medicine on August 12th, and by a vote of 5 to 2 the cults were excluded from University Hospital. Dr. Long's resignation was formally accepted, and Dr. L. J. Moorman, Oklahoma City, a most estimable member of the profession was elected dean.

"It is only fair to say that the President of the University, Dr. Bizzell, as well as the members of the Board of Regents were anxious to do everything legally possible in the interest of the School of Medicine, but apparently, they were unable to understand the necessity of prompt action if the standing of the School was to be preserved."

The Journal praises Dean Long and his inestimable service to the Medical School and medicine generally. Since only sixteen days elapsed between the executive order of the Governor and the meeting of the Regents, it is hard to understand why the Dean retired. However, the article closes:

"Dean Moorman will have the support of every member of the Medical Association of Oklahoma. The cults will be kept out of that school if it is legitimately possible to keep them out, but if they are permitted to enter, its doors will soon be closed as a medical school."

MEDICAL LICENSES IN MICHIGAN

Physicians in the State of Michigan have a separate board for the examining and licensing

(*Continued on page* 1365—*Adv. xxiii*)

Fills the need for a dependable antacid mineral water

VICHY CÉLESTINS

This long renowned naturally alkaline mineral water assists in neutralizing excess acid and in regularizing functions of the digestive tract.

Bottled at the Spring in Vichy, France, under Government supervision, it meets the great need of the physician for constancy of composition.

Sole U. S. Agents: AMERICAN AGENCY OF FRENCH VICHY, INC.
503 Fifth Avenue, Rooms 200-212, New York, N. Y.

(*Continued from page* 1364—*Adv. xxii*)

of candidates in fifteen vocations,—accountants, architects, engineers, surveyors, barbers, chiropodists, embalming, dentistry, law, medicine, nursing, optometry, osteopaths, pharmacists, and plumbers. The Committee on Legislation of the Michigan State Medical Society has proposed one central certifying and licensing agency under the control of the State Department of Education. The plan is similar to that of New York State and is set forth at length in the annual reports of the Committee on Legislation printed in the September number of the Journal of the Michigan State Medical Society. The report says.

"A State Department of Education is the one agency of the State which should be best equipped to look into, evaluate and determine the educational qualifications of him who desires to practice a profession or certain other vocations seeking legal recognition.

"Far too much time and effort, with all the accompanying irritations, lobbying, trades, suspicions and so on, are now taken up by the state legislature in enacting legislation relative to licensing or certificating regulations. This type of legislation is concerned with:

1. Amending existing laws which must be continually amended in order to conform with the ever-changing trends in professional education and,
2. With the creating of new laws and new boards of registration for the ever-increasing new professions and trades seeking legal recognition in the form of regulations relative to educational qualifications and to the setting up of special licensing and certificating boards.

"How much more simple and effective it would be to establish a strong State Department of Education and refer to it the functions and powers of licensure and certification for all professions and other vocations. Assuredly, if this is done, future legislatures would have much more interest, time and energy for important and constructive legislation.

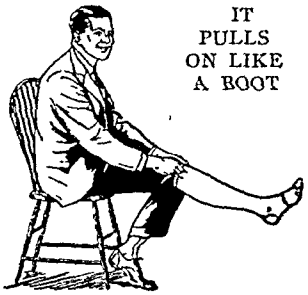
"Moreover, the Governor would be spared the vexing problem of making almost innumerable appointments to the many and ever-increasing boards of registration.

"1. The functions and duties of our State Education Department and State Superintendent of Public Instruction are centered on the teaching

(*Continued on page* 1366—*Adv. xxiv*)

The

New "Master" Elastic Stocking



TRADE MARK

Made with boot strap at top only (full length tape, of course, if desired).

Made in colors which have been scientifically worked out so as not to show through thin silk hose.

Made with no tape on back, but woven together with a practically invisible seam.

And — Each Handwoven to measure.

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BROOKLYN SPRINGFIELD DETROIT

NEWARK BOSTON WILKES-BARRE

(*Continued from page* 1365—*Adv. xxiii*)

profession, its training and certification. This Department of Education, therefore, is regarded as one which is of concern only to the teaching profession. 2. Now, if all the functions and powers pertaining to educational qualification for the professions and other vocations seeking legal recognition were centered in the State Department of Education, this Department would become a much more effective and important agency in the State government.

"This can and should be done without an increase in the State's tax supported budget. Let us refer to the following: The total disbursements of the State of Michigan, fiscal year ending June 30, 1931, for the Department of Public Instruction (administrative) was $123,995.78. The total receipts credited to twelve other licensing and registration boards during this fiscal year were approximately $167,000. Examination and registration fees and annual registration fees which should be paid in by members of each profession or other vocation, combined, should go far toward the support of the State Department of Education."

The procedure necessary for centering the new powers in the State Department of Education is as follows:

"Article XI, Section 2 and Section 6 of the Constitution should be amended in order to establish a strong State Department of Education. In general, the amendment should provide for an increase in the membership of the Board of Education to, let us say, seven or nine, to enlarge the duties and powers of this Board, and to give this Board the powers to appoint a Commissioner of Education who shall serve during the pleasure of the Board.

"The idea of centering thte functions and powers of certification and licensure in a strong Department of Education has been discussed before several groups representing several professions. In general, the reaction has been that a State Department of Education should be set up which should be given all the functions and powers of certification and licensure for vocations which will seek legal recognition in the future and for all vocations now legally established which desire to transfer these functions and powers to the State Department of Education in the future."

HEALTH MAGAZINE IN KANSAS

The first numebr of the popular health magazine, called "Folks," established by the Kansas Medical Society, was reviewed in this Journal of October first, page 1238. How the magazine has been received by the home doctors is told in the following editorial in the September issue of the Journal of the Kansas Medical Society:

(*Continued on page* 1367—*Adv. xxv*)

(*Continued from page* 1366—*Adv. xxiv*)

"Every member of the Society should have received by this time a copy of the new magazine, 'Folks'—a sample copy in a good many instances in which a subscription blank was inserted.

"Advance subscriptions amounting to nearly one thousand were received from members of the Society before the proposition was presented to the House of Delegates, and before the first issue was ready to mail this number had been increased to almost two thousand.

"Not every member of the Society has subscribed. There are quite a good many who have not even subscribed for a copy to keep on the office table. On the other hand, there are a good many who have sent in several subscriptions, some ten, twenty and in one case fifty. But by no means all of these advance subscriptions came from members of the Society or from doctors; a considerable number of them came from nurses and a considerable number also from dentists.

"Members of the Society could easily secure a large number of subscriptions from the people they know in the community. A magazine of this class at fifty cents a year does not require high-powered salesmanship, it practically sells itself. But it is necessary to give the people a chance to look it over and this the members of the Society could do without any loss of dignity or self esteem.

"We have been asking the secretaries of County Societies to send in names of people they can recommend for solicitors. . . According to the list in the society calendar, there are 61 secretaries of county societies, but that list must be very inaccurate for, according to the replies received to our letters, there are only four.

"We trust that no member of the Society will feel humiliated when he is solicited for a subscription to the magazine published by his State Society. That will certainly happen to those whose subscriptions have not been received at the office of publication. Solicitors will all be given the names of those who are always subscribers, and they will be expected to see all the others.

"Getting this magazine started has occasioned a great deal of extra work for the Bureau, and there is still a great deal to be done The extreme gratification experienced on seeing the last of the first issue in the mails was considerably modified by the realization that work must be immediately started on the next issue So far the members of the Society have been very generous in assisting us in getting material and this is and will continue to be the most difficult part of the work. During the next ten months a large number of short articles will be required and they should be furnished by members of our own organization. There is no excuse for waiting to be asked to contribute something, every member should be willing to tell the people something they ought to know."

HERE

is one of the advertisements of The Sugar Institute

THE advertisement reproduced here is one of the series appearing in newspapers throughout the country. In order to keep the statements in accord with modern medical practice, they have been submitted to and approved by some of the leading authorities in the field of human nutrition in the United States. The Sugar Institute, 129 Front Street, New York.

MEAT-COUNTER bargains ARE MORE delicious



WHEN SEASONED WITH

sugar

In cooking meat, the combination of sugar and salt blends tastefully with the meat juices.

EVERY day your meat dealer offers cheap cuts of meat which have an irresistible appeal to your sense of thrift And you can give most of these cuts an *irresistible* taste appeal by seasoning them with sugar

Of course salt should be added to the meat as it cooks, to overcome flatness But the value of adding sugar is that it develops and heightens the flavor of the meat in a way no other ingredient can.

Try a dash of sugar to season pot roasts, braised lamb and veal, stews and meat loaf In boiling corned beef or ham, add a half cup of sugar, more or less, to the water A dash of sugar to a pinch of salt is also a fine seasoning for many fresh or canned vegetables Flavor and season with sugar The Sugar Institute.

"Flavor and season with Sugar"

PUBLIC HEALTH JOURNAL OF CALIFORNIA

The health magazine called *Better Health* was commended by Dr. L. C. Kinney, President of the California Medical Association, whose annual address was abstracted on page 894 of the August first issue of this Journal. The address gave the impression that the health magazine was published by the State Medical Association, and was similar to *Folks,* the health magazine published by the Kansas Medical Society and reviewed in this Journal of October 1, page 1238; but on writing for a copy, we found that it is the official organ of "The League for the Conservation of Public Health," which was founded by Dr. George H. Kress, Editor of *California and Western Medicine,* the official organ of the California Medical Association. The object of the League was to combat an effort to launch state medicine in California through an initiative measure that was put on the ballot at a general civic election. The League accomplished its purpose, but it had demonstrated its usefulness to such an extent that it and the magazine are still continued with considerable financial backing. *Better Health* is about 8 by 11 inches in size, and consists of 32 pages, of which six or eight are given to advertisements. The articles are of a high class from both a scientific and a social point of view. First there are about 20 pages of discussion of compulsory insurance in unemployment that would do credit to a first-class literary magazine, such as *Harper's.*

Next are two pages of editorial comment, on such subjects as paternalism, early signs of tuberculosis, and milk control.

The next three pages are given to popular answers to medical questions sent by lay correspondents, on such subjects as Diet in duodenal Ulcer, *x*-ray for enlarged thymus, and Diathermy.

All the articles are written for "thoughtful" people, and lack the popular features and devices which are ordinarily used to catch the eye of the public. The information contained in the magazine is not second hand, but original, and is unavailable from any other source. It is refreshing to find a popular health magazine that conforms to these standards.



"Vitamins are the little things in nutrition, the metals are the little things in therapeutics."

For Stubborn Coccogenic Affections

Collosol Manganese

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A Stable Preparation Containing Manganese 1-400

Manganese, when injected, increases the capacity of the body to neutralize many endotoxins, the tubercle bacillus, pneumococcus, streptococcus, staphylococcus, etc. (L. E. Walbum). It raises the power of the body to form antibodies (Madsen) and stimulates regeneration of the blood in nutritional anemias (Myers and Beard).

COLLOSOL MANGANESE does not precipitate on addition to blood plasma and therefore gives rise to the minimum of pain, discomfort and untoward reaction when injected intramuscularly. Numerous published reports testify to its value in the treatment of coccogenic affections, particularly furunculosis, boils, acne, etc.

Supplied for injection in boxes of 6 ½ c.c., 1 c.c. and 2 c.c. ampoules

For oral use in 4 oz., 8 oz. and 16 oz. bottles

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PUBLIC RELATIONS COMMITTEE IN FLORIDA

Several State Medical Societies have committees on Public Relations; but some of the committees confine themselves to legislative activities. That of Florida deals with popular medical publicity. The September Journal of the Florida Medical Association describes a meeting of the Committee on Public Relations at which radio talks were first discussed and a program was developed. The report then says:

"It was considered highly important that the members of this Committee and all speakers that intend to speak over the radio attend a meeting for the purpose of learning the approved methods of talking over a radio, and accustom themselves more or less to them. With this end in view, the next meeting will be held in Gainesville, Thursday, October 8th, which will be well in advance of the first radio talk to be delivered by Dr. Jelks from that station on October 14th.

"The Motion Picture Section was next discussed. The Committee has on file a number of motion picture releases. The feasibility of sending this list to all the county medical secretaries, having their Society discuss the time and which film or films would be acceptable, was discussed. This plan would necessarily consume several months, and very probably would not be satisfactory, therefore, it was moved and seconded that 'this Committee arrange a program and notify each county secretary a considerable length of time in advance the picture or pictures he should expect, asking their societies' cooperation in arranging a program around the film.'

"The next topic brought up for discussion was the Press Bureau. Newspapers, wherever possible, and especially in the larger centers, will be given material to print. These articles will number fifty-two, and one should appear each week. All articles put in the press will be released over the printed signature 'Florida Medical Association,' but to indicate the authority for the same, these articles will be signed by the President of the Florida Medical Association. This signature will remain on the article for the files of the newspapers, but it will not be announced on the printed article.

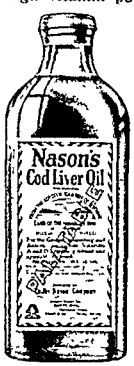
"The Speakers' Bureau, which also takes in a sub-heading of the Scientific Bureau, was discussed. It was thought that this was too large an undertaking to start synchronously with the other Bureaus, and should be withheld temporarily until the other bureaus were well under way; therefore it was moved and seconded that 'this Committee adopt the three major objectives for this year, 1931-1932, namely, first, Radio, including State and local broadcasting; second, Motion Pictures, and, third, Press.' This motion was carried."



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The woods are full of Cod Liver Oils—a few only are dependable; their quality, purity and vitamin potency approved by qualified medical authorities. Nason's Palatable Cod Liver Oil is one of these.

Recommend or prescribe Nason's by name. Its high vitamin potency and pleasant taste make it worthy of your recommendation and easy for your patient to take.



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Cod Liver Oil
The Better Tasting Kind

Vitamin Potency Warranty
1000 A Units 150 D Units
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Mail Coupon for Free Sample

TAILBY-NASON COMPANY
Kendall Square Station, Boston, Mass.
Pharmaceutical Manufacturers to the Professions of Medicine and Pharmacy since 1905.

Gentlemen —You may send me (without charge) sample bottle of Nason's Palatable Cod Liver Oil.

Name .....

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My Druggist's Name..... (N.Y J. 11-31)

INTERSTATE FRATERNALISM IN COLORADO

The editors of *Colorado Medicine* are promoting fraternalism throughout the states in the Rocky Mountains area, and discuss the subject editorially in the September issue of the Journal, as follows:

"Several significant moves have been made within the last few years toward the promotion of closer relations between the State Medical Societies of the Rocky Mountain region. All give promise of lasting value.

"Perhaps the first was the inauguration of a tri-state meeting in Yellowstone National Park each five years, including the societies of Wyoming, Montana, and Idaho. Not knowing who started this movement, credit cannot be given in this brief statement. The second movement, still in a formative stage, is the Colorado State Medical Society's invitation to Rocky Mountain states to unite in publication of a Rocky Mountain Medical Journal to succeed *Colorado Medicine* (N. Y. STATE JOURNAL OF MEDICINE, Sept. 15, page 1185).

"But this is written not to repeat what has been said before of these plans. It concerns a third plan, not necessarily new, but one which has been neglected sorely for many years and now seems due for a pleasant and profitable revival.

"In this year of 1931, the Colorado State Medical Society and the Utah State Medical Association are exchanging fraternal delegates, each giving prominence on its program to a speaker who will represent the other.

"At Colorado Springs we will have the honor to welcome Dr. Louis E. Viko of Salt Lake City as the representative of the Utah Association. One week earlier, Dr. Glen E. Cheley of Denver will represent the Colorado Society at the Thirty-seventh Annual Meeting of the Utah Association in Salt Lake City. In addition the Utah Association has invited Drs. Robert Levy and Herman I. Laff of Denver as guests of the Eye, Ear, Nose and Throat Section."

"INTERPINES"

GOSHEN, N. Y.

PHONE 117

ETHICAL—RELIABLE—SCIENTIFIC

Disorders of the Nervous System

BEAUTIFUL—QUIET—HOMELIKE—WRITE FOR BOOKLET

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CLARENCE A. POTTER, *M.D., Res. Phy.*



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..... N.Y.M.J. 11-31

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A pure, unsweetened dessert powder, to which the individual may add the amount or kind of sweetening allowed in the diet.

Food Value

The food value of one portion of Cellu Gelatin Dessert is: Protein (gelatin) 3 grams; Carbohydrate 0.5 grams; Fat none.

Five Flavors

Cellu Gelatin Dessert is made in five flavors: Raspberry, Grape, Cherry, Orange and Lemon and is packed 20 individual envelopes to a box. May be secured in individual flavors or in an assortment of flavors.

NEW YORK BRANCH

CHICAGO DIETETIC SUPPLY HOUSE

5 EAST 40th STREET NEW YORK CITY, N. Y.

MEDICAL ECONOMICS IN CALIFORNIA

The July issue of *California and Western Medicine* contains the following announcement of the plans of the Committee on Medical Economics:

"The Committee on Medical Economics of the California Medical Association was created for the purpose of investigating methods by which medical service, including hospitalization, is now being rendered to the people of California.

"It was understood that the character of the service and the cost to those furnishing it and to those receiving it, where possible, be ascertained. The reasonable ability of the people to pay for medical service, naturally, is an important feature of the investigation.

"This committee gives sympathetic consideration to every suggestion made, but insists that assertions be backed by truth-proving facts. Of one thing the committee is firmly convinced and that is, that the problem of furnishing adequate medical care at a cost that people of moderate means can easily afford varies greatly in different communities within the borders of our own state. This being true the committee urges every county medical society to appoint a local committee to cooperate with the state committee and its subcommittees in obtaining information from all parts of the State.

"These local commitees should investigate and report conditions in their own counties, send reports to the state committee and, above all things, they should refrain from approval of suggested plans until they have been subjected to analytical study and approval by the state society

"This column will be devoted to contributions on the subject, and while the state committee will carefully study every communication, the fact that it is printed here does not mean that the committee either approves or is responsible for it."

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OBSTETRICS AMONG THE INDIGENT OF MICHIGAN

The October number of the Journal of the Michigan State Medical Society contains the following editorial:

"The Public Welfare Commission passed a resolution recently to offer the doctors of Detroit who may be interested the sum of $10.00 each for confinements in indigent families. These cases had heretofore been cared for at the municipal hospitals at public expense and at a stated cost of $67.00 each, so that the care included hospitalization as well as the actual obstetric service. The offer is in the way of a temporary measure to aid in civic economy, which is so very necessary in every department in the metropolitan city of the state. This has given rise to considerable discussion pro and contra among the members of the medical profession. Some maintain that it is impossible to attend confinements at this price and to do good work. This argument may be disposed of by the statement that a doctor or any other professional man is presumed to give of their best no matter whether his fee be $10.00 or ten times the amount. In other words the quality of a doctor's work should never depend upon the amount of money he receives. Such is true of but very few other occupations under the sun, but it is true of medicine. There is only one grade of service in medicine and surgery and that is the best that the trained physician and surgeon can render.

"The members of the Welfare Commission have endeavored to do something constructive towards helping out an unfortunate situation, and the proffered solution should not be lightly dismissed. We feel, however, that while the fee may be inadequate, it should not affect the quality of service. The doctor, all things considered, renders more gratuitous community service than any other person. What should be a community service in too many instances has been shelved upon the doctor to render gratuitoush "

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ELI LILLY RESEARCH DIVISION

Histories of medicine are replete with romantic accounts of weird beliefs that appear ridiculous in the light of our present knowledge. When Darwin's *Origin of Species* appeared, in 1859, the scientific men of that day were still having controversies on the origin of life. Such men as Pasteur and Koch laid the foundations for many of the brilliant researches that followed their day. The nineteenth century saw many improvements in surgical practice, thanks to anesthesia, antiseptics, and asepsis. Morton demonstrated ether anesthesia in 1846. Ether continues to be a boon to humanity, its benefits more recently improved through the use of sodium iso-amyl ethyl barbiturate, a product of the research division of the Lilly Laboratories, known as Pulvules Sodium Amytal. Sodium Amytal exerts a hypnotic, sedative, and anticonvulsant effect. In surgery its preanesthetic use calms fear and apprehension, allows a quicker induction of inhalation anesthesia, lessens the amount needed, diminishes postoperative nausea and vomiting and when used in conjunction with local anesthetics protects against potential toxicity of the latter.

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NEW YORK STATE JOURNAL of MEDICINE

PUBLISHED BY THE MEDICAL SOCIETY OF THE STATE OF NEW YORK

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*A STUDY OF CARDIOVASCULAR SYPHILIS IN PRIVATE PRACTICE

By LOUIS FAUGERES BISHOP, M D, and LOUIS FAUGERES BISHOP, JR, M D, NEW YORK, N Y.

ALTHOUGH many studies of cardiovascular syphilis have been made of hospital and clinical patients, there have been very few studies where the selection of cases has been from a private practice We thought it might be of interest to make the following study The number of cases we reviewed for this work was 3,627, from the year 1918 to 1931 Out of this number we were able to find sixty examples where there seemed little doubt that cardiovascular syphilis was present All of these had a positive serology, with one or two exceptions where the serology had been changed by treatment but here there was little doubt that we were dealing with a true syphilitic cardiac condition It is also a known fact that positive serum reactions are present in eighty percent of cardiac syphilis It is an interesting fact that a little less than two percent of all cardiological patients referred to us had a cardiac lesion of syphilitic etiology We believe this percentage less than a hospital series would be panying definite evidences of neurosyphilis and it is possible that we would have found on more careful neurological observation evidence of neurosyphilis in others Central nervous syphilis is said to be evident in about ten percent of cardiovascular syphilis

It is interesting to note that this study is of a rather higher social strata than would occur in a public hospital or clinic group All of our people were white, with one exception, and all of them were seen in an office practice In this study there were forty-nine males and eleven females a ratio of about 5 1 This male predominance occurs in nearly every study made on cardiovascular syphilis, due probably largely to greater male exposure to syphilis and the factor of greater physical activity

In regard to age, the largest number fell between the ages of forty to sixty years Forty of the sixty were observed during this age period The age seems to be somewhat higher than is usually found in studies of this kind It is also

TABLE I

YEARS	1918 1919	1919 1920	1920 1921	1921 1922	1922 1923	1923 1924	1924 1925	1925 1926	1926 1927	1927 1928	1928 1929	1929 1930	1930 1931	Totals
Cases Reviewed	418	346	399	417	224	245	376	234	233	194	174	178	189	3627
Cases Taken	5	5	8	13	4	3	6	1	5	1	4	3	2	60

We realize that we have in our files examples of cardiac syphilis with a negative Wassermann reaction, but we have included none that were doubtful In two or three there was present a definite rheumatic history as well as a luetic history, but this occurred in only a few instances In three—or five percent—there were accom- probable that many had symptoms before coming to us This agrees, however, with the well confirmed statement that heart disease due to syphilis usually occurs later than in rheumatism and a little earlier than in arteriosclerosis Occupation did not seem to us of any particular importance in this study

The relation between the time of the primary infection and the onset of cardiac symptoms has

* Read before the Annual Meeting of the American Therapeutic Society Atlantic City, June 6 1931

TABLE II

Age	Cases	Sex
20–30	2	49 Male 11 Female
30–40	10	
40–50	19	
50–60	21	
60–70	7	
70–80	1	

always been of great interest and we have tried in our series to determine this in as many examples as possible. We were able to do this in about thirty-three percent, as shown by the following rather bizarre figures: Two years, two. Ten years, one. Fifteen years, two. Sixteen years, one. Seventeen years, one. Eighteen years, one. Twenty years, one. Twenty-two years, one. Twenty-five years, one. Twenty-seven years, one. Twenty-eight years, one. Thirty-four years, one. Thirty-five years, one. Forty years, two. Forty-three years, three.

The wide variation between the primary infection and evident cardiovascular involvement can be seen. From these figures it can also be seen that the process usually remains latent or unrecognized in our series for about 17-18 years.

TABLE III

TIME BETWEEN PRIMARY INFECTION AND ONSET OF CARDIAC SYMPTOMS

Years	2	10	15	16	17	18	20	22	25	27	28	34	38	40	43
Cases	2	1	2	1	1	1	1	1	1	1	1	1	1	2	3

AVERAGE 17 7

The result of the study of the symptoms of our group of cardiovascular syphilis showed the rather classical findings. It should be emphasized, however, that cardiovascular syphilis is often symptomless. Pain and dyspnœa were the most frequent presenting symptoms and these occurred either alone or together. It was often noted that the dyspnœa was paroxysmal in type.

TABLE IV

PRESENTING SYMPTOMS

Pain	22
Dyspnoea	15
Pain and Dyspnoea	6
Palpitation	7
Fatigue	2
Cough	1
Throbbing in Neck	2

An electrocardiographic study was made with the following findings: Normal mechanism—Thirteen. Left axis deviation, without abnormality—Twelve. Left axis deviation, with abnormality—Twenty-one. Right axis deviation—Four. Auriculo-ventricular block—Seven. Intraventricular block—Two. Complete heart block—One. Ectopic auricular contractions—Four. Ectopic ventricular contractions—Six. Auricular fibrillation—Four. Sinus tachycardia, without abnormality—Seven. Sinus tachycardia with abnormality—Eight. T-wave negativity, Lead I—Nine. Lead I and II—Two. Lead II and III—Three. Lead I, II and III—Two.

From these findings it is interesting to note that there is a relatively large number with no abnormal electrocardiographic findings and that almost every form of electrocardiographic curve can be found in a lesion of the heart due to syphilis. As would be expected there is a large number with left axis deviation and also a relatively large number with T-wave negativity. In this connection one must not forget that some of these had received digitalis. Our feeling is that there is no particular lesion shown in the electrocardiogram that is characteristic in any way of heart disease due to syphilis but we were interested to find out exactly what our electrocardiographic findings would be after a careful analysis. There seems to be also more arrhythmias present in our study than in most electrocardiographic studies on this subject.

In nearly all of our group we had taken a six-foot *x*-ray plate of the heart, whereas, we were well aware that this *x*-ray study would not be in any way conclusive we were interested to find out what a re-study of these plates would reveal. With the aid of a roentgenologist, Dr. Ramsay Spillman, we reviewed fifty-five available plates with the following results: There were twenty-four plates, or nearly fifty percent, where there was no *x*-ray evidence of cardiac or aortic pathology. Cardiac hypertrophy with manifest aortic enlargement was present in eighteen. In two examples the aorta was widened with cardiac hypertrophy. In four there was a widened aorta alone, and in one the aorta was quite sclerotic and elongated with cardiac enlargement. There were five aneurysms, four sacculated and one fusiform.

From this summary of the *x*-ray the most striking point is the number with no *x*-ray evidence in the six-foot plate.

The fact that many had had some treatment before coming to us leaves the question of the

TABLE V
ELECTROCARDIOGRAPHIC STUDY

Normal Mechanism	13
Left Axis Deviation Without Abnormality	12
Left Axis Deviation With Abnormality	21
Right Axis Deviation	4
Auriculo-Ventricular Block	7
Intra-ventricular Block	2
Complete Heart Block	1
Ectopic Auricular Contractions	4
Ectopic Ventricular Contractions	6
Auricular Fibrillation	4
Sinus Tachycardia Without Abnormality	7
Sinus Tachycardia With Abnormality	8
T-WAVE NEGATIVITY—Lead 1	9
Leads 1 and 2	2
Leads 2 and 3	3
Leads 1, 2 and 3	2

study of the effect of treatment entirely unsatisfactory It is true, however that we had some extraordinary responses to specific treatment where the disease had not been previously discovered or treated It is not our purpose in this study, however, to go into the treatment except to say that we have followed what has been fairly well agreed upon as being the best method of handling cardiovascular syphilis Most of our people received courses of mercury or mixed treatment and certain selected ones were given small doses of salvarsan Nearly all of these received *the benefit of constant medical observation* and the best possible nursing and environmental care This is mentioned because if any group of heart diseases due to syphilis is to do well it should be those who have the benefit of constant medical observation We often had the advice of syphilographers

It is relatively easy to classify post-mortem study lesions of cardiovascular syphilis but a clinical classification is somewhat difficult It was our opinion that this series had the following objective findings, or physical signs

There were twenty eight with aortic insufficiency Seven with definite aneurysm of the aorta Ten had an aortic systolic murmur Fourteen had no objective findings and one had evidence of what was considered a mitral stenosis and insufficiency, with syphilitic myocarditis The reason this was included was that previously undiscovered and untreated constitutional syphilis seems to have led the attack of broken compensation and compensation was restored when the syphilitic desease was treated Rheumatic pathology of the heart is so extensive that we cannot prove whether there was any organic specific lesion of the heart or aorta However, the extraordinary response to treatment might lead us fairly to infer that there was a specific influence acting on the heart muscle

Of the sixty examples which we have included in our study we were able to find information in forty-eight Of this total number, twenty-nine had died, or nearly sixty percent We then attempted to find out what the average duration of life was from our clinical classification

In seventeen with aortic insufficiency the average length of life, after being first seen by us was two years and ten months In six with definite aneurysm of the aorta the average length of life, after being first seen, was two years The average length of life here is misleading because five of the six with aneurysm lived only an average of six months Of the three examples having only objectively an aortic systolic murmur the average duration of life was two years and nine months

The above were all ambulatory when first seen and they were followed up until the time of death and most of them died at home rather than in a hospital There are at the present time nineteen in this series who are alive which in our classification were grouped as follows

Aortic insufficiency, five Aneurysm of the aorta, one Aortic systolic murmur, two Syphilitic myocarditis, one Unclassified, ten

TABLE VI
CLASSIFICATION

	Cases	Unknown	Dead	Alive
Aortic Insufficiency	28	5	18	5
Aneurysm of Aorta	7		6	1
Aortic Systolic Murmur	10	2	4	4
Mitral Stenosis and Insufficiency	1			1
Unclassified	14	3	1	10

In a recent study, Moore and Danglade found that the average duration of life in their series of treated patients from the onset of symptoms to death was two years and eleven months, which agrees very closely with our results in private practice Their study included fifty-three cases taken from the Syphilis Division of the Medical Clinic, Johns Hopkins Hospital

The conclusion we can make from this study is that cardiovascular syphilis presents very much the same problem in private practice as it does in hospital and clinic work and we feel it is of interest that our findings in the study of our group agree so closely with studies made on hospital and clinic groups

N. Y. State J. M.
November 15, 1931

BRANCHIOGENIC CYST

By LEO SCHWARTZ, JR., M.D., NEW YORK, N. Y.

BRANCHIAL cysts, while not medical curiosities, are of sufficiently infrequent occurrence to remain interesting.

The following case represents a typical example. A bibliography is appended, a perusal of which will familiarize one with the many interesting features of this condition.

E. F., a young woman, 23 years of age, was referred to me for examination with the suggestion that a swelling present in the left side of the neck was possibly due to an enlarged lymph node due to infected tonsils.

History of Case—She had first noticed a swelling in the left side of the neck about three years previously. It had gradually increased in size until it had reached present proportions. At no time had there been any pain. She had often had attacks of sore throat and in the last few years had had peritonsillar abscesses on the left side incised. On several occasions, the occurrence of these abscesses had antedated the appearance of the swelling.

Examination—There was a swelling in the left side of the neck extending from the angle of the jaw to the thyroid cartilage anterior to the sternocleidomastoid muscle (Fig. 1). It was about the size of a small tangerine, was fluctuant and not attached to the skin. The sternocleidomastoid muscle overlapped the mass. There was no pain nor redness present. It was not translucent.

The tonsils were hypertrophied and diseased.

Examination of the nose showed a polypoid right middle turbinate which was also very turgescent. There was a right chronic purulent otitis media with a perforation at the lower posterior quadrant through which a polyp protruded. A malodorous purulent discharge had been present for 12 years.

The patient was advised to submit to an operation for removal of the tonsils due to the repeated attacks of peritonsillar abscesses and was advised that at a later date the tumor in the neck could be removed.

October 20, 1930, tonsillectomy and adenoidectomy performed under general anesthesia. The left tonsil was removed with difficulty due to the unusual scarring of the fossa. A large adenoid mass was also removed.

On January 15, 1931, the original mass not having diminished in size, the patient was sent to the hospital and under local infiltration anesthesia of 1% novocain, a transverse incision was made over the mass and with careful blunt dissection the cystic sac with some of its contents was removed in toto. The cyst wall ruptured during the dissection and the fluid content, which was of a creamy consistency and in appearance not unlike pus, was under sufficient pressure to project a stream upward for several inches. Some of this escaping fluid was saved for chemical and microscopic examination. The sac extended downward to the carotid sheath but did not extend between the vessels enclosed therein, and fortunately for the patient a complete removal was possible without damaging the important structures.

Pathological report by Dr. Julius Pincus, of the Joint Diseases Hospital.

Gross—Specimen consists of a cystic mass received at laboratory opened up. Grossly, cyst would be about the size of a walnut when filled with secretion. At one pole a small whitish area of tissue is seen. Cyst fluid is milky white secretion and contains fatty acid and cholestrin crystals on chemical examination.

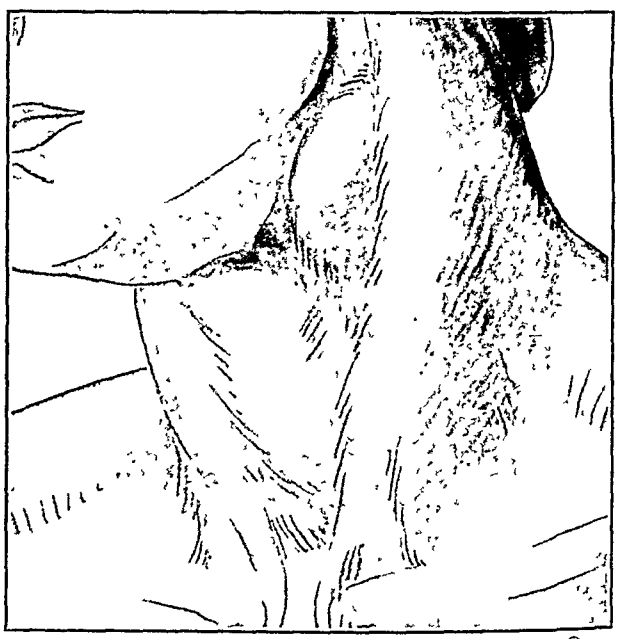


FIGURE 1

Artist's drawing showing location and relation of cyst to sternocleidomastoid muscle and topography of neck.

Microscopic—Internally the cyst is lined by stratified squamous epithelial cells (Fig. 2). Beyond this lining is seen fibrous tissue stroma containing numerous small and large blood vessels and the greater part of the stroma is filled with lymphoid tissue with follicle formations surrounded by a fibrous tissue capsule (Fig. 3). No malignant changes were noted. These pictures illustrate the classical text book description of a branchiogenic cyst.

Diagnosis—Branchiogenic Cyst

Comment—It is possible that this cyst at one time communicated with the tonsillar fossa and



FIGURE 2

Low power photomicrograph of section of cyst wall showing lumen and stratified squamous epithelium lining



FIGURE 3

Section showing characteristic lymphoid follicle in stroma of cyst wall

due to the cicatrization that took place following the abscesses, the opening was obstructed giving rise to the subsequent mass formation in the neck. This would account for the obliteration of the communication between the cyst and the opening within the mouth if there had been any communication previous to operation.

The patient made an uneventful recovery and at this time shows no recurrence.

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TREATMENT OF INFECTIONS OF THE CENTRAL NERVOUS SYSTEM BY FORCED SPINAL DRAINAGE*

By GEORGE M. RETAN, M.D., SYRACUSE, N. Y.

THE acute infections of the central nervous system are of a serious nature. Septic meningitis and tuberculous meningitis are nearly always fatal. Encephalitis, poliomyelitis, cerebro spinal meningitis and syphilitic meningitis give a varying mortality with our present method of treatment. Many of the recovered cases develop serious and permanent sequelae. I believe one is justified, therefore, in using any type of therapy that offers some prospect of improving our results in the treatment of these diseases.

Forced spinal drainage must not be confused with continuous spinal drainage. Theoretically, forced spinal drainage is sound. My work with this method has convinced me that it is safe. This treatment offers a further advantage in that it can be combined with other types of treatment. Any serum that may be useful in the individual case can be given in conjunction with it.

Kubie has laid the ground work for this type of therapy by his experiments with animals.

Under normal conditions, water and certain salts pass through the capillary walls into the interstitial spaces, and from the interstitial spaces into the capillaries. This takes place by the process of osmosis. If the concentration of salt is greater in the capillary, the flow is from the interstitial spaces into the capillary. If the salt concentration is less in the blood stream, the flow is from the blood stream into the fluid spaces surrounding the capillary. The force causing this interchange is called osmotic pressure, and depends on the concentration of salts in the solution. The normal osmotic pressure of the blood is that of an aqueous solution of 0.9 per cent of sodium chloride. A solution of greater concentration than 0.9 per cent of sodium chloride is called a hypertonic solution; a solution of less than 0.9 per cent is called a hypotonic solution. The permeability of the capillary wall may vary in different organs and in the same organ under different pathological conditions. There is evidence that in acute inflammation of the tissue the permeability of the capillary wall is increased.

There are certain hydrostatic pressure factors that influence this fluid interchange. These pressure factors need not be discussed in this paper.

In case a hypotonic solution is injected into the blood stream, there is a flow of fluid from the blood stream, through the capillary walls, into the surrounding tissues.

The action of such a solution on the central nervous system is shown in the diagram (Fig. 1) The capillaries in the cord are represented by (C). Since the blood has been made hypotonic by an injection of 0.45 per cent sodium chloride solution, there is a flow of fluid from the blood stream of the capillary into the intercellular spaces (I). The fluid flows through the intercellular spaces to the subarachnoid space (S). From the subarachnoid space the fluid is drained from the lumbar needle.

Kubie has shown that there is some hydration of the tissues of the central nervous system as a result of the intravenous injection of a hypotonic solution, provided the subarachnoid space is not drained. (Figs. 2 and 3). If the subarachnoic space is drained no hydration takes place.

Referring to the principles of osmosis we can conclude that in case a hypotonic solution is slowly injected into the blood stream, the osmotic pressure in the capillaries causes the fluid to flow from the blood stream into the perivascular spaces. If the fluid is continuously drained from the subarachnoid space, there is no opportunity for osmotic equilibrium to be established. The washing of the depths of the inflamed area can be continued as long as seems desirable. There is evidence that the flow is greater in the inflamed areas, possibly in proportion to the inflammation.

The most effective method of making the blood hypotonic is by injecting a hypotonic solution into the blood stream. A 0.45 per cent solution of sodium chloride was used in the treatment of these cases. The solution must be injected slowly, not faster than one liter in an hour. The intravenous injection of this solution is essential. Plain water given in quantities by mouth or rectum is a further aid. Kubie concludes from his animal work that "If free escape of cerebro spinal fluid is allowed, the injections produce little rise in intracranial pressure and no recognizable hydration of the tissues of the central nervous system."

The present treatment of acute preparalytic poliomyelitis leaves much to be desired. There is no positive clinical evidence that the intraspinal injection of human immune serum is of any benefit. The theory upon which this treatment is based depends on the following fact: When human immune serum is mixed with polio virus and injected into monkeys, the monkeys will fail to contract the disease. Immune serum injected into the subarachnoid space does not come into contact with the lesions of polio in the anterior horn cells. It may neutralize the virus in the spinal fluid and this may be of some slight benefit. Whether we believe that this treatment is of benefit or not, we are faced with the fact that certain patients so treated die, and a varying percentage develop paralysis.

Poliomyelitis: The pathology of poliomyelitis lends itself peculiarly well to forced spinal drain-

* Read at the Annual Meeting of the Medical Society of the State of New York, at Syracuse, N. Y., June 3, 1931.

age The first notable change in the central nervous system are a marked hyperemia of the meninges and a collection of small mononuclear cells in the perivascular lymph spaces This process rapidly extends into the cord itself Here is noted the same perivascular collection of mononuclear cells (Fig 4) An oedema develops in the cord The oedema affects the gray matter more than it affects the white matter so that one section the gray matter projects above the level of the white matter Often minute hemorrhages are found Oedema, hemorrhage and cellular exudate are of vascular origin and this is the reason the anterior horn cells are more particularly involved

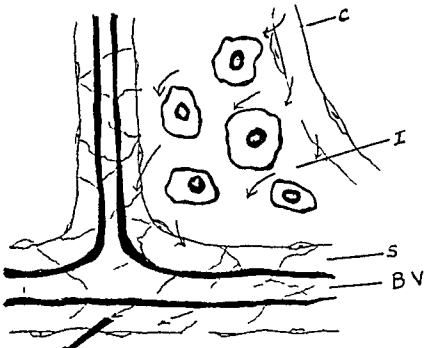


FIGURE 1

Diagrammatic representation of a section of the spinal cord illustrating the flow of fluid from the capillary through the tissue to the subarachnoid space

What role the virus plays in the destruction of the nerve cell has not been determined Possibly there is some toxin in the perivascular spaces which has a direct action on the nerve cell Pressure from the oedema may also be a factor in devitalizing the nerve cell It is, however, not reasonable to believe that this pressure alone is responsible for the destruction This type of cell degeneration is not met with in other diseases or conditions causing oedema of the cord, such as general anasarca

Since it has been shown by Kubie that we are able to wash the perineural spaces continuously by the use of a hypotonic solution and that this fluid can be drained from the body, is it not reasonable to believe we can prevent damage to the nerve cells by making use of this method? If the virus of poliomyelitis exists in the perineural



FIGURE 2

Reproduced from Intracranial Pressure Changes in Health and Disease work of Kubie Brain, Vol 51, Pt 2 p 244 1928

Left Undilated central canal from drained animal

Right Tremendously dilated central canal from undrained animal

spaces it is possible to wash it out of these spaces. One can demonstrate in the spinal fluid the mononuclear cells which have been washed from the perivascular spaces.

Case Report: On November 4, 1930 I saw a girl, age 9 years, who had been exposed to a case of poliomyelitis. She gave the following history:

November 3rd this patient had been perfectly well. She had spent the afternoon riding horseback with her mother and had gone to bed without complaint. The nurse said she had been restless between two and four on the morning of the fourth. At four o'clock she asked to void and then complained of pain in her back and neck. She was unsteady in the bathroom with her legs trembling and shaking. She continued to be restless in her sleep and awakened at 7:15 unable to bend her neck. She was seen at eight o'clock by Dr. Morrow who found her temperature 99. Rigidity of the neck and back was present on attempted flexion. There was a positive Kernig and a tremor of the hands.

I saw the child at 11:30 A.M. Her temperature had arisen to 102.2 —pulse 140. Dr. Morrow found that she had gotten rapidly worse since he had examined her at 8 A.M. The rigidity of the back and neck as well as the tremor had increased. There was pain on attempting to flex the neck. There was a slight redness of the throat. The abdominal and knee reflexes were sluggish. Physical examination was otherwise negative. The patient was taken to the Syracuse Memorial Hospital where a lumbar puncture was done. The fluid was under slightly increased pressure with a cell count of 739. These cells were over 90% polynuclears. She was drained continuously for 27 hours and 45 minutes. The drainage was forced by the intravenous injection of 1000 c.c. of 0.45% NaCl solution. 30 c.c. of human immune serum was added to this solution (See Chart).

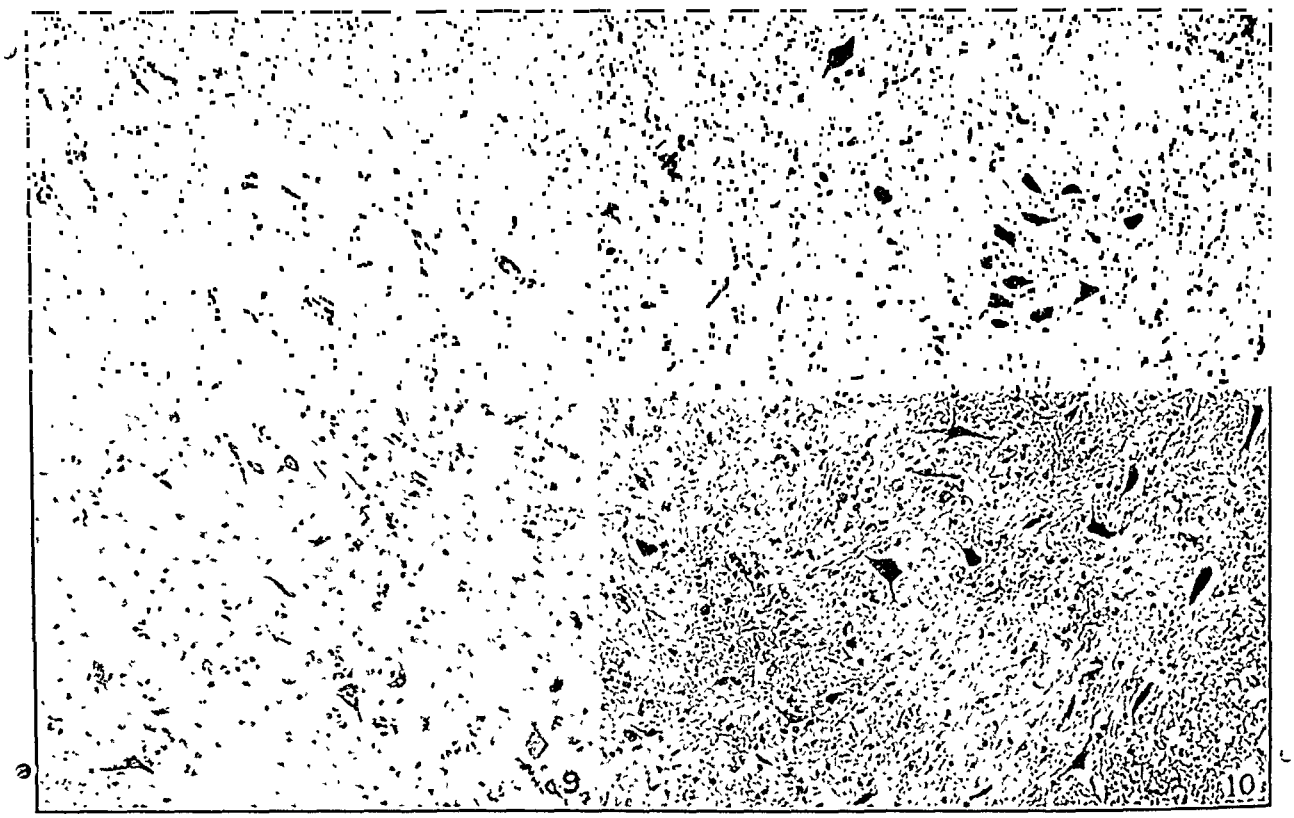


FIGURE 3

Reproduced from "Intracranial Pressure Changes in Health and Disease," work of Kubie. "Brain," Vol. 51, Pt. 2, p. 244, 1928.

Left: Undistended perineuronal spaces from drained animal.

Right: Tremendously distended perineuronal spaces from undrained animal.

When the hypotonic solution was injected, the character of the cells changed abruptly from 90% polynuclears to 80% mononuclear cells. The cell count also increased from 38 cells to 174 cells.

This patient recovered without at any time showing any paralysis or muscular weakness.

Encephalitis: Acute encephalitis is a serious disease in infancy. The mortality is high. Those cases beginning with convulsions are especially

serious The recovered cases usually develop residual symptoms There is no effective and accepted treatment for the acute stage of this disease

Case Report Girl baby, age 11 months seen June 18, 1930 During the afternoon the baby had developed a temperature of 102 which arose at 11 P M to 105 4 At 12 P M the baby developed convulsions These convulsions were terrific—tonic over the whole body with clonic twitching of the left arm and leg There was a violent twitching of the eyeballs toward the right The baby was in a deep coma Inhalations of ether failed to control these convulsions

The spinal fluid was clear but under increased pressure Cell count 7 cells The patient was given continuous spinal drainage for 47 hours The drainage was forced by the intravenous injection of 1000 c c of 0 45% NaCl solution Murphy drip of 400 c c of distilled water was given and 375 c c of water by nasal drip 247 c c of spinal fluid was obtained

Very soon after the treatment was begun the spinal fluid became haemorrhagic and continued to be haemorrhagic throughout the 47 hours of drainage

During the drainage the baby improved The convulsions stopped and later the twitching of the eyeballs The baby had developed a flaccid paralysis of the left leg which was evident as soon as she came out of her coma This was not complete for at times there was some movement of the leg

Following the drainage the baby seemed lethargic She slept, could be aroused to take her feedings The night of the third day the temperature which had remained under 100 during and after the drainage, arose to 104 and convulsions again developed These were promptly relieved by a second drainage which was continued for 20½ hours We obtained 114 c c of haemorrhagic fluid We gave 1000 c c of 0 45% NaCl solution into the vein—450 c c of distilled water by Murphy drip and 200 c c by nasal drip

Before this second drainage the patient had developed a transitory ptosis of the left eyelid and nystagmus The left leg was still partly paralyzed but had improved from its previous condition She had also developed spasm of the extensors of the left arm

Following the second drainage she was greatly improved, sat up in bed and waved to her parents The temperature was normal

During the following week her temperature remained normal and there was a gradual improvement of the left arm and leg At the end of the week the arm and leg were entirely recovered The day following the second drainage cisterna puncture revealed a fluid containing tiny prune colored particles of clotted blood

The baby has remained perfectly well There are no residual symptoms

Septic Meningitis There are possibilities of curing certain cases of septic meningitis by forced spinal drainage The following conditions are necessary for success The original source of the infection must be drained The case must be treated early before a plastic exudate forms on the brain These plastic exudates act as secondary foci The drainage must be continued for

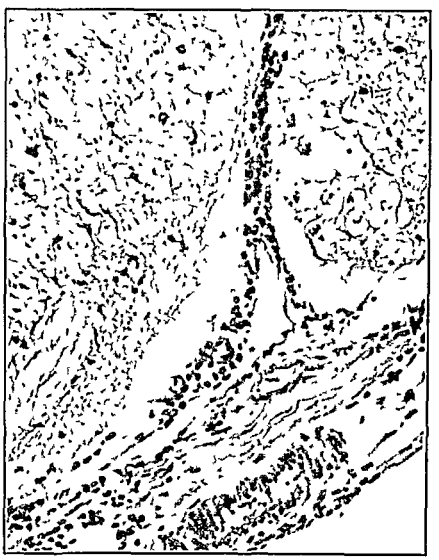


FIGURE 4

Section of spinal cord from a case of poliomyelitis showing perivascular infiltration of mononuclear cells

at least twenty four hours after the spinal fluid count becomes normal

Case Reports I have treated three cases none of which met these requirements One case of about five days duration secondary to an orbital infection (Streptococcus haemolyticus) showed no improvement with forced drainage Autopsy showed a large plastic exudate on the right frontal lobe with pus partly walled off—really a localized brain abscess

A second case —Pneumococcus type II—secondary to an ear infection The middle ear was drained but not the mastoid There was no improvement with treatment—history indefinite as to onset The original spinal fluid cell count was over 4000

The third case one of Streptococcus Haemolyticus followed mastoid Mastoids drained—treat-

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2:20 "					Drainage started
2:50 "	45 c.c.	264	90 "		400 c.c. water
3:20 "	31 c.c.	136	90 "		400 c.c. 20 c.c. serum muscle
6:20 "	11 c.c.	98	90 "		Fluids refused—Nausea—6:00 vomited
					9:15—200 c.c. orange juice
10:00 "	15 c.c.	47	90 "		Vomited—200 c.c.
12:15 A.M.	2 c.c.	38	90 "		1 drop 6 minutes
1:30 "	32 c.c.	174	20	80	1030 c.c. .45 NaCl. 30 c.c. serum
					11 to 16 drops per minute
3:00 "	42 c.c.	134	8	92	480 c.c.
6:30 "	75 c.c.	147	4	96	390 c.c.
					7:30 vomited
9:30 "	50 c.c.	155	35	65	280 c.c. 9:10 vomited—severe headache
12:30 P.M.	30 c.c.	56	23	77	420 c.c. 10:00 vomited—wire in
4:30 "	20 c.c.	54	26	74	310 c.c. 1:30 severe pain right leg
5:30 "	10 c.c.	85	28	72	180 c.c. Severe headache. Wire out.
6:05 "	65 c.c.	121	29	71	Needle removed
	429 c.c.				

ment instituted about fifty hours from onset. The patient was given two liters of 0.45% NaCl solution into the vein and drained for eight hours. During this period the patient showed considerable clinical improvement. He came out of a deep coma but later lapsed into coma and died. Autopsy revealed a plastic exudate on one of the frontal lobes. There was no hydrosis of the brain or other organs in the gross or microscopic specimens.

Leighton reports three recoveries in ten cases. These cases were treated by continuous drainage and lamienectomy. Lamienectomy allows of better drainage since there is often difficulty in keeping the needle in the canal continuously for a long period of time. Kolmer reports two recoveries in eighteen cases of septic meningitis. He used intra carotid injections of sera and solutions with intermittent spinal drainage.

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The treatments given were as follows: Sulpharsphenamine intramuscularly 0.2 gms. every five days for ten doses, with daily inunctions of mercury. Following this bismuth salicylate was given once a week until September fourth.

At this time the spinal fluid gave a normal cytology. No meningeal symptoms were present, but the head was enlarging about twice its normal rate. There was a bulging fontanelle. Both blood and spinal fluid were still positive to the Wassermann reaction.

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Since December 31st the spinal and blood Wassermanns have remained negative. The case is still under observation and there is no evidence of the activity of the disease. Since the first drainage the head has grown at a normal rate.

It is possible that when arsenicals are introduced into the blood stream with a hypotonic solution, a larger percentage of the arsenic might be drained through the lesions of the central nervous system.

Summary: It is evident that much more clinical and experimental data will need to accumulate before we can draw any conclusions as to the efficacy of forced spinal drainage in the treatment of infections of the central nervous system.

The treatment is theoretically sound.

The case of poliomyelitis seemed like an acutely fulminating case. We can not conclude that the treatment was responsible for her recovery for many cases of poliomyelitis recover without any treatment.

Forced spinal drainage should not be confused with continuous spinal drainage. Continuous

spinal drainage is of questionable value in the treatment of preparalytic poliomyelitis although it has been used successfully in certain cases of septic meningitis The abrupt change in the cytology of the spinal fluid of the poliomyelitis case coincident with the intravenous injection of the hypotonic solution presents further evidence that we were washing fluid through the lesions

The improvement of the encephalitis case during the drainage was most impressive

My work with this method of treatment has convinced me that it is a safe procedure

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BACTERIOPHAGES AS A HELP IN THE TREATMENT OF INFECTIONS IN CHILDREN*

By WARD J MacNEAL, M D, NEW YORK, N Y

From the Department of Pathology and Bacteriology New York Post Graduate Medical School and Hospital
These studies have been supported by a grant from the Josiah Macy Jr Foundation

SINCE the pioneer observation of transmissible autolysis of bacteria by Twort[1] in 1915 and the subsequent extension of such observations especially by d'Herelle[2] there has been produced an extensive literature dealing with the general subject of the bacteriophage phenomenon and its possible importance in infectious diseases The phenomenon itself is one of peculiar interest in general biology and its observation has introduced an uncertainty in regard to minute forms of life, which has been compared to the influence of the discovery of radium upon the elementary ideas concerning molecular and atomic structure With these more theoretical conceptions of general biology we are not at present concerned

D'Herelle's classical example of the phenomenon may be observed as follows Take a small amount of stool from a patient convalescing from bacillary dysentery, suspend it in broth and filter through a porcelain filter to obtain a bacteria-free filtrate Add a drop of this filtrate to a young broth culture of the dysentery bacillus and place the culture in the incubator In a few hours it is diffusely clouded with bacterial growth but soon thereafter, ordinarily in eight to twelve hours the broth becomes perfectly clear and it may no longer be possible to demonstrate the bacteria in it either by microscope or culture A drop of this clear liquid added to a new culture of the dysentery bacillus brings about a repetition of the phenomenon and this may be repeated indefinitely Obviously the agent which causes this solution of the bacteria is being reproduced in increasing amounts Its precise physical chemical or possibly biological nature is not clearly understood It is the bacteriophage for the dysentery bacillus

Analogous filterable agents have been found which will cause dissolution of other bacteria, such as the typhoid bacillus, the colon bacillus, the bacillus of green pus, the golden staphylococcus In fact there is reason to think that the phenomenon may be quite general for all the bacteria and that persistent search may be rewarded by the discovery of a bacteriophage for each pathogenic microbe or at any rate for many of them The tubes and culture dishes here shown illustrate the phenomenon as it occurs in broth cultures and on agar plate cultures of the colon bacillus and the staphylococcus

From such examples of complete destruction of the bacteria one may gain the impression that the bacteriophage always destroys the bacteria against which it is potent Such, however, is not the case Frequently one may observe the apparently complete clearing of the broth culture only to have it become cloudy again after twenty or more hours because of the growth of bacteria which, although tainted by the bacteriophage are nevertheless sufficiently resistant to it so that they continue to survive and multiply in its presence The bacteria of such secondary growth show peculiarities of individual shape and structure and in colony form as well as alterations in virulence, which have furnished themes for an extensive literature Furthermore, one observes that various environmental conditions influence the outcome of the struggle for existence on the part of the bacterial cells in the presence of the bacteriophage Significant contrasts are readily obtained by incubating identical mixtures at different temperatures In our laboratory, experiments carried out by Miss Frisbee[3] have revealed a remarkable influence exercised by the hydrogen ion concentration of urine in the bacteriophagy of the colon bacillus in urine The significance of these results for the treatment of infections of the urinary tract is obvious Somewhat analogous experiments by Miss Applebaum[4] have revealed in influence ex-

* Read at the Annual Meeting of the Medical Society of the State of New York at Syracuse N Y June 3 1931

such as a large spur on the septum with enlarged middle turbinates, producing bad ventilation of the ethmoid region, will be a predisposing factor, always worth noting. A slight thickening of the membrane over the posterior ethmoid and sphenoid region with a shiny, oedematous appearance is often present, or the membrane may appear much redder than normal. The nasopharynx will often show a granular tract on one or both sides extending under the posterior pillar. This will indicate a chronic discharge from the sinuses and although scarcely noticed by the patient will often be the most positive evidence of sinus infection that one is able to obtain. Once a tentative diagnosis has been made, treatment will usually be surgical. If the eye lesion is not severe and if the oculist thinks there is no danger in a delay of a week or two, intranasal treatment may be tried and the eye carefully watched. In retrobulbar neuritis it is not usually advisable to wait very long, but in young subjects whose regenerative powers are very strong a good result may be obtained even though the process has been going on for some time. In older patients it is important to remove the cause as quickly as possible and one should not wait very long before resorting to surgery. In the series of 44 cases reported by the late Dr. E. S. Thomson[1], in which the various eye affections were associated with infected sinuses and tonsils, operative procedure was carried out almost as soon as the diagnosis was made and the earlier the operation the better the results. Dr. Thomson had a large experience in this field and his conclusions were that sinus disease caused iritis, cyclitis, retinitis, and choroiditis in almost as great frequency as it caused optic neuritis. He also stated that the diagnosis of the casual relationship is so difficult for the rhinologist in many cases that it must remain for the ophthalmologist to decide when the sinus operation should be done.

Infection of the lacrymal sac may be secondary to nasal infection and will not respond to treatment till the intranasal condition has been treated. Obstruction in the nasal duct can also occur from inflammation inside the nose extending into the duct. Occasionally one sees the opening of the duct in the inferior meatus occluded from a swollen or polypoid inferior turbinate. Removal or cauterization of a part of the turbinate may help this condition but the results are not always satisfactory. The West operation for removal of an old chronic, suppurating sac by the intranasal route is a well-devised procedure but is rather difficult technically and unless thoroughly done is not likely to provide much benefit to the patient.

When the tonsils are suspected as a source of infection the diagnosis can usually be made with quite a positive degree of certainty. Any tonsil containing thin, liquid pus which can be demonstrated on slight pressure or suction is an obvious focus and should be removed at once if eye symptoms are present. There is, however, a possibility of a tonsil being the cause of mischief where the infection is not so obvious. One may find it very difficult to demonstrate any pathology in a small, buried tonsil stump and yet it may be the real source of the infection. I have advised the removal of such tonsils on speculation on several occasions and found much more than I had suspected. A history of an attack of tonsilitis at any time during the patient's lifetime may be all the evidence obtainable in some cases.

The late Dr. Leon White[2] who did a great deal of work in the relation of sinusitis to eye infections came to the conclusion that tonsils and teeth were more often the original cause of such infections than the sinuses. My experience has been more with the cases with sinus pathology but the cases from other causes may have been sent to other specialists so I cannot draw conclusions in regard to their relative frequency.

I now wish to report briefly three cases which will best illustrate the observations of this paper:

The first was a case of bilateral retrobulbar neuritis. A girl aged 13 years, brought to me the 15th of June, 1926, had started to lose vision in April in the left eye, and three weeks previous to the time I saw her the right eye began to fail. Her father was a doctor and an extensive investigation had been made in a large city. Finally, a diagnosis of suspected brain tumor had been made. They were then on their way to Boston to consult Dr. Cushing. His visit to me was to get my recommendation for a New York oculist. On inquiring about the case, I found out she had had a bad attack of influenza a month before the onset of the eye trouble. I asked him to bring the child to my office and let me see her. I found she had some mucoid discharge in the back of her throat and some congestion in the posterior ethmoid and sphenoid region with a thickened septum. I referred her to Dr. E. S. Thomson and he reported by telephone at once that she had a double optic neuritis with 20/200 in the left eye and 20/40 in the right, and said it looked very much like a sinus condition. With this evidence and my own findings I decided to open the ethmoids and sphenoids on both sides. This I did on June 16th, doing a submucous, complete exenteration of ethmoids on both sides and opening both sphenoids. In forty-eight hours the sight in the right eye was normal and three days later the sight in the left eye, the bad eye, was normal. She has remained perfectly well ever since. This case illustrates the remarkable regenerative power of the nerve in a young patient. It also illustrates the lack of recognition on the part of the profession of these important pathological relations as this patient's sinus condition had not been suspected.

The second case was a man of 48 who had lost the sight of his left eye from an accident in boyhood. Over a year previous to the time I saw him

his vision in the right eye had begun to fail He had gone through an elaborate investigation during that time having spent several months at the Mayo Clinic and having seen many of the best specialists in the country His eye lesion was a choroiditis with recurring hemorrhages in the macular region, the vision failing somewhat after each attack He gave a history of an infection in the right antrum fifteen years before This had been irrigated three times a week for six weeks and pronounced cured During the time of this antrum infection he had run a temperature and had sweats After the onset of his eye trouble he had had this antrum irrigated several times with no discharge found and no improvement in his eye condition The x ray at this time showed some cloudiness of the right antrum The clinical examination showed practically nothing Tonsils had been thoroughly removed and on irrigation of the antrum the return flow was perfectly clear In view of the rather desperate prospects and relying on the past history of such an antrum infection I advised a radical antrum operation The oculist who sent him to me thought my evidence rather flimsy and was very sceptical of my supposition that an antrum infected fifteen years before could have anything to do with the present condition I referred to the chronicity of syphilis and remarked that other infections under some conditions could last just as long After much persuasion I was allowed to open the antrum intranasally He showed no improvement after this, in fact I thought he was worse and was more or less septic for some time I felt certain that I had merely stirred up a focus and had not removed it He went away and continued slowly to lose his vision A year later he was sent back to me by Dr DeSchweinitz His vision was then 18/200 and this time I was able to persuade him to have a radical antrum done At the operation, I found a mass of granulation tissue on the floor half an inch thick but no free pus I cleaned this out and he made a steady recovery, his vision coming back to 20/40 in two months

The third case was a young man of 26 who had suffered from frequent recurring attacks of iridocyclitis, the first attack occuring seven years previous to the time I saw him He had had his tonsils removed and this gave him a respite from the attacks for nearly three years When the attacks returned, his antra were operated on, a double Caldwell Luc being done on both sides, but he got no result and during the past year his condition had been gradually getting worse in spite of the fact that he had been sent to Arizona for three months His ethmoid sinuses had been examined by several specialists but were considered normal I examined him several times and always found slight œdema of the membrane with increased redness over the ethmoid area On the advice of Dr E S Thomson, I opened the ethmoids and sphenoids on both sides The cells had a sort of doughy consistency due to thickening of the intracellular membrane, a condition which I have observed at operations in several other cases with very few clinical symptoms His eyes began to improve immediately after the operation He has since demonstrated beyond doubt the correlation of the nasal and ocular pathology, for every time he gets a cold his eyes will show a little redness for a day or two and subside as the cold clears up This reaction has grown very feeble and the last cold he had gave no eye reaction

Infection of the middle ear rarely causes secondary foci I can recall one case where I had done a radical mastoid in which a pus pocket remained in the upper part of the Eustachian tube This became partially locked in The patient had several choroidal haemorrhages which did not clear up till a secondary operation was performed on the ear and the pus pocket obliterated

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THE INJECTION TREATMENT OF VARICOSE VEINS*

By ARTHUR M DICKINSON, M D, ALBANY, N Y

THE treatment of varicose veins by chemical obliteration appears to be a sound advance in therapy It is in reality not a new method for such procedures have been in use to a limited extent for at least fifty years Various solutions were used then, such as ferric chloride ferric sulphate combinations of iodine and tannic acid, compounds of mercury, phenol, etc Interest in this method of treatment probably began as a result of experiences in treating aneurisms with coagulants such as ferric chloride With the development of intravenous therapy, requiring injection of mercury compounds, bicarbonate solutions, saline, etc, various workers noted that the vessels used for the injection sometimes became obliterated, this stimulated investigation as a result of which the modern injection treatment of varicose veins came into being

The pathological anatomy of the condition

* Vice Presidential address read before the Albany County Medical Society Albany N Y June 22 1931

Chart showing spinal fluid changes in a case of poliomyelitis treated by forced spinal drainage

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The case of poliomyelitis seemed like an acutely fulminating case. We can not conclude that the treatment was responsible for her recovery for many cases of poliomyelitis recover without any treatment.

Forced spinal drainage should not be confused with continuous spinal drainage. Continuous

spinal drainage is of questionable value in the treatment of preparalytic poliomyelitis although it has been used successfully in certain cases of septic meningitis. The abrupt change in the cytology of the spinal fluid of the poliomyelitis case, coincident with the intravenous injection of the hypotonic solution presents further evidence that we were washing fluid through the lesions.

The improvement of the encephalitis case during the drainage was most impressive

My work with this method of treatment has convinced me that it is a safe procedure.

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BACTERIOPHAGES AS A HELP IN THE TREATMENT OF INFECTIONS IN CHILDREN*

By WARD J. MacNEAL, M.D., NEW YORK, N. Y.

From the Department of Pathology and Bacteriology, New York Post Graduate Medical School and Hospital
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SINCE the pioneer observation of transmissible autolysis of bacteria by Twort[1] in 1915 and the subsequent extension of such observations, especially by d'Herelle,[2] there has been produced an extensive literature dealing with the general subject of the bacteriophage phenomenon and its possible importance in infectious diseases. The phenomenon itself is one of peculiar interest in general biology and its observation has introduced an uncertainty in regard to minute forms of life, which has been compared to the influence of the discovery of radium upon the elementary ideas concerning molecular and atomic structure. With these more theoretical conceptions of general biology we are not at present concerned.

D'Herelle's classical example of the phenomenon may be observed as follows: Take a small amount of stool from a patient convalescing from bacillary dysentery, suspend it in broth and filter through a porcelain filter to obtain a bacteria-free filtrate. Add a drop of this filtrate to a young broth culture of the dysentery bacillus and place the culture in the incubator. In a few hours it is diffusely clouded with bacterial growth, but soon thereafter, ordinarily in eight to twelve hours, the broth becomes perfectly clear and it may no longer be possible to demonstrate the bacteria in it either by microscope or culture. A drop of this clear liquid added to a new culture of the dysentery bacillus brings about a repetition of the phenomenon and this may be repeated indefinitely. Obviously the agent which causes this solution of the bacteria is being reproduced in increasing amounts. Its precise physical, chemical or possibly biological nature is not clearly understood. It is the bacteriophage for the dysentery bacillus.

Analogous filterable agents have been found which will cause dissolution of other bacteria, such as the typhoid bacillus, the colon bacillus, the bacillus of green pus, the golden staphylococcus. In fact there is reason to think that the phenomenon may be quite general for all the bacteria and that persistent search may be rewarded by the discovery of a bacteriophage for each pathogenic microbe or at any rate for many of them. The tubes and culture dishes here shown illustrate the phenomenon as it occurs in broth cultures and in agar plate cultures of the colon bacillus and the staphylococcus.

From such examples of complete destruction of the bacteria one may gain the impression that the bacteriophage always destroys the bacteria against which it is potent. Such, however, is not the case. Frequently one may observe the apparently complete clearing of the broth culture only to have it become cloudy again after twenty or more hours because of the growth of bacteria which, although tainted by the bacteriophage, are nevertheless sufficiently resistant to it so that they continue to survive and multiply in its presence. The bacteria of such secondary growth show peculiarities of individual shape and structure and in colony form as well as alterations in virulence, which have furnished themes for an extensive literature. Furthermore, one observes that various environmental conditions influence the outcome of the struggle for existence on the part of the bacterial cells in the presence of the bacteriophage. Significant contrasts are readily obtained by incubating identical mixtures at different temperatures. In our laboratory, experiments carried out by Miss Frisbee[3] have revealed a remarkable influence exercised by the hydrogen-ion concentration of urine in the bacteriophagy of the colon bacillus in urine. The significance of these results for the treatment of infections of the urinary tract is obvious. Somewhat analogous experiments by Miss Applebaum[4] have revealed an influence ex-

* Read at the Annual Meeting of the Medical Society of the State of New York, at Syracuse, N. Y., June 3, 1931.

ercised by the presence of blood, blood serum and purulent exudates, tending to impede the action of the bacteriophage. Laboratory experimentation of this sort shows that the bacteriophage phenomenon in the body of the patient may be very different from that seen in the test tube and indicates that the environmental conditions *at the site of the infectious process* must be made favorable to the bacteriophage and unfavorable to the bacteria, if the most desirable results are to be attained in the treatment.

Final decision as to the therapeutic value of bacteriophage must rest upon the results of clinical application; not upon the results in a few instances, for we all know that some patients get well in a most surprising fashion and evidently quite without regard to our treatment, while others succumb to their disease without apparent excuse and much to our chagrin and discomfiture. This is, perhaps, more often the case in children. The value of bacteriophage will not, in my opinion, be established by those enthusiasts who would exploit it as a panacea nor will the bacteriophage be finally discredited by those careless and inexpert workers who apply it without intelligent regard to its limitations and without skill in its application, much harm though they may do. The decision in regard to bacteriophage will come rather from the work of those patient students who are willing to make a careful study of the clinical application of this agent to disease under various conditions and by various technical methods and who are willing to subject to critical scrutiny their results, both favorable and unfavorable.

Our attempts in the therapeutic application of bacteriophage have been directed especially to infections with the colon bacillus and the staphylococcus.

In entero-colitis and dysenteries the use of bacteriophage, active against various enteric organisms, the dysentery and paradysentery bacilli and the colon bacillus, administered by mouth and by colonic irrigation, appears to exercise a favorable influence on the course of the disorder. From our limited experience we are convinced that it does no harm in these cases and we believe there is here a wide field of usefulness. Bacteriological examination of the stools should be carried out in conjunction with the treatment. D'Herelle is especially enthusiastic about the successful use of bacteriophage in the intestinal infections, particularly the dysenteries.

In infections of the urinary bladder and renal pelves with colon bacilli we have had, in collaboration with Dr. Joseph F. McCarthy, Dr. J. S. Ritter and Dr. H. D. Furniss, a somewhat extensive and varied experience. Pyelitis rarely leads to death. Spontaneous recovery is not unusual. In many instances the bacterial infection persists for years with only occasional periods of serious discomfort to the patient. The goal of bacteriophage therapy should be complete eradication of the bacteria from the urinary tract, not a mere symptomatic relief. Obviously an intimate bacteriological study of the urine must be carried out as a control of the treatment.

In one instance, Dr. Ritter, by a single instillation of specific bacteriophage through ureteral catheters into each renal pelvis of a girl of eight years, was able to eradicate completely the colon bacilli, so that subsequent urine specimens were bacteria free. In other patients, however, this method of applying the bacteriophage has given less fortunate results and those of us who have been concerned with the laboratory part of this study have come to believe that elaborate instrumentation of the urinary tract is undesirable during treatment with bacteriophage, not only because of the risk of infection with extraneous bacteria, but also because the slight injuries to the epithelial lining of the urinary passages appear to favor the continuance of the original bacterial infection even in the presence of a potent bacteriophage. Greater success has been attained by somewhat less dramatic procedure. Briefly, the patient is put to bed on a very regular light diet with abundant fluid intake. The urine, collected by aseptic technic, without catheter, each morning and evening, is at once tested to determine its hydrogen-ion concentration. The reaction of the urine is brought close to the neutral point by oral administration of a drug with residual alkali such as potassium citrate, 5 to 20 grains in watery solution, every four hours. Practically always the urine is naturally acid. If it is too alkaline, this can be corrected by oral administration of acid phosphate or ammonium chloride. Two or three days may be required to get the urine nearly neutral. The patient nearly always becomes comfortable under this regimen and there is no pressing need for hasty application of the bacteriophage, which is, meanwhile, being developed to a high potency against the patient's bacterial strain by serial filtrations in the laboratory. When the bacteriophage is finally ready and the urine is remaining nearly neutral, pH 6.6 to 7.2, one begins with subcutaneous injection of bacteriophage, 0.5 c.c., 1.0 c.c. and 2.0 c.c. on successive days. On the second and third of these days one introduces into the bladder, by rigidly aseptic and gentle technic, through a small soft catheter, about 10 c.c. of the bacteriophage preparation diluted with 100 c.c. of sterile saline solution and the patient is encouraged to retain this liquid as long as may be convenient. Subsequently the patient remains on the regular diet with abundant fluids and regulation of reaction of the urine as before. Bacteriological examination of the urine should be done 48 hours after the last instillation, for bacteria and for presence of bacteriophage; and again five days later. Ordinarily a few living bacteria still persist in the bladder urine. One now introduces into the bladder about 100 c.c. of sterile distilled water, to which has been added 10

c c of one per cent silver nitrate This is repeated after 24 hours Other silver preparations may be used if desired Two days after the second silver treatment the bacteriological examination of the urine is made; the patient is allowed to be up and the alkali therapy is changed over to acid phosphate coupled with administration of methenamine during a convalescent period of two to three weeks A final bacteriological examination should show sterile urine

More recently we have had occasion to employ the bacteriophage for the colon bacillus by intravenous injection, with successful outcome in one case of blood stream infection in conjunction with pelvic thrombo-phlebitis in a young woman The chills and febrile responses to intravenous bacteriophage therapy are so disturbing that we have so far, employed this method only in desperate cases and not in the infections restricted to the urinary tract It may, however, prove useful there also

In wounds, accidental or surgical, infected with colon bacilli alone or mixed with staphylococci, local application of wet dressings impregnated with bacteriophage potent against one or both these organisms have frequently exercised a remarkably favorable influence upon healing

Osteomyelitis, so frequently due to infection with *Staphylococcus aureus* has been treated with the aid of bacteriophage in two ways In the patient with suppurating bone lesions, the surgical removal of sequestra and sauceration of the lesions has been followed by the introduction of the bacteriophage for staphylococcus vaseline dressing and immobilization by plaster This method, which has been described by Patterson and Albee,[5] has been followed by favorable clinical progress in a number of patients Doctor Albee has expressed with enthusiasm his conviction that the bacteriophage is a distinct aid in chronic osteomyelitis In the earliest stage of the disorder, when the blood stream yields positive cultures of the staphylococcus and the localization of the skeletal lesions still remains indefinite, the intravenous injection of the bacteriophage appears to halt the progress of the lesions in the bones In a boy of 15 years with positive blood culture and severe localized pain in the extremities, treated in this way, the osteomyelitis failed to reach a surgical stage although the patient succumbed to a pericarditis after a month

Furuncles and carbuncles of the skin and subcutaneous tissue offer a field for bacteriophage therapy in which the methods of application are already fairly well standardized and the results good beyond question Cipollaro and Sheplar[6] are presenting results in this field at the meeting of the American Medical Association at Philadelphia, June 11, 1931 A baby, male, aged 10 months, on the service of Dr De Sanctis, treated in collaboration by Dr J M Sloan, has not been included in the series of Cipollaro and Sheplar This baby was severely ill with large carbuncles, involving practically the entire area of both buttocks and presenting multiple pin-point apertures in the skin, on May 5, 1931 The general condition was so poor that we began with very minute dosage, 1 c c of a 1 10 dilution of staphylococcus bacteriophage prepared in a protein-free asparagin medium This was injected through a fine needle into the subcutaneous tissue near the most prominent areas on the right buttock Culture taken at this time yielded *Staphylococcus aureus* which proved to be quite susceptible to the bacteriophage preparation *in vitro* Immediate improvement in the general condition and behavior was noted by the nurse Locally, however, the buttock appeared more indurated the next day Local injections of increasing amounts of bacteriophage up to a final dose of 2 c c of the undiluted asparagin preparation were given on May 6, 7 8, 9, 11 and 12 Cultures from two openings on May 12 yielded a slight growth of *Staphylococcus aureus* from one, and only an air-contaminating large rod from the other On May 14 the lesions on the buttocks were practically healed but on May 16 a sole remaining small furuncle was drained through a small opening Meanwhile a small furuncle which appeared on left little finger on May 6 1931, was injected with a minute drop of bacteriophage and it healed promptly and on May 7 another which had just appeared on plantar surface of right middle toe was effectively treated in a similar way The photograph of the baby's back (Figure 1) taken on May 22 gives

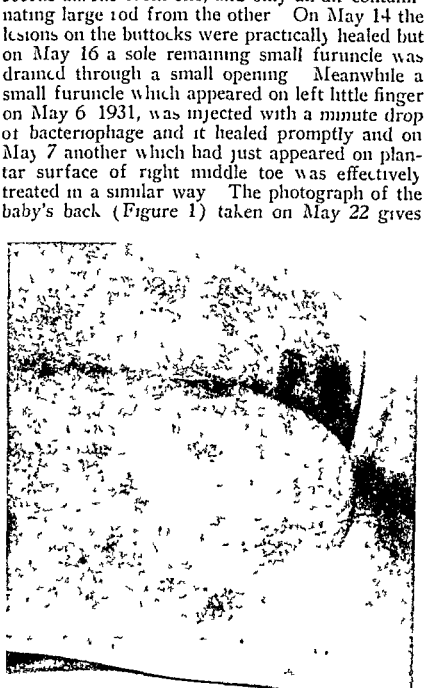


FIGURE 1

Photograph taken on May 22, 1931, showing condition of buttocks after bacteriophage treatment May 5 to May 12

some idea of the area originally involved and the absence of scars. Pigmented spots mark the sites of the minute spontaneous openings in the skin.

Infection of the blood stream with *Staphylococcus aureus* and the less common septicemia due to the colon bacillus present therapeutic problems which challenge our best efforts. When the septicemia has taken origin from an accessible superficial wound we have employed the bacteriophage in copious amounts introduced into the wound itself along with subcutaneous injections adjacent to the wound and at a distance. Two adult patients treated in this way have recovered from the blood stream infection and one of them is at work in apparent good health. The other remains, after a year, disabled by persistent osteomyelitis of a thoracic vertebra, which appears to represent a residual metastatic localization of the staphylococcus which was in the blood stream. In another patient, previously mentioned, a young woman with pelvic thrombophlebitis and colon bacillus septicemia following abortion, the bacteriophage for colon bacillus was injected intravenously. The reactions were severe but the blood stream became sterile and the pelvic condition slowly subsided with complete recovery of the patient.

In septicemias of children our experience has been somewhat less fortunate. A girl of 20 months with multiple abscesses of the scalp, temperature 104 and rasping precordial murmur, was found to have a blood stream infection with *Staphylococcus aureus*. The bacteriophage was applied to the open lesions on the scalp and by subcutaneous injection. For a time there was encouraging clinical improvement, but a fatal termination resulted after two weeks. The pericardial sac was greatly distended with thick pus, in which the *Staphylococcus* was still found by culture. A school boy of 15 years, previously mentioned, was admitted on January 28, 1931, with temperature 104.6°, pain in right hip, left ankle and in arms, petechial hemorrhages in the skin, and friction sound over the heart. The blood culture yielded abundant *Staphylococcus aureus*. Intravenous treatment with bacteriophage asparagin preparation was begun on January 31 and continued to February 19, 1931. The total amount of undiluted asparagin bacteriophage injected intravenously during this time was 987 c.c. For a time there seemed to be clinical improvement. The blood culture taken on February 2 developed very slowly and was positive only after 48 hours. Subsequent blood cultures were negative. The pains in the extremities improved and *x*-ray examination disclosed no evidence of bone lesions. On the other hand the pericardial sac became more and more distended. Pericardial tap on February 19 yielded a thin sero-purulent fluid in which staphylococci were found by culture. The patient died on February 24. In both these patients the pericardial localization was evidently present before the bacteriophage therapy was initiated. Our experience in septic pericarditis, therefore, has been entirely without success so far. In the future we have in mind to try an early introduction of bacteriophage into the pericardial sac in conjunction with early tap for drainage.

What has been here presented represents a report of work in progress and not a finished investigation. Your Chairman, Dr. Pease, thought that it might interest you. He has had opportunity to see some of the work. We are continuing and hope, with greater experience, to be able to utilize the bacteriophage phenomenon in an increasingly effective way.

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THE PLACE OF THE OTORHINOLARYNGOLOGIST IN THE TREATMENT OF EYE DISEASES*

By E. ROSS FAULKNER, M.D., NEW YORK, N. Y.

THE relation of certain eye conditions to focal infections in the nose and throat has been the object of considerable study and discussion in recent years. The observation that such a correlation exists goes back many years, but in the beginning there was only an occasional report with rather vague suspicion as to the exact correlation. Before the days of the Wasserman

* Read at the Annual Meeting of the Medical Society of the State of New York, at Syracuse, N. Y., June 2, 1931.

test, no doubt many cases were diagnosed as syphilis which were really due to a focal infection; and here I wish to note how closely the lesions of a focal infection can imitate syphilis, not only in vascular degenerations of the eye but also in other parts of the body. The typical gumma is never found to be due to a pus focus but many degenerative changes undoubtedly can be ascribed to a residual focus of infection from the pus organisms, such effects being often secondary to absorption of toxins from nasal or throat infection. The proximity of the eye to the intranasal sinuses renders certain inflammatory processes closely correlated and both structures may be involved at the same time. Thus an ethmoiditis may be associated with an orbital abscess or cellulitis and the pathology may be more evident in the orbital complication. This is one type of case which has passed from the realm of ophthalmology to that of rhinology in the treatment, though in the management of the case cooperation between the two specialties is most desirable. They were formerly treated almost entirely by the oculist and treatment was an immediate operation. The original cause, which is practically always a sinusitis, was left alone. Though I know of no statistics on the subject I am told that the results were very bad, with a high mortality from meningitis. Later on with the recognition of the fact that the condition was due to involvement of the ethmoid and frontal cells with a rupture into the orbit the cases were treated by the sinus surgeon. They also made the mistake of being overzealous on the operative side and usually resorted to an immediate operation, doing a more or less radical sinus operation in the acute stage. They also achieved an abnormally high mortality. I regret to say that many rhinologists still regard these orbital blowouts as an occasion demanding immediate surgical procedure. During the past twelve years I have seen many of these cases, probably an average of four or five a year, and I have come to treat them much more conservatively. My experience would compel the conviction that one can wait several days on practically all of them and that not more than twenty-five per cent of them will need to be operated on at all. Treatment by shrinking up the nose several times a day and applying suction will always be worth a trial and in the majority of cases will succeed. If it does not succeed, the operation will be much safer when the process becomes more localized and the virulence of the infection has decreaseed. I reserve operation for those cases where no drainage can be established through the nose, where pain and temperature are increasing with more marked exophthalmos and fixation, or where vision is failing steadily from pressure on the optic nerve. When surgery is attempted a certain minimum should be done. This will mean an external incision with exenteration of the ethmoids to provide free drainage into the nose. A drainage tube inserted into the frontal through an opening in the floor and brought out externally will provide safe drainage of the frontal sinus. A subsequent operation should be done to clean out the frontal and close the external wound. Cases which were not operated on have shown no tendency to recurrence and *x*-rays taken afterwards have showen scarcely any trace of the original infection.

A simple mucocele may cause pressure on the eyeball, producing external displacement and proptosis. This should be dealt with by an external operation and will usually necessitate an exenteration of the entire ethmoid labrinth.

We will now consider the various intrinsic diseases of the eye which may be associated with focal infections in the nose and throat. Perhaps, nearly all oculists belive that infection of the tonsils or teeth may act as focal infections and cause such conditions in the eye as optic neuritis, retinitis, choroiditis, iridocyclitis, episcleritis, and keratitis, but when the subject of sinuses arises, we will find considerable variation of opinion. You may occasionally find an oculist of repute who will deny that sinusitis ever causes any of the inflammatory diseases in the eye itself, or some rhinologist who will hold the same view and even pronounce a negative finding on examination of sinuses where there is ample evidence that distinct pathology is present. The discrepancy in opinion seems to arise from the fact that many of the sinus infections which produce eye complications are of rather a low-grade, hyperplastic type without pronounced symptoms. The easily recognized form of sinusitis wth a purulent discharge is not usually associated with eye lesions. That this type may occasionally cause such complications, however, does occur, though I think all observers regard it as the exception rather than the rule. The diagnosis of sinusitis of the milder type presents considerable difficulty and when the oculist has excluded every possible known cause and "passes the buck" to the rhinologist to make a positive statement in regard to the condition of the sinuses, the latter often finds himself in somewhat of a dilemma. His first function should be to make sure that other causes have been eliminated. If there are any bad teeth, these should be extracted. Tonsils showing any suspicion should be removed. If there is an obvious sinusitis and a bad history of repeated head infection, treatment should be initiated at once. In the obscure cases repeated examinations with the pharyngoscope should be made and the best possible sinus *x*-ray obtained as soon as possible. A positive *x*-ray will be good evidence but should be supplemented by clinical findings. A negative *x*-ray may not be the final answer, as one may occasionally find some pathology by repeated examination which the *x*-ray has failed to detect. Bad anatomy in the nose,

such as a large spur on the septum with enlarged middle turbinates, producing bad ventilation of the ethmoid region, will be a predisposing factor, always worth noting. A slight thickening of the membrane over the posterior ethmoid and sphenoid region with a shiny, oedematous appearance is often present, or the membrane may appear much redder than normal. The nasopharynx will often show a granular tract on one or both sides extending under the posterior pillar. This will indicate a chronic discharge from the sinuses and although scarcely noticed by the patient will often be the most positive evidence of sinus infection that one is able to obtain. Once a tentative diagnosis has been made, treatment will usually be surgical. If the eye lesion is not severe and if the oculist thinks there is no danger in a delay of a week or two, intranasal treatment may be tried and the eye carefully watched. In retrobulbar neuritis it is not usually advisable to wait very long, but in young subjects whose regenerative powers are very strong a good result may be obtained even though the process has been going on for some time. In older patients it is important to remove the cause as quickly as possible and one should not wait very long before resorting to surgery. In the series of 44 cases reported by the late Dr. E. S. Thomson[1], in which the various eye affections were associated with infected sinuses and tonsils, operative procedure was carried out almost as soon as the diagnosis was made and the earlier the operation the better the results. Dr. Thomson had a large experience in this field and his conclusions were that sinus disease caused iritis, cyclitis, retinitis, and choroiditis in almost as great frequency as it caused optic neuritis. He also stated that the diagnosis of the casual relationship is so difficult for the rhinologist in many cases that it must remain for the ophthalmologist to decide when the sinus operation should be done.

Infection of the lacrymal sac may be secondary to nasal infection and will not respond to treatment till the intranasal condition has been treated. Obstruction in the nasal duct can also occur from inflammation inside the nose extending into the duct. Occasionally one sees the opening of the duct in the inferior meatus occluded from a swollen or polypoid inferior turbinate. Removal or cauterization of a part of the turbinate may help this condition but the results are not always satisfactory. The West operation for removal of an old chronic, suppurating sac by the intranasal route is a well-devised procedure but is rather difficult technically and unless thoroughly done is not likely to provide much benefit to the patient.

When the tonsils are suspected as a source of infection the diagnosis can usually be made with quite a positive degree of certainty. Any tonsil containing thin, liquid pus which can be demonstrated on slight pressure or suction is an obvious focus and should be removed at once if eye symptoms are present. There is, however, a possibility of a tonsil being the cause of mischief where the infection is not so obvious. One may find it very difficult to demonstrate any pathology in a small, buried tonsil stump and yet it may be the real source of the infection. I have advised the removal of such tonsils on speculation on several occasions and found much more than I had suspected. A history of an attack of tonsilitis at any time during the patient's lifetime may be all the evidence obtainable in some cases.

The late Dr. Leon White[2] who did a great deal of work in the relation of sinusitis to eye infections came to the conclusion that tonsils and teeth were more often the original cause of such infections than the sinuses. My experience has been more with the cases with sinus pathology but the cases from other causes may have been sent to other specialists so I cannot draw conclusions in regard to their relative frequency.

I now wish to report briefly three cases which will best illustrate the observations of this paper:

The first was a case of bilateral retrobulbar neuritis. A girl aged 13 years, brought to me the 15th of June, 1926, had started to lose vision in April in the left eye, and three weeks previous to the time I saw her the right eye began to fail. Her father was a doctor and an extensive investigation had been made in a large city. Finally, a diagnosis of suspected brain tumor had been made. They were then on their way to Boston to consult Dr. Cushing. His visit to me was to get my recommendation for a New York oculist. On inquiring about the case, I found out she had had a bad attack of influenza a month before the onset of the eye trouble. I asked him to bring the child to my office and let me see her. I found she had some mucoid discharge in the back of her throat and some congestion in the posterior ethmoid and sphenoid region with a thickened septum. I referred her to Dr. E. S. Thomson and he reported by telephone at once that she had a double optic neuritis with 20/200 in the left eye and 20/40 in the right, and said it looked very much like a sinus condition. With this evidence and my own findings I decided to open the ethmoids and sphenoids on both sides. This I did on June 16th, doing a submucous, complete exenteration of ethmoids on both sides and opening both sphenoids. In forty-eight hours the sight in the right eye was normal and three days later the sight in the left eye, the bad eye, was normal. She has remained perfectly well ever since. This case illustrates the remarkable regenerative power of the nerve in a young patient. It also illustrates the lack of recognition on the part of the profession of these important pathological relations as this patient's sinus condition had not been suspected.

The second case was a man of 48 who had lost the sight of his left eye from an accident in boyhood. Over a year previous to the time I saw him

his vision in the right eye had begun to fail He had gone through an elaborate investigation during that time having spent several months at the Mayo Clinic and having seen many of the best specialists in the country His eye lesion was a choroiditis with recurring haemorrhages in the macular region, the vision failing somewhat after each attack He gave a history of an infection in the right antrum fifteen years before This had been irrigated three times a week for six weeks and pronounced cured During the time of this antrum infection he had run a temperature and had sweats After the onset of his eye trouble he had had this antrum irrigated several times with no discharge found and no improvement in his eye condition The x ray at this time showed some cloudiness of the right antrum The clinical examination showed practically nothing Tonsils had been thoroughly removed and on irrigation of the antrum the return flow was perfectly clear In view of the rather desperate prospects and relying on the past history of such an antrum infection I advised a radical antrum operation The oculist who sent him to me thought my evidence rather flimsy and was very sceptical of my supposition that an antrum infected fifteen years before could have anything to do with the present condition I referred to the chronicity of syphilis and remarked that other infections under some conditions could last just as long After much persuasion I was allowed to open the antrum intranasally He showed no improvement after this, in fact I thought he was worse and was more or less septic for some time I felt certain that I had merely stirred up a focus and had not removed it He went away and continued slowly to lose his vision A year later he was sent back to me by Dr DeSchweinitz His vision was then 18/200 and this time I was able to persuade him to have a radical antrum done At the operation, I found a mass of granulation tissue on the floor half an inch thick but no free pus I cleaned this out and he made a steady recovery his vision coming back to 20/40 in two months

The third case was a young man of 26 who had suffered from frequent recurring attacks of iridocyclitis, the first attack occuring seven years previous to the time I saw him He had had his tonsils removed and this gave him a respite from the attacks for nearly three years When the attacks returned, his antra were operated on, a double Caldwell Luc being done on both sides, but he got no result and during the past year his condition had been gradually getting worse in spite of the fact that he had been sent to Arizona for three months His ethmoid sinuses had been examined by several specialists but were considered normal I examined him several times and always found slight œdema of the membrane with increased redness over the ethmoid area On the advice of Dr E S Thomson I opened the ethmoids and sphenoids on both sides The cells had a sort of doughy consistency due to thickening of the intracellular membrane, a condition which I have observed at operations in several other cases with very few clinical symptoms His eyes began to improve immediately after the operation He has since demonstrated beyond doubt the correlation of the nasal and ocular pathology for every time he gets a cold his eyes will show a little redness for a day or two and subside as the cold clears up This reaction has grown very feeble and the last cold he had gave no eye reaction

Infection of the middle ear rarely causes secondary foci I can recall one case where I had done a radical mastoid in which a pus pocket remained in the upper part of the Eustachian tube This became partially locked in The patient had several choroidal haemorrhages which did not clear up till a secondary operation was performed on the ear and the pus pocket obliterated

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THE INJECTION TREATMENT OF VARICOSE VEINS*

By ARTHUR M DICKINSON, M D, ALBANY, N Y

THE treatment of varicose veins by chemical obliteration appears to be a sound advance in therapy It is in reality not a new method for such procedures have been in use to a limited extent for at least fifty years Various solutions were used then such as ferric chloride ferric sulphate combinations of iodine and tannic acid compounds of mercury, phenol, etc Interest in this method of treatment probably began as a result of experiences in treating aneurisms with coagulants such as ferric chloride With the development of intravenous therapy, requiring injection of mercury compounds, bicarbonate solutions saline etc various workers noted that the vessels used for the injection sometimes became obliterated, this stimulated investigation as a result of which the modern injection treatment of varicose veins came into being

The pathological anatomy of the condition

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of varicose veins is interesting and a brief study of it is profitable as an aid to diagnosis and treatment. The veins of the lower extremity consist of a superficial and deep group. The internal saphenous vein, which is part of the superficial group, commences on the inner side of the foot and passes upward along the inner side of the leg; at the knee it dips behind the internal condyle and continues up the inner aspect of the thigh to the saphenous opening in the fascia lata, to terminate in the femoral vein about one and one-half inches below the inguinal (Poupart's) ligament. In its course upwards this vein receives tributaries from the leg and thigh. The internal saphenous vein is the larger of the two superficial veins and so is more commonly the site of varicosities. The external saphenous vein runs upward from the foot on the lateral aspect of the leg to the popliteal space where it empties into the popliteal vein. The deep veins of the leg follow the arteries and require no further description. The superficial and deep veins of the leg are connected by the perforating or communicating veins, six to eight in number. All of the veins, superficial, deep and perforating, are provided with valves. Under normal conditions. venous blood flows upward through both superficial and deep veins and the communicating veins carry blood from the superficial to the deep group only. The deep veins are well supported by muscle and fascia so rarely become varicose; the superficial veins, on the other hand, have little support except the overlying skin and so become varicose more readily. The causes which may operate to produce varicosities are many: congenital weakness, general loss of tone, pelvic tumors, pregnancy, strenuous physical work, tight garters, etc. It must be remembered further, that while the veins of the leg have valves to check the effects of back pressure, the abdominal veins have no valves and so any increased venous pressure from within the abdomen must be borne by the valves of the internal saphenous vein; when these become incompetent, the column of blood from above has free access to the saphenous system. As the etiological factor operates, whatever it may be, it causes increasing back pressure in the veins below. These gradually dilate and become tortuous, forming some varicosities. Then the valves become incompetent and more blood is forced down into veins below. The process continues until finally the deep veins bring the blood up only to have it spill back, downward through the internal saphenous. The superficial veins become more dilated and tortuous; there is stagnation of the blood and the tissues become edematous. As a final result, rupture of one or more varicosities may occur, pigmentation of the skin takes place due to deposit of hemoglobin in the tissues, ulcers form and we have the typical picture of a severe case of varicose veins.

The modern surgical treatment of varicose veins has for its purpose the removal of the internal saphenous vein in part or in entirety. The most popular method is probably that of stripping the vein with a vein stripper; this is followed by dissection and excision of venous branches. The actual technic varied in different hands but did require multiple incisions along the course of the veins. In addition many operators ligated and cut the internal saphenous vein just distal to its junction with the femoral vein in order to prevent back pressure from the abdominal veins.

The efficiency of any new method of treatment must be judged by comparison with former methods. Comparison of results in the treatment of varicose veins by surgical removal and by injection must take into consideration, the mortality rate, morbidity, end results and the all-important economic factor. McPheeters has recently published statistics of a comparative nature. In a series of 6771 operated cases, death resulted from embolism in .53 percent of cases, and post-operative deaths from other causes occurred in .41 percent, making a total mortality rate of .94 percent. On the other hand, in a series of 53,000 cases treated by injection, the mortality rate was .00754 percent or just about one-seventieth as great. The case operated upon remained in hospital an average of 15 days and did no work for 35 days. Patients treated by injection have no hospital confinement and may continue with their work during treatment. The danger of post-operative infection of the wounds after surgical removal of veins is real as contrasted with the minor danger of infection or slough after injection. Following operation, recurrences are noted in five percent at the end of one year and in 19 percent at the end of five years. Recurrences after injection treatment are placed at 10 percent in one year. However, recurrence after injection treatment only requires more treatment. Recurrences after operative treatment required further surgery or perhaps went untreated. Careful comparison of these two methods of treatment of varicose veins appears to indicate the superiority of the injection method.

Two tests which are of value in examining the patient with varicose veins are the Trendelenburg test and the Perthes. The Trendelenburg test is based on the rapid filling of a varicose vein by back pressure. The patient's leg is elevated and the blood allowed to drain out of the superficial veins; a tourniquet is applied high around the thigh. The patient then

stands up, if the superficial veins fill rapidly from below upwards, it indicates incompetency of the communicating veins, if they fill rapidly only after removal of the tourniquet, it indicates incompetency of the valves of the long saphenous vein The Perthes test can be used to demonstrate the competency of the communicating veins The patient stands and the superficial veins are allowed to fill Then a tourniquet is applied to the thigh and the patient takes some leg exercises If the varicose veins become smaller, the competency of the communicating and deep veins is established Competency of the deep veins must be established before any form of treatment of the superficial group is begun for if one return channel is blocked it would be unwise to attempt blocking of the only other return route Competency of the communicating veins is merely an index of the extent of damage already done by the back pressure

Contraindications to the injection treatment of varicose veins are few Before commencing such treatment, a general physical examination should be made with the idea especially in mind of eliminating possible general causes for the symptoms which appear to be due to varicose veins If there is obstruction to the deep veins as demonstrated by tests or as manifested by constant swelling of the extremity, we should not recommend treatment A history of prolonged post operative swelling of the extremity or of phlegmasia alba dolens should also put one on his guard Acute infection of the veins (phlebitis) either present or recent, is a positive contraindication Patients with Buergers disease or Raynauds disease are also to be avoided

The pathological results of the injection of sclerosing solutions into veins are interesting Within a short time after injection, there is formed within the vein, a thrombus of varying length and quite firmly attached to the vessel wall The vein is appreciably decreased in size and contains no free blood There is considerable perivascular reaction Later the entire mass becomes contracted into a cord-like scar without any lumen

Various solutions have been used in the injection treatment of varicose veins Of these the more popular are sodium chloride, sodium salicylate, dextrose, quinine and urea and combinations of some of the above We have been using sodium salicylate in 30, 40 and 50 per cent solution and prefer it to the others

A few points about the actual technic of treatment require explanation The needles used for injection are of rustless steel, 20 gauge, ¼ of an inch in length and with a short bevel This seems to be the most satisfactory type of needle although other types may be used The short bevel aids materially in decreasing the hazard of penetrating the farther wall of the vein Any good 5 or 10 cc syringe will do although one with an off set tip is much easier to use An easily adjustable tourniquet is a very essential part of the equipment Now as to the actual technic The patient stands and a tourniquet is applied to the area above the veins to be injected, then the patient lies down The veins to be injected are painted with tincture of iodine and then the stain removed with alcohol The needle is then inserted into the vein and the blood aspirated and discarded This procedure is facilitated by a two way valve, although it may be accomplished by removing and emptying the syringe The injection is then commenced If the patient has immediate pain, it is an indication that the solution is being injected outside of the vein In such event a local slough will develop unless the area is quickly injected with some normal saline to dilute the sclerosing solution If the needle is in the vein correctly there will be no pain until toward the end of the injection when the patient will complain of cramps in the extremity lasting about 30 seconds Following withdrawal of the needle firm pressure is maintained on the vein for two or three minutes to keep the vein walls collapsed, this intensifies the sclerosing action of the solution injected Then the tourniquet is removed In about ten minutes the patient is allowed to get up and go on Usually we apply a firm dressing to the injected area which is worn for 24 hours Two or three separate varicosities may be injected at one treatment In using sodium salicylate solution, there is a limit to the amount that can be injected with safety at one sitting We rarely use more than 5 cc of a 40 percent solution at one time In injecting small thin walled veins, the 30 percent solution is used, for thick walled veins the stronger solutions are used Treatments may be given at 4 to 7 day intervals, usually it takes 4 to 6 treatments to each leg to produce a cure The first treatments are usually given in the region of the knee, later treatments are given below and above this In cases of very severe varicosities where there is absolute incompetency of the valves of the long saphenous, ligation of the saphenous vein at its junction with the femoral vein is to be done

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PSYCHOPATHOLOGY AND PSYCHOTHERAPY IN THE NEUROSES AND PSYCHOSES*

By A. A. BRILL, M.D., New York, N. Y.

ALL sorts of ideas crowd themselves into one's mind when one thinks of psychopathology and psychotherapy. The ideas naturally revolve around one's self, for in one's own mind, in one's sanctum sanctorum, everything is ego-centric. The thoughts which thus present themselves must perforce be somewhat censored, or better, sorted, for they are to be presented to the general practitioner in whom this subject is not as affectively endowed as it is in those who are, so to speak, forever steeped in it. I have lived in an atmosphere of psychopathology and psychotherapy for exactly twenty-eight years, and I find myself, as it were, at home therein, while the general practitioner has always considered these subjects more or less alien to himself and has looked upon them with an awry eye. His training precludes the acceptance of structures that he cannot see, at least with the microscope, and although the times are changing in this respect, the general practitioner still experiences an uncanny, nay comical feeling when he is confronted with psychopathological material. Some time ago, a very prominent pediatrician referred to me an idiot child with a note, which read: "I am referring this case to you for a psychoanalysis"! From the emotional display of the parents I could see that all their former despair of being the progenitors of a defective child was dissipated with the hopeful note from this learned physician. They felt sure that a psychoanalyst would give this child a new brain. This is the tragic part of my story; now comes the comical part of it, at least for the prominent occulist in question. This well-known professor of ophthalmology referred to me a middle-aged man with the note that the patient was suffering from hysterical blindness and that he was sure that I would cure him. Somehow, the patient did not impress me as one suffering from a psychic disturbance, but coming as he did from a great authority, I immediately dismissed my mental reservations. However, after taking the patient's history and examining him neurologically, I found that he was suffering from tabes dorsalis. "Is it possible that Dr. X. made such a gross diagnostic error," I asked myself, "Has he examined this patient's eye grounds?" I darkened the room and applied the ophthalmoscope and found that the patient had a bilateral optic atrophy.

I felt quite sensitive when I began to speak to this ophthalmologist over the 'phone; but to my surprise when I finally told him my findings, he burst out laughing, I could not quite see the joke. He said that he knew all about the atrophy, but hated to tell it to the patient. He did not wish to tell it even to me because he feared that my psychotherapeutic approach would thereby become impaired. He thought that if I knew that the patient was hopelessly blind, my treatment would lack the proper spirit and the patient would not be benefited by me. His logic was truly bewildering. It recalled the man who borrowed a kettle and when reproached for returning it damaged said: "In the first place I never borrowed any kettle, secondly it had a hole when I got it, and thirdly it was in perfect condition when I returned it." Thus far, I could not repay my ophthalmologist in his own coin, for even if I could find a patient with a glass eye, whom I could send to the Professor to be treated, let us say for glaucoma, the patient would have to know about it.

I could add many more experiences of this kind to show that the average physician still looks upon psychotherapy with the same scepticism and irreverence that Benjamin Franklin entertained for mesmerism over one hundred and fifty years ago. Franklin, as you know, was a member of the committee appointed by the Academy of Science of Paris to investigate the reputed cures of Mesmer. After a thorough investigation the committee reported that the cures were genuine, but that the effect was due to the imagination of the patient, and that the subject was not worthy of further scientific investigation. However your attitude must be different; otherwise you would not have asked three psychopathologists, all votaries of psychotherapy, to come here and tell you about it. As I happen to have played some part in the development of psychopathology and psychotherapy in this country, I cannot do better than follow my own experience with these subjects from the time I became an interne in the Central Islip State Hospital in 1903 until the present. For, it is my opinion that prior to this date very little interest was displayed by the average physician in either of these subjects. You will, I hope, therefore, forgive me if I inject myself or rather my own experiences into this talk.

But, let us formulate or rather define the subjects under discussion. Psychopathology, which I would prefer to call here psychiatry in the broad sense, is that science which treats of the study and treatment of abnormal mental conditions, while psychotherapy is that mode of therapeutic procedure which treats neuroses and psychoses by psychic means. Psychopathology is thus a branch of clinical medicine, while psychotherapy is a healing method. (Cf. Hans W. Maier: Psychiatrie und Psychotherapie, *Schweizerischen Mediz. Wochenschrift,* 58, Jahrgang, 1928.)

Nowadays, there is no difficulty in obtaining

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physicians for state hospital service Most of the colleges and medical schools are now teaching medical psychology and psychiatry and the subjects are presented in a vivid and interesting manner, so that the students become interested in the subjects and attracted to them even before they reach hospital age For some reasons I have always been interested in the study of the mind, but my experiences with psychology and psychiatry while I was an undergraduate and a medical student were not conducive to draw me to the study of psychopathology In order to understand the normal or abnormal workings of the mind one must come in contact with human beings, but up to within recent years the academic psychologists were sort of clock makers, they spent most of their time measuring the sense perceptions, they taught us nothing that could be applied to the actual workings of the mind Nor did the medical schools teach us much psychiatry I believe I heard only a few lectures on psychiatry during my senior year Were it not for the fact that my professor of psychiatry accidentally discovered me and urged me to enter this field I probably would have gone into another specialty Thus, my interest in psychiatry started with suggestion, which is a human relationship, the professor was nice and friendly, so for his sake I overcame all objections to the disreputable name of the insane asylum, and all that went with it

It was my fortune to come into the state service when the New York State Hospitals entered a new epoch in psychiatric development It was shortly after Dr Adolph Meyer became the director of what is now the Psychiatric Institute and through his indomitable perseverance he converted the old insane asylums into psychiatric hospitals There I have learned much psychopathology, I mean gross and microscopic psychopathology, and when I reflect retrospectively on all that has happened since then in psychiatry, and attempt to condense it for you in a few sentences, I can say that many of the so called new discoveries now belong to what Hans W Mayer would call "brain mythology" We know for example that dentistry and surgery cannot cure insanities, but that we are justified in studying the relations of the vegetative nervous system to the inner secretions, especially to our affectivity, and we can hope that bio chemistry will explain some of the enigmas of the psychoses There is only one thing that I have learned in these years and this is *Some psychopathological disturbances may be explained in the future by somatic influences though at present we know very little about them, but I am absolutely sure that the psyche participates in all organic disturbances and that most of the psychopathic ailments can be diagnosed, explained, and cured only by psychic modes of procedure*

Perhaps it will interest you to know how I came to this cognition I am presumptuous enough to tell you that I made good use of the material at my disposal in the hospital But, after a few years the monotony of descriptive psychiatry began to pall on me I became tired first of my neuro pathological work, it was so deadly, and after a few years of clinical work, that, too, lost its attraction The patient was diagnosed, classified and his future psychic health depended on himself If he was a manic-depressive he would recover from the attack, if he was a schizophrenic he might improve only to a certain degree Everything was so hopeless and uninteresting It was then that I began to read about hypnotism and other psychotherapeutic methods Hypnotism was the form of psychotherapy then in vogue so I devoted most of my reading to this subject I was fascinated when I read Forel, Loewenfeld, Charcot and others I was interested when I read that psychotherapy is as old as mankind, that it was employed by primitive races as well as in the medicine of antiquity I read abstracts of Mesmer's *"De Planetarium Influxu,"* and followed mesmerism to hypnotism, and suggestion My heroes were Mesmer, Braid, Liebault, Richet Bernheim Charcot, Pierce, and our own Morton Prince and Boris Sidis, names of great psychopathologists and psychotherapists I began to practise hypnotism and suggestion and obtained results good enough to encourage me to go on I had no hope of curing the psychotics, but there were plenty of so called borderline cases whom I hoped to treat in clinics and in private practice (That we can now expect results even in the psychoses which are popularly thought hopeless, has been amply demonstrated by me and others Cf Brill The Application of Psychoanalysis to Psychiatry *Journal of Nervous and Mental Diseases*, Vol 68, No 6, Dec 1928, and Schizophrenia and Psychotherapy, *American Journal of Psychiatry*,—Vol IX, No 3, November, 1929)

In 1906, Drs Jelliffe and White published an English edition of "The Psychic Treatment of Mental Disorders" by the Swiss psychotherapist Dubois The book never appealed to me very much because I did not get any results from this form of therapy In justice to Dr Dubois, whom I later met and liked, I will say that my failures were due to my poor material All my patients were mental cases from the hospital, most of them in a state of convalescence I tried Dubois' method on a case of insomnia The patient in question, a young woman who was recovering from a hypomanic condition, was glad to listen to me, but the more I educated her and persuaded her, the more wakeful she remained I then succeeded in hypnotizing her,—it was not so simple as you may think—after a few treatments, she could sleep normally This and other

experiences decided me in favor of hypnotism as a psychotherapeutic procedure.

But, my experiences with hypnotism were the same as those of other psychotherapists. I could hypnotize some and failed with others, and being very narcistic, I felt terrible, nay cheap, when after I went through all the ceremonials, and finally said to the patient "Now, you are asleep," the patient would exclaim "No, I'm not!" In the spring of 1907, I decided to go to Paris in order to perfect myself in these psychotherapeutic methods. I visited the different centres, and finally entered the Hospice de Bicêtre in Pierre Marie's service. I expected perhaps too much when I went to Paris. I found that in comparison to psychiatry in New York, Paris was much behind. I found that the patients were still described according to Pinel's classification. And, as to the treatment of the psychoneuroses, which originally drew me to Paris, I was sadly disappointed. It was then that the same man who originally influenced me to go to the state hospital, advised me to go to Zurich to the Clinic of Psychiatry at Burgholzli, which was then directed by Professor Eugen Bleuler. Dr. Frederick Peterson was at that time a great admirer of Freud and in telling me to go to Bleuler and Jung he assured me that I would find the work there very stimulating; he, himself, had been there for a few months, and spoke very admiringly of the men and their work. He casually mentioned the fact that in Burgholzli they were applying Freud's theories to the cases. Dr. Peterson was right. Bleuler and Jung vivified my interest in psychopathology. There I found an enthusiasm for psychiatry, which I never saw before nor since I left Zurich. The interest, I might say zeal, was all due to Bleuler's infusion of psychoanalysis into psychiatry. (Bleuler: Textbook of Psychiatry, translated by A. A. Brill, The Macmillan Co., New York, 1924.) Under his instigation, all his assistants labored assiduously to prove, or disprove, experimentally Professor Freud's theories. We worked with the association experiments with the galvanometer, with the so-called normal test person, and with the patients. There I learned for the first time of Freud's work, whose therapy cures at the same time that it investigates, and unlike hypnosis and suggestion, which may remove symptoms, but never really cure, Freud's psychoanalysis not only removes the symptoms, but transforms the personality of the patient in such a manner that recurrences do not as a rule recur. In the Zurich Clinic we were all ardent Freudians. Bleuler revolutionized psychiatry because he changed it from a purely descriptive chronicle to an interesting human document. Instead of a dry description of the patient's normal and abnormal faculties, we now wished to know the whys and wherefores of his illness. It was not enough to say that the patient had delusions and hallucinations of this or that sort, hence he was a schizophrenic or an epileptic. Never mind the diagnosis. Professor Freud taught us that in order to enable us to do something for the patient, which is after all what we are striving for, we must endeavor to understand the dynamic forces which swayed him since his childhood, since his birth, for they are also at the basis of the neurosis or psychosis. Looking at psychopathology from this viewpoint, the yawning gap between the so-called normal and the abnormal vanishes. For the greatest confusion in the study of the neuroses and psychoses and the greatest injustices to a large class of sick people resulted from the theory of "mental degeneration" introduced by Morel and others of the French school. As Jones put it: "On the insecure basis of this hypothesis, Charcot introduced the term, 'Constitutional neurasthenia,' and Janet the allied concept of 'Psychasthenia.'" (Jones: The Treatment of the Neuroses. p. 18, Ballier, Tyndal & Cox, London, 1920.) When one reads Janet's cases in his "Psychasthenie," one finds there almost more psychoses than psychasthenics. But, psychasthenia means "mental weakness," which is as meaningless as Beard's term, neurasthenia, which means "nerve weakness," whatever this may mean.

All these confusions disappear when we follow Freud's approach to the study and treatment of the psychoneuroses. For beginning with hypnotism, which he learned from Charcot, and the cathartic method, which he got from Breuer, Freud combined the two and then developed his psychoanalysis. (Those interested may read the author's Psychoanalysis, Its Theories and Practical Application, 3rd edition, W. B. Saunders, Philadelphia, 1922.) He gave up hypnotism because not everybody can be hypnotized, and at best, you can only remove symptoms, but not the disease. Hypnosis imposes blind obedience on the patient, so that symptoms can be temporarily removed, but it gives us no insight into the play of forces that formed the neurosis. Moreover, there are some dangers in the use of hypnotism; to be sure they are not of the kind so often depicted in sensational literature and on the stage. One cannot be hypnotized for example into committing a crime as some judges and lawyers still seem to believe, but one can become, as it were, addicted to hypnotism. I know a man of about sixty whose headaches were first removed by hypnosis when he was eighteen, shortly before he emigrated from Vienna to Buenos Aires. Since then, this patient could go nowhere without first making sure that he would be near a hypnotist. When he was forced to visit New York City he wrote to Bellevue Hospital and ascertained that I was treating nervous diseases by hypnotism, and as soon as he reached New

York, he called on me and kept in almost daily contact with me until he left I have seen a few similar cases To illustrate the difference between the hypnotic and psychoanalytic therapies, Professor Freud gives Leonardo da Vinci's distinction between the two arts, painting and sculpturing "The art of painting," said Leonardo, 'works *per via di porre*, by placing small heaps of paint on an uncolored canvas while sculpturing is done *per via di levare* by taking away from the marble block as much as covers the surface of the statue therein contained" (Selected Papers on Hysteria, p 178 translated by A A Brill, Monograph Series Nervous and Mental Disease Pub Co) In other words, hypnotism concerns itself little with the emotional or psychic forces of the patient the psychotherapist imposes his own personality on the patient while psychoanalysis removes only those impediments which were wrongly superimposed on the patient's personality by his environment, and by exposing to the patient his own personality future psychic health is practically guaranteed For, the average individual brings along into the world all those attributes which are adequate enough for self preservation and left to himself if he would only survive, he would not have any neurosis or psychosis To be sure the present situation is quite different the world one encounters is no longer primitive, one must now adapt himself to a complicated civilization which is very difficult even for a normal child Moreover the child brings into the world an impulsive wild mental apparatus, which Professor Freud designates as the *Id*, the lawless, unorganized mind, the function of which is blind wishing In order to survive, the child must have nourishment and protection, fundamental needs lovingly gratified by the mother The wishes that emanate from the *Id* are therefore directed to the two primary instincts, hunger and love, which sway the whole animal kingdom In order to live one must satisfy both of these instincts Moreover, in order to adapt himself to our artificial civilization the child must be able to assimilate about 50 000 years of civilization during the first four years of his life His *Id*-mind meets with one rebuff after another, the outer world is hostile and cruel, it has no regard for the individual Nevertheless, the average child is adjustable and very soon, that part of his *Id* which meets the onslaught of the outer world through the various senses becomes endowed with consciousness and learns to differentiate between good and bad This educated part of the *Id* then constitutes the ego of the person and henceforth controls the rest of the id Later on, a part of the ego, develops into a still higher level, into what Freud calls the *Super ego*, which is the highest attainment of mental evolution in man Only those who attain this level have the capacity to absorb the highest assets of civilization The *Super ego* harbors all the ethical, moral, and religious principles, which were inculcated in the individual by his parents, especially the father, and later by religion, ethics, and law Once an individual attains the super-ego level he becomes endowed with a "conscience" which forever stands guard and watches the ego which in turn controls the *Id*, and insists upon "right for right's sake," and "virtue for virtue's sake" This gives you in a few sentences Freud's conception of the psychic apparatus, its earliest development and adaptation to civilization, but in order to correct some current misconceptions I will briefly explain a few more of Freud's principles

The first adjustment the child has to cope with is his home environment, of which the greatest force is the father If the latter is perchance absent, or if the mother is very indulgent or very aggressive, the child's environment is more or less influenced thereby, and in a sensitive person (constitution), it may result in a latter neurosis Let me add that these processes are not as simple as one might imagine

You have also heard so much about the fact that we Freudians lay so much stress on the sexual role in the origin of the neuroses and psychoses This is true only if you bear in mind our connotation of the term, sex Freud does not use the word, sex, in its narrow popular meaning, but conceives the sex impulse in the broad sense of libido which he defines as a quantitively changeable force which is directed to an object The child at first directs all his libido to his own ego, he loves himself only, to be sure he is at first in a very dependent relation to his mother, he leans on her for all his needs, but he does not consider her as someone apart from himself As the child grows older, he gradually withdraws the libido from his ego, and directs it to other objects, this is especially true after the age of puberty And, depending on the libido proportions he maintains on the ego and the object, his capacity to give and take libido, he is either normal or abnormal in his love life Some people can never detach enough libido from their own ego to love anybody else, their own ego absorbs it all, in which case the ego becomes so hypertrophied that the individual evinces delusions of grandeur All human relations are based on libidinous attachments regardless of conscious sensuous gratification

The oedipus situation, a Freudian shiboleth, refers to the various stages of adjustment between the parents and the child during the first four years of the child's life There is nothing mysterious or far fetched about this relationship Briefly, Freud maintains that the baby boy knowing that *everything good comes from his mother* wants her all for himself He is jealous of anyone who intrudes into his little world As the

father is his greatest rival, his innate aggressive hostility is naturally directed towards him. The child is still very selfish and sees no reason why he should tolerate any rival in his home. Every boy who has a normal father, that is, one who commands authority, will perforce dislike him. We were born to be free and independent and we do not like to be corrected and told what to do and what to eat, even if it is for our own good. Normally, however, the little boy gradually recognizes his father's status in the home and adjusts himself to him. This is especially the case when the child becomes independent and is able to give up the childish gratifications furnished by his mother, who is the source of contention. But, there is always a substitute for the father hatred, in the form of the teacher, the professor, the boss, etc. It seems that we must always hate or dislike someone. To be sure, if the father is of the right sort and understands the child, everything proceeds smoothly, and one can expect that the child will be normal.

It is impossible to go here into the deeper problems of our psychology. I shall, therefore, endeavor to illustrate what I said by the following case:

About seventeen years ago, a patient was sent to me from this very city by Drs. Stiles and Broad. He was a young medical student of about 24 years. For over four years he was treated for almost everything imaginable. He was introspective, hysterical, had headaches, and many other symptoms too numerous to mention here. He was treated first for auto-intoxication, then gastritis, then gastric ulcers. But, as Dr. Einhorn decided that he had no ulcers, his wisdom teeth were extracted and for good measure his appendix was removed. Then, he was sent to Battle Creek, where he remained for months, but his symptoms did not leave him. On the contrary, they became more diffused and more aggravated. For obvious reasons I am unable to go into the details of this interesting case. I brought it up to illustrate a few points mentioned. The neurosis was primarily due to the fact that the patient's parents lived a very unhappy marital existence. From the age of three, the patient saw his mother weep over the supposed wrongs perpetrated on her by his father. As he grew older, each parent played for his sympathy, with the result that he could not detach himself from either. He had to love and hate when he should have given up his infantile attachments, that is his mother love, and identified himself with his father. In other words, as a result of his parents' behavior, his psychosexual development was impeded and traumatized so that numerous weak spots or *fixations* resulted, to which he later regressed. From the age of puberty he found it hard to adjust his love life properly; he loved too hard or not enough and finally developed the neurosis. His libido stream was impeded in its outflow by the obstructions formed in childhood. His unconscious still struggled with his early parental images, in his unconscious he was still torn by the sympathetic interests for both parents. Such an unconscious struggle always ends in a neurosis. Dynamically expressed, according to Freud his neurosis was the result of a conflict between the ego and the id. The id impetuously demands gratification, but the ego by virtue of its contact with reality must curb and restrain the id-tendencies. You may not be able to follow me because I am not showing you how I proceeded with my therapy, but I can report to you that the patient has made an excellent recovery and has remained well ever since, which shows that we do not just remove symptoms.

If I could lead you into the actual dynamics of the symptoms, I could show you how each and every complaint was psychically determined by definite experiences in the patient's life, and that the nucleus of the neurosis was formed in early childhood. From what you have already heard about this case, you can readily understand the logic of Professor Freud's concept of the origin of neurotic symptoms. Please remember that sex does not necessarily refer to physical or sensuous outlets. The love relationship between parents and children is sexual in our broad sense of libido, though not in the popular sense. Many children, young and old, become neurotic in consequence of excessive parental love or because of a lack of it. Thus, a young girl of five became neurotic following her parents' separation when she was deprived of her father, and a younger girl merged into a typical catatonic type of behavior under the same circumstances when she was deprived of her mother. Both became sick because of a disturbance in their sex or love-life, which in civilized states plays a much greater part than the instinct of self-preservation.

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It is for all these reasons that once I began to study psychopathology by means of Freud's Psychoanalysis the neuroses and psychoses assumed new meaning and new interest and no other form of psychotherapy could possibly appeal to me There is no objection, however, to any other form of psychotherapy as long as it helps You all practice psychotherapy when you show the patient that you are kindly disposed towards him and wish to help him for it is impossible to exclude the psychic element from any somatic ailments I have no doubt that a sympathetic interest will do as much, if not more, than a pill or a powder Indeed, Moebius has shown long ago that even such a specific as Quinine acted more effectively and more beneficially when administered by a sympathetic physician than by one who appeared indifferent to the malarial sufferer Hypnotism removes symptoms, persuasion and isolation may help, but all these methods touch only a small segment of the personality If we were to apply similar methods to physical diagnosis and therapy, it would mean that given a patient, with let us say, an inflammation and pain, all attention would be directed to these symptoms and no attempt would be made to discover the nature of these symptoms But, such narrow procedures belong to ancient times Nowadays, every physician worthy of the name wishes to diagnose the malady regardless of the symptoms Temporary alleviation does not cure In psychotherapy like in physical therapy the whole person must be considered, somatically a very small ulcer often spells lues, psychically a very insignificant idea or act, such as an eccentric behavior often connotes a compulsion neurosis or paranoia Psychoanalysis, as formulated by Professor Freud and his pupils, is the only form of psychotherapy that is all embracing It not only discovers the nature and origin of the malady, but at the same time also treats and cures the personality as a whole as shown by Dr Jelliffe, the pioneer in the application of psychoanalysis to organic conditions,—its effects on the soma are not less remarkable than those on the mental states

THE ORTHOPEDIC TREATMENT OF ANTERIOR POLIOMYELITIS *

By ARMITAGE WHITMAN, M D, NEW YORK, N Y

FROM the ideal standpoint the orthopedic treatment of poliomyelitis should begin the moment the diagnosis of the disease is made, and continue throughout the patient's lifetime Practically it begins when the acute symptoms have subsided and continues until the patient and surgeon are convinced that no further improvement is possible The aims of orthopedic treatment are three (1) The prevention of deformity (2) The maintenance of muscular tone (3) The maximum utilization of remaining muscular power by muscle transplantation and skeletal stabilization

So much confusion apparently exists not only in the lay but in the professional mind as to what may be expected from treatment, when it should be begun, and of what it should consist that I think we should do well to reflect upon the pathology of the disease

It is an inflammation centering in and about the anterior horn cells of the spinal cord, and either by haemorrhage into the cells or pressure about them depriving them of their function The muscles whose efferent nerve impulses are transmitted through those cells suffer flaccid paralysis Fortunately a majority of the cells lose their function from pressure rather than actual destruction Thus, as the inflammation subsides, power gradually returns to the secondarily affected muscles Supposing, however, that during that period deformity had been allowed to develop, no degree of returning nerve power could restore normal muscle function

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father is his greatest rival, his innate aggressive hostility is naturally directed towards him. The child is still very selfish and sees no reason why he should tolerate any rival in his home. Every boy who has a normal father, that is, one who commands authority, will perforce dislike him. We were born to be free and independent and we do not like to be corrected and told what to do and what to eat, even if it is for our own good. Normally, however, the little boy gradually recognizes his father's status in the home and adjusts himself to him. This is especially the case when the child becomes independent and is able to give up. the childish gratifications furnished by his mother, who is the source of contention. But, there is always a substitute for the father hatred, in the form of the teacher, the professor, the boss, etc. It seems that we must always hate or dislike someone. To be sure, if the father is of the right sort and understands the child, everything proceeds smoothly, and one can expect that the child will be normal.

It is impossible to go here into the deeper problems of our psychology. I shall, therefore, endeavor to illustrate what I said by the following case:

About seventeen years ago, a patient was sent to me from this very city by Drs. Stiles and Broad. He was a young medical student of about 24 years. For over four years he was treated for almost everything imaginable. He was introspective, hysterical, had headaches, and many other symptoms too numerous to mention here. He was treated first for auto-intoxication, then gastritis, then gastric ulcers. But, as Dr. Einhorn decided that he had no ulcers, his wisdom teeth were extracted and for good measure his appendix was removed. Then, he was sent to Battle Creek, where he remained for months, but his symptoms did not leave him. On the contrary, they became more diffused and more aggravated. For obvious reasons I am unable to go into the details of this interesting case. I brought it up to illustrate a few points mentioned. The neurosis was primarily due to the fact that the patient's parents lived a very unhappy marital existence. From the age of three, the patient saw his mother weep over the supposed wrongs perpetrated on her by his father. As he grew older, each parent played for his sympathy, with the result that he could not detach himself from either. He had to love and hate when he should have given up his infantile attachments, that is his mother love, and identified himself with his father. In other words, as a result of his parents' behavior, his psychosexual development was impeded and traumatized so that numerous weak spots or *fixations* resulted, to which he later regressed. From the age of puberty he found it hard to adjust his love life properly; he loved too hard or not enough and finally developed the neurosis. His libido stream was impeded in its outflow by the obstructions formed in childhood. His unconscious still struggled with his early parental images, in his unconscious he was still torn by the sympathetic interests for both parents. Such an unconscious struggle always ends in a neurosis. Dynamically expressed, according to Freud his neurosis was the result of a conflict between the ego and the id. The id impetuously demands gratification, but the ego by virtue of its contact with reality must curb and restrain the id-tendencies. You may not be able to follow me because I am not showing you how I proceeded with my therapy, but I can report to you that the patient has made an excellent recovery and has remained well ever since, which shows that we do not just remove symptoms.

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ease into three phases—(1) Acute, (2) Convalescent and (3) Chronic, and each phase has its different treatment.

The orthopedic treatment during the acute stage consists in the prevention of deformity, and, if I may use such a phase, the immobilization of the affected area. The idea of being able to immobilize a segment of the spinal cord may seem fantastic. If we place the affected limbs in plaster of Paris we have assured ourselves that at least as few impulses as possible pass through, and by their passage irritate, the inflamed area. The same principle was applied by Hugh Owen Thomas to the treatment of peritonitis, and I have no doubt that it was handed on by him to Sir Robert Jones. Unless I am much mistaken it is the only treatment that Sir Robert uses. It should undoubtedly be insisted upon until all muscular tenderness has disappeared. I think we all agree that muscular tenderness may be interpreted as a sign that the inflammation in the cord has not subsided. One of the strongest impressions left in my mind by the epidemic of 1916 was that the worst cases, and those in which the tenderness persisted longest, were those in which active treatment, usually I am glad to say, suggested by osteopaths or chiropractors, had been instituted too early.

When the acute stage has passed we encounter from the therapeutic standpoint the most perplexing phase of the disease. I think most orthopedic surgeons have agreed to set two years as the period of potential recovery, and feel that, except for correction of deformity, no operative treatment should be undertaken during that period. During that two year period the first essential is the prevention of deformity.

Deformity may occur (1) by the force of gravity. (2) By unopposed action of active muscles. (3) By habitual posture. (4) By functional use. The commonest example of the first is toe drop, caused by the attitude as the patient lies in bed, plus the weight of the bedclothes. Flexion deformity at the hip occurs by the unopposed action of the tensor fasciae femoris muscle, which, curiously enough, is almost never completely paralyzed. Habitual posture, as when a completely paralyzed person sits about, is in itself sufficient to cause flexion contractions at the hips and knees. Functional use as a cause of deformity may be seen when a patient with weakened back or abdominal muscles sits up unsupported, and develops curvature of the spine. All these factors must constantly be kept in mind, and deformities thus prevented rather than cured. I am confident that the profession at large has learned many of these lessons, for since the war I have seen nothing to compare with the horrible deformities that I saw throughout the state in the epidemic of 1916.

The form of apparatus that is used will naturally vary according to the training and taste of a particular surgeon, but the end of all of them is the same, prevention of deformity and protection against gravity.

One of the most vexing questions is that of when to allow the patients up. There is no doubt that overfatigue of a weakened muscle is the greatest obstacle to its recovery. On this theory Dr. Lovett was accustomed to keep the patients off their feet indefinitely, while they had massage and muscle training. I feel myself, however, that the mental attitude of the patient is of the utmost importance, and that the depressing effect of such prolonged inacivity upon the patient must outweigh its benefit to a given muscle. Provided the affected muscles are properly protected I cannot see that a small amount of exercise can be harmful. Even when accomplished only with the aid of braces and crutches the power of independent locomotion is of tremendous psychological value to the patient.

We have now arrived at the controversial phase of the disease. What is to be done during the two year period that we have agreed to regard as that of potential recovery? Shall the patient have massage, muscle training, water borne exercises in a pool, various forms of electricity, chiropracty or osteopathy? I think the best thing to do is to fall back upon pathology. I take it for granted that a detailed muscular examination of the patient has been made. As the result of such an examination we know that certain muscles are completely, others partly paralyzed. We can by no means thus far devised affect the diseased area in the cord, except by the itch of ill advised activity to prolong its inflammation.

We have protected the remaining muscles by appropriate apparatus against the harmful effects of deformity and overfatigue. We know that paralyzed muscles when completely neglected atrophy, become stiff and lose their tone, and that when a bone no longer functions in weight bearing it loses its calcium. Obviously, therefore, the muscles must be kept in the best of condition against the possible return of nerve power. Anything, therefore, that preserves their blood supply and is not so violent as to cause harm is beneficial.

In deciding what more complicated method of treatment shall be used we must think again of the pathology. I have heard it said that by so-called muscle training nerve impulses from the brain could be trained to leap around, as it were, the damaged anterior horn cell, and arrive at their muscular destination by a different peripheral nerve. This theory appears to me to rest more on wish fulfillment than on physiology.

While we are told that no man by taking thought can add a cubit to his stature, we also know that by taking appropriate exercises we can increase the size of a muscle. Suppose that half

my biceps muscle were paralyzed, I might by careful, persistent training build it up until the remaining half could do the work of the whole Muscle training, under water exercises and electricity all seek this end I personally feel that the voluntary exercises, in which the patient's own brain is the activating force, are of far more value than the passive

Water-borne exercises are certainly the most logical form of treatment This at once brings up visions of inaccessible swimming pools and costly expert therapists There is, however, a bathtub in practically every home This may be filled with water at from 85-90°, a little salt put in the water to increase its buoyancy, and the child placed in the tub and allowed spontaneously to move his limbs If the doctor will then observe him carefully, he can, without particularly expert knowledge on his part, devise exercises for the affected muscles

I feel, particularly in the early stages of the disease, that electricity is dangerous The only form of electricity that has been proved of any value is a form of current, such as the Bristow coil, which actually produces muscular contraction Unless in the hands of a real expert, who knows how to stimulate one affected muscle at a time, there is great likelihood that all the muscles of an extremity will be stimulated at once, thereby cultivating the strong at the expense of the weak Even an expert is apt to be carried away, and contract a muscle twenty times or more, when four or five contractions would be all that were indicated

I wish to emphasize in connection with both these forms of therapy that the greatest of all dangers to a convalescent muscle is overfatigue from any cause If there must be a choice between the two evils too much treatment is far more harmful than no treatment whatever

I think this an appropriate time to call the attention of the profession in general to two facts —that the patient must not be sacrificed to his disease and that the family must not be sacrificed to the patient A patient is not likely to be greatly soothed by exercise in the relaxing luxury of a pool if it takes him two hours in a crowded bus to get to the hospital, and two more to get home again Also the paralyzed patient is but one unit in a family and sacrificing all the family resources to send him to a certain specialist or away from home, perhaps, for a given form of treatment is mistaken kindness, and does most harm to the recipient himself From the very beginning emphasis must be placed upon making the patient independent, and not dependent upon the ministrations of his family or friends

We now come to the third stage of the disease We assume that every legitimate form of treatment has been tried, that a certain amount of improvement has been gained, but that it is agreed by all, including the patient, who is the best judge, that it has come to a standstill Twenty-five years ago the future would have been said to be hopeless Today I know of no field in which surgery offers a more brilliant promise Except in the most extraordinarily bad cases surgery has supplanted apparatus Spine fusions do away with back braces, and various tendon transplantations and stabilizing operations take the place of braces for the legs and feet I have seen a number of cases of paralysis of the lower extremities which required the persistence of but a single muscle, the gluteus maximus, to enable the patient after various operations to walk without apparatus The existence of less, but still severe degrees of paralysis may by surgery be entirely disguised Nor is there any limit to the time at which such improvement may take place The most spectacular case I ever personally treated was a man of fifty two years old who had been paralyzed for thirty eight years and during those years had never walked He now gets proudly about on braces and crutches Some of you may think that the ability to get about with braces and crutches is not such a great achievement To a person who has had all his life to be carried from place to place, the ability to get up and watch a fire engine going by means in health, contentment, happiness, and general well being a great deal

I should like to end this paper upon a note of optimism The disease this year is not nearly as severe as in 1916 I have not seen for years the terrible deformities that I saw then all over the State of New York Surely such an improvement must mark a beginning in the education of the public and the medical profession Once they have an understanding of the nature of the disease, when it no longer seems the utterly mysterious thing that it does now, the people will no longer rush frantically from quack to quack sacrificing the fortunes of the family to anyone who promises a cure

The public should know that only a small proportion of patients who contract anterior poliomyelitis are paralyzed at all Of those paralyzed a large proportion get well Of those who do not, the ones who are faithful and systematic in following the doctor's orders over long periods of time may be greatly improved Owing to the replacement of braces by surgery only a very small number need expect to look, feel or act like a cripple

N. Y. State J. M.
November 15, 1931

THE NATURE AND TREATMENT OF NON-SPECIFIC ULCERATIVE COLITIS*

By ASHER WINKELSTEIN, M.D., NEW YORK, N. Y.

From the Medical Department, Mount Sinai Hospital, New York City.

Introduction

THE term "colitis" is frequently used in an incorrect sense by the physician and the layman. Colitis signifies definitely an inflammation of the colon and the term should not be applied to gastro-intestinal disturbances of a functional nature.

The type of colitis with which we are concerned today, ulcerative colitis, is a special form of the inflammatory colitides. This remarkable disease, first described as an entity by Sir William Wilks in 1875 and William Hale White in 1888, is variously known as colitis ulcerosa, colitis purulenta, colitis gravis, idiopathic colitis, chronic bacterial colitis, and chronic ulcerative colitis. We prefer "non-specific ulcerative colitis" as being the most descriptive title.

The subject of this disease is of great importance for many reasons. It is a fairly common and a very serious malady. Apparently, it is increasing in frequency. A correct differential diagnosis is essential for proper therapy. Finally, every single feature of the disease has given rise to disputes which are, as yet, for the most part, unsettled.

Statistics

Let us consider the statistics of this disease. The Mayo Clinic reports 675 cases in a ten-year period. At Mount Sinai Hospital, we see an average of 40 cases of the serious type a year. Apparently, it is not an uncommon disease.

Most of the patients are from 20 to 40 years of age. Helmholtz, however, has described it in young children. I have seen four cases in children during the past year. The sex distribution is equal.

The mortality is higher than in typhoid fever (15%). Logan of the Mayos gives 27%, Strassburger of Germany 40%, Lockhart-Mummery 40%, and at Mount Sinai Hospital our figure is 18%. These figures, of course, represent the mortality of the serious hospitalized group. It is surely a disease to be dreaded.

Pathology

Let us next discuss the pathologic features of ulcerative colitis.

It is generally agreed that it is an infection; whether primary or secondary, we will discuss later. Also, it is agreed that the process commences, in most instances, in the mucosa of the rectum and sigmoid. It is confined to the colon —rarely extending into the terminal ileum.

In the severe cases, the entire colon is involved whereas in the milder cases, only the rectum or sigmoid may be involved. Occasionally the process is higher up, leaving rectum and sigmoid free.

There is an interesting group where the inflammation occurs in the form of localized masses, called "non-specific granulomas," particularly in the cecum and the flexures. They are probably, in many instances, the result of localized ulcerative colitis.

The evolution of the lesions is as follows—first there is edema and congestion of the mucosa; then myriads of minute superficial ulcers form—we have not seen the miliary abscesses described by Buie. Later, large, coalescing, deep ulcers appear, leaving scarcely any normal mucosa. It is at this stage that certain severe complications, namely, perforative peritonitis, fistulae, and polypi occur. When the disease heals the mucosa appears normal, atrophic, or, rarely, scarred. Polypi, strictures, and fistulae may be among the unfortunate sequelae.

I shall now mention briefly the complications of the disease which are not infrequent in the severe cases.

Complications:

Local	Massive Hemorrhages (infrequent) Polyposis (13%) (17 cases of malignant degeneration reported from the Mayo Clinic) Stricture (recto-sigmoid) Fistulae (recto-vaginal) Perforation (3%) Inflammatory masses Peri-rectal suppuration
General or Distant	Bacteremia—Endocarditis Arthritis, neuritis Bucco-Pharyngeal ulcers Skin lesions (erythema nodosum especially) Eye lesions Parotitis

Clinical Features

Among the clinical features only the most important will be mentioned briefly.

It is a chronic disease—often lasting years—I have a young woman under observation now with continuous ulcerative colitis for eighteen years. It is, like peptic ulcer, essentially a disease with exacerbations and remissions. The remissions, often sudden and spontaneous (one must exercise care in the interpretation of therapeutic results) may be very short or very long—in some instances 5, 10, and even 20 years. There are mild, moderate, and severe types—often with sudden transition from one to the other.

* Read at the Annual Meeting of the Medical Society of the State of New York, at Syracuse, N. Y., June 2, 1931.

What does a typical severe case present? A diarrhoea (five to thirty movements daily)—the movements, often small discharges, contain blood, pus, and mucus chiefly—septic fever, emaciation, dehydration, anemia, and, some of the complications already mentioned. Some mild cases have only diarrhoea. Some rare cases are constipated. The colon may be badly diseased without fever and complications—even with general well-being. The colon may show only congestion and edema and yet the patient may be very toxic. In other words, although usually the clinical features and the pathologic appearance correspond, it is not uncommon to encounter a lack of parallelism. Let us assume that we are confronted with such a patient—i. e., one who complains of a more or less chronic bloody diarrhoea, how does one establish a diagnosis of non specific ulcerative colitis?

The *stool* examination is of utmost importance—it is usually a sanguinous and foul fluid—microscopically, it is almost pure pus and blood. One should look at the stool daily—it is an excellent guide in the course of the disease.

Next comes *sigmoidoscopy*. This is not used enough by the general practitioner. As Hurst puts it—"would one diagnose and treat tonsillitis without looking at the tonsils?" It is important to look at the mucosa. One sees, early, congestion and edema, then myriads of tiny superficial ulcers presenting a granular appearance, and later, large, deeper ulcerations. Of course, polypi are seen—they may appear and disappear. Two sigmoidoscopic points are of importance: (1) in my opinion, it is impossible to differentiate the sigmoidoscopic features of non specific ulcerative colitis from amoebic and bacillary dysentery, and (2) there is often a striking lack of correspondence between the sigmoidoscopic picture and the clinical features—this has already been pointed out in the discussion of the pathologic features. Patients with non-specific ulcerative colitis, therefore, should not be discharged as well until the sigmoidoscopic appearance is normal.

The x-ray examination of the colon is also very helpful. We owe most of our knowledge of the radiographic points to Carman, Moore, and Weber of the Mayo Clinic. One must use the barium enema. What does one see? Well, early, only spasm or negative findings. Later, one finds that the colon is short, narrow, fills rapidly and the haustrae are missing. The edge may reveal nicking or feathering, indicating ulceration. The lumen may appear mottled, indicating polyposis.

A word of warning should be uttered—do not diagnose ulcerative colitis from the x-ray examination alone. It is very useful in following the course of the case, in localization and in the diagnosis of high lesions and complications.

Finally, before leaving this phase of the subject, a word about the differential diagnosis. Briefly, one may state it as axiomatic that in this climate, with rare exceptions, a chronic bloody diarrhoea is either non-specific ulcerative colitis, amoebic dysentery, bacillary dysentery, or carcinoma coli. In the case of amoebic and bacillary dysentery, the differentiation, of course, is purely a laboratory one. One must, however, bear in mind the fact that despite negative laboratory examinations a patient may have, and with fair frequency does have, amoebic or bacillary dysentery.

WHAT IS THE CAUSE OF THIS DISEASE?—Several questions arise at once.

1. Is it primarily an infection? The answer is unknown—it may be first a neurotrophic disturbance, a toxic-excretory injury, an avitaminosis, or another acute infection (bacillary or amoebic dysentery, for example) and, then, secondarily, a secondary infection of a sensitized bowel by the normal bowel organisms.

2. Is it caused by the Diplococcus of Bargen? In a series of papers from 1924 to the present, Bargen of the Mayo Clinic has described a causative organism, present in 90% of the cases, with positive animal reproduction of the disease, with a vaccine and culture filtrates helpful in therapy, with a curative crude horse serum and finally, a curative purified horse serum. This work, exhaustive and painstaking, merits serious consideration. Of course, one hopes that he has solved the etiologic problem. Certain doubts naturally arise—isn't this organism, also, merely a secondary invader? Is it clearly differentiated from the enterococcus and other normal inhabitants of all normal bowels? Is the experimental and serologic evidence complete enough to establish it, according to strict bacteriologic criteria, as the causative organism? Have the therapeutic claims been substantiated? Certain opponents of his ideas, particularly T. R. Brown and M. Paulson of Johns Hopkins Hospital, have been very blunt in their criticisms. They state (1) that only one-third of the cases were cultured, (2) agglutination methods are unsatisfactory, (3) the experiments lacked proper controls, (4) the characteristics of the organism were not constant in the various reports, (5) Paulson obtained the same rabbit lesions with normal organisms from the bowel of normal people.

3. Is this disease acute or chronic bacillary dysentery? In favor of this view, sponsored chiefly by Hurst of London, is the following:

1. Pathologically, the lesions in both are identical.
2. The disease may start in acutely, as in bacillary dysentery.
3. Occasionally, dysentery organisms have been found.
4. Occasionally, one sees excellent results with anti-dysentery serum.

Opposed to this view are the following:

1. The sporadic nature of non specific ulcerative colitis

2. The onset is usually insidious in ulcerative colitis.
3. Scarcity of bacteriologic and serologic evidence.
4. The higher mortality in ulcerative colitis.

Recently, Dr. Gregory Shwartzman and I have been accumulating evidence at the Mount Sinai Hospital which indicates that some of the cases, at least, are acute or chronic bacillary dysentery. In the past six months, four cases yielded either Flexner or Shiga organisms when the fresh stool was cultured. The organisms were identified by agglutination and cross-absorption.

One may conclude, however, that, as yet. the etiology of this disease is not definitely known. Further work is necessary.

A brief résumé of the therapy in this disease will now be outlined. Whether or not amoebae are found, every patient should have a course of Emetine (grs. 1 daily intramuscularly for ten doses). With this exception, for the first ten days, the therapy should be general and non-specific. This is a control period.

The medical therapy should consist in:

1. In bed—local heat—calcium administration —possibly viosterol.
2. Diet: non-residue, low protein, with high carbohydrate-push fluids, salt, and vitamins. Maintain the nourishment as in typhoid!
3. *For the diarrhoea*—deodorized tincture of opium—morphine occasionally.
4. Transfusions—of great value. They should be repeated and large. They combat the anemia, supply fluid, and possible antitoxins. One sees occasionally a dramatic crisis after a transfusion.
5. *Specific measures* are of questionable value.
   (a) Autogenous vaccine—results are like those with other vaccines in medical therapy, i.e. disappointing.
   (b) Serum—in view of our experience, as well as that of Hurst and Crohn, we are treating some of the serious cases as bacillary dysentery. We are opposed to routine intravenous anti-dysentery serum as dangerous—we have seen two fatalities, perhaps attributable to anaphylactic shock. The serum should be given intramuscularly—25 ccs. b.i.d. for 6 doses at least. If one gets a result, he should not conclude that the case was bacillary dysentery. It may be only foreign protein shock. In some cases, to be reported, we have seen excellent results. In addition, in several instances, we have used repeated rectal instillations of a potent polyvalent anti-dysentery bacteriophage. Our experience here is too limited to permit of a conclusion. The method seems promising.
6. Local therapy with colonic irrigations and instillations: Because of the depth of the lesions and the possibility of spread, this type of therapy is of questionable value. However, it is our custom to use first as a control a one percent of bicarbonate of soda (in saline) colon irrigation daily—then one may use in the acute stages, acriflavine (1:4000) or Rivanol (1:1000). In the subacute and chronic forms, we find 1-2% tannic acid or silver nitrate (from 1:10,000 to 1:2000) more satisfactory. There is no convincing evidence that any form of local therapy is curative in any given instance.

SURGICAL TREATMENT.—The question of surgical intervention arises only in the serious cases. It should be used only when the case is a septic one and the patient going downhill rapidly. Nice therapeutic judgment is necessary here. A well-known Boston surgeon says "operate at the end of one week"—Stone of Johns Hopkins says "six weeks." It is really a question of individualization—however, one should not wait until the patient is moribund. The high mortality in the operations may be the result of waiting too long. The following operations have been used and may be discussed.

1. Appendicostomy and cecostomy—not good since the fecal stream is not diverted.
2. Colectomy—too dangerous.
3. Ileo-sigmoidostomy—this excludes two-thirds of the colon—the lower portion can be treated locally. Perhaps this should be tried more often.
4. Ileostomy (Brown of St. Louis) the best operation—often dramatically life-saving—it saves a life but does not cure the disease —the disease continues. If one removes the ileostomy, the disease recurs. Recurrences of moderate severity are not uncommon even in the presence of an ileostomy.

CONCLUSIONS:

1. Non-specific ulcerative colitis is a frequent and serious malady.
2. The etiology is as yet not definitely established.
3. Because of the difficulty of excluding amoebic and bacillary dysentery, therapy should be instituted against both of these diseases.
4. Therapeutic controls are essential because of the spontaneous remissions.
5. If adequate medical therapy fails, surgical treatment, preferably ileostomy, should be instituted early.

PREVENTION OF NERVOUS DISORDERS; A COMMUNITY PROGRAM*

By ALBERT B. SIEWERS, M.D., SYRACUSE, N. Y.

IN every community problems arise and multiply and eventually the community arises to do something about these problems. This is certainly bound to be the case if the difficulty grows beyond the capacity of the individual or his family to handle. The two main ways by which a community endeavors to meet its problems are the introduction of skilled specialists and the gradual education of the members of the community themselves. In an ideal situation, both ways are employed from the beginning and in any situation they are finally necessarily used. In this paper we are considering no community in particular and likewise no specific psychiatric program, but rather communities in general and, psychiatric programs in general with the general aim of having the psychiatric point of view becoming an integral part of the community. In his better moments the aim of the psychiatrist is to do away with the necessity for himself.

In the field of nervous disorders, which includes for practical purposes the problems of behavior, there has been for a long time community organized means, however imperfect and inadequate, for handling of its special problems. These means, which have long been in existence, are: The State Hospital, The State School for Mental Defective and the so-called Reformatory or Penal Institution.

Until quite recently one could safely say that the best knowledge and training in the field of nervous or behavior disorders was being applied largely in the field of Criminology and Mental Defect rather than to the more preventive aspects of the problem child in the school, whether preschool, grade school or high school. This in spite of the fact that admittedly less can be done and less is expected in the fields of mental defect or deviation than one can do or expect in the field of prevention. We have been putting the "cart before the horse."

The trend of the community in handling its problem of nervous or behavior disorders has been the same as the trend in other medical and social fields. The steps have been:

1. Emphasis on the improved care of the cases in Institutions.

2. Betterment of after care and other forms of follow-up, leading to the establishment of clinics of one kind or another whose aim was prevention.

3. Prevention has meant a change from rigid fixed ideas and technics in treatment of behavior disorders, to a dynamic growing or revolutionary conception of all the probelms in this field.

This dynamic conception has brought the psychologist out of the laboratory into direct contact with individuals. It has brought out, as the greatest aid to understanding and treatment, the psychiatric social worker and, it has changed the psychiatrist from a physician, who had a lot of queer pigeonholes and queerer labels, to one who wonders, observes, listens and tries to understand and interpret, and then, sanely and soundly, direct measures for relief.

The psychiatrist or at least the psychiatric point of view may be an important factor in guiding many of the normal contacts of growing children, but in all too many instances it plays no part, because of the over-emphasis in the past on the child's physical well being alone. It might be well to list a few of these contacts and make an attempt at evaluation of them. First the Home.

There is a growing realization that the ability to have children does not necessarily bespeak the ability to bring them up properly. This point of view has developed through community education and though this has been done from a standpoint of physical rather than mental health, it nevertheless applies to both. Physical and mental well being should not be stressed as separate, after all, the individual is a psycho-physical unit. Parents are made aware of feeding difficulties and their prevention as well as the prevention of colds, diphtheria, and the like. But all too often the development of desirable habits and the prevention of undesirable habits is left out of the program until the child is ready for school. Parents are lulled into inactivity by the idea that children will out-grow undesirable traits or shed them like an old coat when they enter school. Here, then, is the opportunity for the community through the Obstetrician, the Pediatrician and the Public Health Nurse, to begin work with the child as soon as he is born. And not only begin with the child; it is the parent with whom we must deal.

Here we are not looking for direct instruction in how to solve each individual emergency situation as it may arise. Too many parents believe that a child training expert exists to tell the mother definitely what to do when her child embarrasses her by having a temper-tantrum in a department store, or when he refuses to eat the fresh greens she has so carefully provided for him. What the expert and those interested in helping him are trying to create is a parental attitude which is sufficiently understanding of mental hygiene principles that it can recognize this behavior as symptomatic of a childish difficulty once preventable, now needing at this stage of development a redirecting. We said one should "begin work with the child as soon as he is born.' That is not early enough!

* Read at the Annual Meeting of the Medical Society of the State of New York, at Rochester, N. Y., June 4, 1930.

The importance of the early years of a child's life as a most plastic period has been accepted and taught for some time. Many experts in psychiatric fields insist that most habit patterns are laid down by the sixth year. As a result, work with and interest in the pre-school child is increasingly evident. Through well organized nursery schools, mother's study groups, and sometimes as a part of the school health program of the community's department of health, there is developing a more objective and constructive consciousness of the importance of parent-hood. By the use of nursery school technic we can do much toward forming in children the habits of regularity, reliability, self-reliance, obedience, good habits of eating and sleeping, and the ability to get along with others. And with the proper psychiatric set-up much can be done to prevent or correct undesirable habits of eating and sleeping; temper tantrums; jealousy; enuresis; thumb-sucking; masturbation; lying; and stealing. What this "psychiatric set-up" shall consist of has been up to this time a matter of experiment and of suiting the service to the community needs and demands. Frequently the needs and the demands do not coincide. Here again we have our opportunity for community education. The basic fact that some such set-up is essential to any community is, however, past the stage of experimentation.

School:

Schools are primarily educational and are organized for the intellectual development of the child. In addition, the majority of schools have a well organized medical service which is almost entirely absorbed with the problem of the physical well-being of the child. This means that the emphasis is all too heavy on the physical and intellectual development while the emotional development has been neglected or misunderstood. The aim of the educator and the psychiatrist should be identical, that is, to produce in the child a good adjustment with his environment and to develop in him personality traits which will help him to get along in the world as one of the happily adjusted.

Since demonstration child guidance clinics have shown what the team of psychiatrist, psychiatric social worker and psychologist can contribute to the solution of behavior problems, there is no question that they should go a step further and bring their special knowledge and technic to aid with the development of the normal child. The aim then, which we hope for in our educational system is the personal development of the child rather than the making of high grades, through an attempt to surround him by those influences which will help him in emotional control and will establish such mental habits as make for successful living. Leading educators are, of course, aware of the practicability of this point of view. When those parents who remember school as consisting of only the three grim R's can similarly adopt this attitude where facilities exist, and demand them where they do not, we shall have further progress.

This would make for conservation of Mental Health. Psychiatric help would then be available and given to all children in the school system, and we would not be waiting for acute episodes or definite behavior problems to arise. Problems might be anticipated and prevented.

It is beyond the scope of this paper to consider the various behavior problems which arise in the schools but we can consider more specifically what the educators' acceptance of these aims might mean. For example: In all probability the problems which have been and are most readily and thankfully turned over to the psychiatrist, are the problem of truancy. In cases of truancy as with other behavior problems, study shows the great variety of contributing factors, which if allowed to continue, may lead to delinquency or in extreme cases, to psychoses. One of the hopeful signs of the day is the increased readiness among lay people to study each problem individually. For who can generalize as to whether the emotional factors may be varying phases of sibling jealousy, unfortunate comparisons with other children, or too great emphasis on high grades, due to exaggerated parental ego drive. Misunderstanding on the part of the teacher or school principal may add to the child's difficulty. The truant or other behavior problem may be a day-dreamer who finds the school interferes with his day-dreaming and forces reality too harshly upon him, or he may be wrongly placed in his grade, or again, he may be a child who finds his greatest satisfaction in the attention he receives by going against the rule. The day-dreamer whose wandering attention is a thorn in the flesh of his teacher might be readily referred to the psychiatrist, but the other type of day-dreaming child whose school behavior is examplary, may be too easily overlooked as a behavior problem. It is this quiet type, often the most apt student, never giving trouble in the classroom, which we believe sometimes to be pre-dementia praecox—if we may be allowed this anticipatory term. Much can be accomplished in bringing this type of child to the every day world by intensive work on part of the psychiatrist and the visiting teacher or school counselor, who is trained as a psychiatric worker.

"Nothing succeeds like Success" is an old proverb and "Nothing so quickly becomes a habit as Failure" should be added to it. With our attention to personality development, as well as to problems, there must be attention to proper grade placement to prevent feelings of inferiority and with them the habits of failure. Special classes must be provided for those who cannot carry on in the regular grades, but this does not mean just classes with less book work and more hand work.

It means classes directed by a teacher, who has some feeling for the development of the individual pupil as a unit of physical, intellectual, and emotional make-up. These special classes should serve several purposes which have definite places in a program of prevention.

Directly:

The backward or defective child can be removed from the regular grade where competition is always with those quicker than himself, to the special class where he competes with like capacities, and still learns things which will help him get along in the world. In this way we may prevent later tragedies of poverty or delinquency and relieve the burden of the State Institution.

Indirectly:

A backward child requires much more of the teacher's time and energy than a normal one. Therefore the removal of the backward one gives the teacher better opportunities to teach and provides for each teacher a more homogeneous group.

In the future one can readily see the necessity of extension of the work of the psychiatrist and the visiting teacher, not only with the pupils but with the teachers. The teachers already on the job should be shown in every way the practicability of mental hygiene and helped to apply its methods. The teacher in the normal school and those to come should be given courses in mental hygiene. The most successful application of mental hygiene principals is to be expected if the teacher takes them with her as part of her teaching equipment rather than looking to their introduction by others than the educators themselves.

During the school age the time of the child outside of school hours is given to recreation or work (job) or both. The field of recreation offers one of the most fruitful means of influencing the child in the development of habits of self-reliance and sociability which we have come to know in adult life as efficiency and good sportsmanship. Yet, I believe this to be the field most neglected by educator and physician alike. True, we have boys' clubs and girls' clubs, but these are usually small units organized to take care of small limited groups. Here then, is a virgin field which in all probability will have to be pioneered by the groups already in the field with the help of other organizations interested in youth and filled with civic pride. Let some of these organizations underwrite demonstrations in recreation and it would not be long before the community would recognize that planning and really skilled workers in this field are a necessity.

Camps:

This brings us to a subject which is constantly becoming more and more important and which at this season is particularly apropos—the summer camp. The ideas and ideals of a large part of the community in the matter of camps can be expressed by contrasting two outstanding types.

1. The camps based on the idea that removal from the noise of the city to God's Great Outdoors where the grass is green, the air fresh and the food and water plentiful is in itself a great constructive experience for the child. The partisans of this type of camp feel that having provided one of natures beauty spots and a good cook, the children can be trusted with little guidance to reap a harvest of good.

2. That type which accounts for every minute and does everything on schedule, e.g., arise at 6.30 put on bathing suit, swim. 7.00 return to dormitory, make beds. 7.15 sing. 7.20 breakfast. 7.40 clear tables and so on. Hikes on Tuesdays, Thursdays, and Saturdays at 8 A.M.

Of course, some private camps are run on a system which is designed to bring out desirable treaits with small groups, projects, etc., but communities and their agencies have been reluctant to accept innovations from the two types. Rademacher in his Cleveland experiment with a long term camp as treatment for behavior disorders gives just a hint of what we might accomplish here by the introduction of a psychiatric point of view into this branch of the field of recreation.

Jobs:

I feel it is beyond my limited powers to discuss child labor laws and hope it is really beyond the scope of this paper. That the community has a responsibility here is unquestionable, and it may be found that the psychiatrist and his associates have something to contribute here as they have contributed in the handling of cases of juvenile delinquency by the courts.

Besides these inventable contacts there are a number of others which might be considered. The sick child comes into contact with clinics and hospitals, with physicians, nurses and social workers. In these medical fields the education has not been able to keep up with psychiatry, but much is being done to catch up. Psychiatric hospitals and psychopathic wards in general hospitals are being established. Psychiatric services in dispensaries and hospitals are being enlarged and increased. Medical colleges are re-arranging their courses in psychiatry. Nurses' training schools have in large numbers established affiliation with State or other hospitals for mental disorders, and schools for social workers are emphasizing family rehabilitation and the handling of individuals rather than the distribution of relief. With these powerful forces at work the science of psychiatry grows apace as all infants grow and the conservation of mental health really becomes a community project.

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Annual meeting, Buffalo, May 23-25, 1932

OPPORTUNITIES, RESPONSIBILITIES AND OBLIGATIONS

When does an opportunity become an obligation?

This is not a mere problem of abstract reasoning; it is a practical question which confronts the medical profession today.

Doctors are not entirely satisfied with the methods and results in the practice of medicine. They are unanimous in their opinion that they are surrounded with evident opportunities to increase their capabilities and sphere of usefulness.

Many physicians feel that the major share of responsibility for providing better medical service rests with the people themselves, for they are ready to give what the people demand and appreciate.

A minority group of doctors feel an obligation

to assume a leadership in all forms of medical service, even that of educating the people to assume their proper share of the burden

Opportunity, responsibility and obligation are degrees of the same mental attitude toward medical service Medical leaders seek to reach the doctors who are watching opportunities listlessly from the side lines, and are striving to inspire these passive physicians to do something active, even if it be only to stand up and cheer for the new methods of progress

The mental processes of every doctor pass through three stages in solving medical problems

1 The stage of *opportunity* or recognition that conditions are not entirely satisfactory Every doctor feels this way toward most medical problems

2 The stage of *responsibility* in which doctors here and there say, "Why don't some one do something?"

3 The stage of *obligation* in which a few leaders say, "Let us get busy"

Physicians recognize two classes of obligations

1 Those applying to the doctors themselves

2 Those applying to the patients or their families

The essential obligation resting on every doctor is that of keeping up with medical knowledge A further obligation is that of seeking the advice of a specialist when his own knowledge is uncertain A whole group of further problems suggest themselves, such as

Graduate education,

The qualifications of specialists,

The ready means of securing the services of experts,

The availability of consultants in hospitals and private practice, and

Group practice

Physicians are earnestly seeking practical solutions of all these problems, and it may be truly said that the services which individual doctors are giving to their patients are more scientific and conscientious than ever before

If the doctors are under obligation to render the best possible service to their patients, they cannot fulfill that obligation unless the patients cooperate with them Failure of a patient to cooperate with a doctor is the result of two causes

1 Unwillingness

2 Inability

Each party, the doctor and the patient, is inclined to blame the other for lack of cure, but after the doctor has done his best to render efficient medical service, the further responsibility rests upon him to diagnose the exact cause of the patient's failure to seek an efficient remedy

When the doctor's diagnosis is unwillingness on the part of the patient, the remedy is *education*. The individual doctor is under obligation to instruct the patient and family regarding the illness, the measures for its cure, and the means for preventing its recurrence or its extension to others

To give these instructions to every individual patient is a very large task for which the busy doctor has not sufficient time The doctor of a decade or two ago considered himself excused from further responsibility for his patient if he diagnosed the underlying causes of his patient's failure to be ignorance or inability Every doctor today sees the opportunity to educate the patients, an ever increasing number realize their responsibility to give that instruction, and a few medical leaders have a keen sense of obligation to give that instruction

Talk about missionary efforts on the part of churches! Doctors are altruistic missionaries who destroy their own livelihood in direct proportion to their success in educating people to keep well They are not only home missionaries instructing their own people, but they feel the obligation to minister to people of other lands, because the plague in China or cholera in India is the direct menace to the health of our own people as well as the cause of world-wide economic disturbance

Among the greatest advances in the practice of medicine in recent years has been the growth of the spirit of cooperation among doctors, among their patients and between the medical profession and the public The individual doctor can do comparatively little in educating the individual patient for his instruction begins only when sickness is already present Nor can the individual patient and family correct their defects of ignorance or inability to cooperate after disease has come upon them No argument is needed to prove the necessity of collective action of individual doctors and of concerted measures by the people

Physicians throughout the civilized world have their medical societies which represent the standards of individual doctors The fundamental organization is the county medical society to which all physicians are eligible, except that small minority who are so intensely individualistic by temperament that they cannot live in peace with their fellow doctors There is a very real sense in which the county society practices medicine Its officers and committees promote the establishment of hospitals and public health nursing, and advise the authorities regarding their conduct in public health matters They also carry on campaigns for educating the people so that they will be ready to cooperate with the family doctor when sickness comes or is threatened The county societies set the standard of medical practice and of the relations of doctors to the public

People generally have little comprehension of the intimate connection of the county society with the practice of either private medicine or public health A board of education, for example, will choose the medical school inspector because he is

the family physician of some member of the board and not for his peculiar qualifications for the office; and when an officer of the county society asks why the society was not considered, the reply often is, "We didn't know you had a county medical society." Every individual doctor is willing that the medical society should decide the methods of conducting any form of public health work and of nominating the personnel that conducts the work. Such activities as these on the part of county societies is an essential part of the practice of medicine.

The obligation upon the people generally is of the same nature as that upon the family of a sick person. The people form one great family, and upon them rests the responsibility for providing the means of supplying efficient medical service to all. The responsibility rests primarily upon the sick person or family, just as it also rests primarily upon the individual doctor. But when the resources of the individual family or doctor are exhausted, the further responsibility rests jointly upon the public and the medical society to provide the remedial or preventive measures which the individual or family doctor cannot provide.

The elementary principle in public service, from acts of charity to the promotion of public works, is that the individual shall be held responsible so far as his ability goes. It is considered a calamity in New York State that the State or any organization should do for an individual what he can do for himself, be it in the line of finances, or civics, or morals, or health. Yet, there are a number of ways in which doctors expect the State to supply medical service—for example, the care of mental patients and the control of communicable diseases.

There are other ways in which doctors expect the State or other organization to supply part of the medical service, as in tuberculosis and laboratory diagnoses.

Then, too, there are ways in which doctors expect governmental bodies to reimburse physicians for treating those unable to pay for the service, as is the intent of the Welfare Law.

All these measures, a decade or two ago, would have been condemned as "state medicine;" but they are now advocated and planned by the Medical Society of the State of New York with a view of preserving the independence of both doctor and patient. Every doctor expects the State to build a cement road over which he may drive as he calls on his patients. It is equally logical that the doctor should expect the State to supply other missing links in the chain of medical service.

It is most encouraging that both the medical profession and the civic authorities have progressed from the state of seeing opportunities for efficient medical service into the state of realizing their joint responsibility for existing health conditions, and are now entering the stage of obligation to provide satisfactory means for bringing efficient medical service within the reach of every person.

LOOKING BACKWARD

This Journal Twenty-five Years Ago

Biology Teaching: Twenty-five years ago the subject of nature study was being developed in the public schools of New York State. This Journal of November, 1906, contains a leading article on the nature study teaching by Dr. Helen C. Putnam of Providence, who studied the methods of teaching the subject in nineteen cities. The Doctor told of one experience in which the teacher taught young pupils about household insect pests, saying "Flies were found to be much more interesting and much more injurious than they had known. With hints from the teacher they collected eggs, watched them hatch into larvae, saw the fly come out of the pupa case. They mounted between plates of glass the egg, larvae, puparium, male and female flies. They learn through this work the life story of the fly; that it lays its eggs in manure heaps and dead animal matter; learn how numerous they are, what flies live on, how they carry filth and disease from sputum and other animal discharges to the next object they light on, which may be one's face or food. The children almost of their own initiative start a crusade against uncovered manure heaps, foul garbage pails and other common uncleanliness. They learn to believe in screens and covered food supplies. They learn, too, nature's method of killing these filth distributors by birds and toads."

After describing a study of mosquitoes, the author says:

"After similar practical methods the life stories and natural enemies of other household vermin were found out; roaches, fleas, bedbugs, buffalo bugs, moths, meal worms. They tried to figure the loss from damage to clothes and food, and to estimate the cost of extra labor.

"Collecting butterflies and wild flowers for study in schools has threatened in more than one locality to destroy beautiful and desirable species. But the collection of these household pests is a good riddance, while the knowledge gained is equally scientific, and saves health, labor and property. Many parents see a profit in this kind of nature study."

MEDICAL PROGRESS

The Treatment of Gas Gangrene—Henry Milch calls attention to the fact that gas gangrene is not so rare in civil practice as we are wont to believe It is a fairly common complication of so called "street accidents," and has been described as occurring after various operations In its treatment practically every known antiseptic has been tried and found disappointing Radical surgery, even including amputation, and the liberal use of a polyvalent serum are the only dependable measures at hand In an illustrative case, the author employed a polyvalent serum, similar to that of Larsen and Pulford, containing 4,000 units of tetanus antitoxin, 15 000 units of perfringens, 35,000 m l d of vibrion and 20,000 m l d of histolyticus antitoxin per 100 c c of saline A double dose was given directly after operation, and another 100 c c was administered after an interval of four hours The amount to be given and the interval at which it should be given must be determined by the clinical evaluation of the severity of the infection and the patient's response to the treatment Though the specificity of this polyvalent antiserum in definitive gas gangrene is not completely established, there is no doubt of its great value in reducing the mortality when used as a curative measure and in reducing the morbidity when used prophylactically Its greatest importance may lie in its use as a preventive measure Its administration should be advocated in all cases of street accidents, as well as pre operatively in patients suffering from arterial disease, diabetes, etc The prophylactic dose of polyvalent gas gangrene antitoxin is now being prepared in conjunction with tetanus antitoxin for commercial sale in this country It contains 15 units of tetanus antitoxin, 10 units of perfringens, 10 units of vibrion antitoxin, and is as easily administered as tetanus antitoxin alone In addition to the prophylactic use of sera, attention should be given to other auxiliary means of preventing the development of gas gangrene Shock, acidosis, and diabetes should be energetically combated Local, spinal, or gas anesthesia should be chosen in preference to ether or chloroform The use of the tourniquet should be forbidden even at the inconvenience of the surgeon—*Annals of Surgery*, June, 1931, xciii, 6

Pathogenesis of Metaplastic Diseases of the Hip ("Osteochondritis")—There can be no doubt, in the opinion of R Tiller and G Bousser, that the great majority of metaplastic affections of the hip are the outcome of initial malformations of this joint, varying from characteristic subluxations down to imperceptible anomalies of adaptation Sometimes they are secondary osteo-articular changes of which metaplasia is the cause and not the effect But it is unquestionable that a certain number of cases of osteochondritis—a minority—are the result of vascular phenomena which are not related to any question of articular morphology In the case of a spontaneous metaplastic disease, what occurs is apparently a repetition of a long slow series of minimal traumatisms, the mechanism of which appears to be as follows (1) A traumatism always produces a vasomotor disequilibrium (brief and negligible vasoconstriction followed by active and prolonged vasodilatation) (2) It may produce a more or less localized necrosis due to suppression of nutrition of one or several regions of the tissue, resulting in vascular ruptures or in small embolic processes The bone then becomes the site of local calcareous mutations as long as the vasomotor phenomena continue and until the mass of calcium set free is utilized The course of the metaplasia will be conditioned primarily by local vascular dispositions and secondarily by mechanical conditions of pressure, traction etc The indispensable condition is the vascular modification of the territory Local vascular troubles readily arise in the region of the hip joint, both because this joint has to sustain the entire weight of the body and also because the epiphyseal region of the head of the femur is more sensitive than any other to the slightest vasomotor variation, owing to the particular disposition of its principal afferent bloodvessels It is not always possible to determine the exact nature of the vascular disturbances, but it is easy to conceive the multiplicity of causes that may result in active hyperemia, and which may, in the presence of secondary mechanical maladaptations, produce metaplastic disease The osteochondritis may be capital, coxal, femoral, or of all three types combined These conditions, whatever their basic cause, constitute a well-defined pathologic entity They terminate, after a phase of resorption, in reconstitution of the joint in conformity with a new type, generally more or less abnormal—*Lyon Chirurgical*, May-June, 1931

Heart Disease and Pregnancy.—In discussing the risk of pregnancy in heart disease, Maurice Newman says the important point is to determine the efficiency of the myocardium The signs of myocardial deficiency which should be looked for in a pregnant patient are limitation of the response to effort, persistent crepitations at the bases of the lungs, edema of the ankles, en-

largement of the liver, and other signs of right-sided failure. If none of these signs are present patients with valvular disease may marry and become pregnant, but should be kept under observation. Persistent auricular fibrillation, signs of heart failure, or a history of failure of compensation from previous pregnancies or other causes, prohibit marriage and pregnancy. The essential principle in the treatment of pregnant women with heart disease is to guard against the onset of heart failure. The greatest care should be taken to maintain the general health and to avoid fatigue and excessive muscular exercise. Infections, such as bronchitis and influenza, which affect the nutrition of the heart should be guarded against. If the efficiency of the heart is maintained the majority of patients will go through pregnancy and labor without much added risk. When the heart is inefficient, the case should be regarded as medical rather than obstetrical. On no account should the pregnancy be interfered with until the heart failure has been adequately treated. At the onset of heart failure the woman should have absolute rest in bed, a restricted diet, and if the heart is fibrillating digitalis should be given until the rate is adequately controlled. Then sufficient digitalis should be administered to keep the heart rate within normal limits. Edema should be treated by restricting the amount of fluids, and giving digitalis and diuretics. If heart failure occurs before the end of the fourth month, abortion should be performed as soon as the heart has been adequately dealt with. In the later months of pregnancy labor should not take place until the heart failure has been overcome. When the child is viable either induction or cesarean section may be considered. The disadvantages of a general anesthetic can be eliminated by using spinal anesthesia, or morphine-scopolamine and local novocaine anesthesia. Labor should be conducted so as to give the heart the minimum amount of strain, particularly during the second stage. A close watch on the heart should be kept throughout labor, and if necessary heart stimulants should be given.—*Practitioner,* June, 1931, cxxvi, 6.

Obstetric Shock.—Although an alarming case, and especially a fatal case. of shock following labor is rare, Miles H. Phillips is convinced that the condition is worthy of close attention. Obstetric shock is the same thing as traumatic or surgical shock, it has the same causes and must be treated on the same principles. The distinction between primary and secondary shock must be kept in mind. Delayed or secondary shock may set in after a latent period, during which nothing obviously abnormal may be noted unless a routine blood pressure reading has been taken. The downward tendency of the systolic pressure gives the first warning of impending shock. The causes of shock are bodily fatigue from prolonged muscular exertion, cold from exposure, deprivation of food and water, sweating, hemorrhage, anesthetics, toxemia of pregnancy, infection, and emotion. This list of causes indicates the precautions to be taken in the prevention of shock. By proper antenatal management the woman should be brought to labor in good physical and mental condition. The second stage of labor should not be unduly prolonged. For the relief of actual pain and mental strain, the use of scopolamine in large doses, without morphine, has proved valuable. When the pains begin to distress the patient, whether in the first or second stage of labor, 1/100 of a grain is given, the dose being repeated in half an hour, and again at the end of the next half hour if required; then the same dose may be given at two-hour intervals. The author is also convinced of the value of this treatment as a preventive of shock. On studying blood pressure records, taken during the various stages of labor and immediately after, in scores of cases during the past fifteen months, he has been impressed by the fact that the fall of blood pressure has been less when scopolamine has been used. With the onset of shock further loss of blood must be prevented so far as possible. Bodily heat must be restored. Pain, anxiety, and restlessness should be relieved by the administration of morphine. The volume of blood plasma should be restored by the intravenous injection of 500 to 700 c.c. of gum saline solution, repeated if necessary. When the patient is in shock the repair of all tears should be postponed; particularly is there grave danger from the use of chloroform or ether. Phillips lays particular stress on the emotions as the cause of shock, and cites cases in which fear and anxiety afforded the only apparent explanation of collapse and death. Hence the woman should be helped to approach confinement with a mind free from anxiety and apprehension, and during labor measures should be taken to lessen mental strain.—*British Medical Journal,* May 16, 1931, i. 3671.

The Placenta as an Endocrine Organ.—The most recent investigations have shown, says L. Seitz in the *Münchener medizinische Wochenschrift* of May 22, 1931, that the placenta itself produces a hormone and thus enters directly into the state of equilibrium of the maternal endocrine system. It has become clear that, through the activity of this newly formed gland which begins to function when pregnancy appears, a hormonal displacement occurs and a new kind of hormonal equilibrium is ushered in, different from that which exists in the non-pregnant condition. The endocrine influence of the placenta and its reflex effect upon the maternal body must be regarded as a completely physiologic process, exactly adapted for the phase of gestation just as the action of the thymus is for childhood and the action of the ovary for puberty and sexual maturity. Its

effect is distinguished from these, however, in tempo, in quality and in quantity, in tempo, because the entire process is built up in 9 months and regresses in 2 3 months, in quality, because several increations are involved, in quantity because the active amounts are unusually large The disturbances attributable to an endocrine action of the placental hormone are of 2 kinds, those connected with endocrine activity itself, and those related to metabolism So far as we can now see, the chief effect of this hormone is to cause an increase of the other endocrine secretions already normally present, especially those of the anterior lobe of the hypophysis, of the ovaries and the thyroid, enabling the woman, unless of abnormally asthenic type, to go through pregnancy with undiminished health and in a state of general well-being Many women experience an improvement in their constitutional condition beyond anything they have ever before enjoyed The essential factor in these transformations in the maternal body is the thin limiting membrane formed by the chorion epithelial cells of the placenta These elements represent an endocrine gland in both the wider and the narrower sense of the word, through the action of which the entire glandular equipment of the maternal organism is stimulated to increased and perhaps more successful activity Growth processes are promoted in the various maternal organs and changes in metabolism and in organ function are cared for The sound and healthy female body bears these changes without great difficulty But in inferior persons disturbances of equilibrium in the endocrine system are brought to light, or there are changes in metabolism that lead to injury of organ function, with occasional fatal outcome

The Infrequency of Cancer in Egypt—The statistics for cancer in Egypt show such low figures, says Schrumpf-Pierron, that they suggest the presence of some special condition existing in that country Cancer is at least ten times less frequent in Egypt than in Europe Since 1918 when it was made compulsory to report the cause of every death in towns of over 5,000 population, the average mortality from cancer has been 0 23 per 1,000 population Cancer is responsible for only 6 in 1,000 deaths This relative exemption of Egypt is the more remarkable in view of the existence in this country of a special predisposing cause of cancer in bilharzia Of the small number of cancer cases (22) that Schrumpf-Pierron has observed among the native population (and his total observations in clinics include 7 040 patients suffering with all kinds of diseases), 7, or about one third, were of bilharzial origin Another striking fact is the very small proportion of cancers of the digestive tract, and of gastroduodenal ulcer Neither climate nor race accounts for the low cancer figures But Egypt presents a remarkable unity in the nature of its arable soil, which is watered only by the Nile and its canals This soil has an extraordinary content in magnesium, the minimum figure being 1 54 and the maximum 1 72 per cent The highest magnesium figure for any soil in France is that of Caen, which is only 0 1 per cent Thus the arable soil of Egypt is 15 to 17 times richer in magnesium than the most favorable spot in France In the filtered water of the Nile the magnesium content amounts to 6 to 22 mg per liter While this is not an exceptionally large amount, it is nevertheless many times the content reported by Breteau in four countries in which cancer is very frequent The ordinary Egyptian fellah however, prefers to drink the Nile water unfiltered, despite its heavy content of mud Even some personages of importance regard this unfiltered water as indispensable for their health The fellah also lives chiefly on vegetables grown in the soil abounding in magnesium Hence the small incidence of cancer in general and the infrequency in particular of cancer of the digestive tract suggest the strong probability that cancer may be related to a lack of magnesium in the system—*Bulletin de l'Academie de Medicine,* May 19, 1931

The So Called Precancerous Dyskeratoses—Discussing the nature of cancers of the type known as Paget's disease and Bowen's disease, which they place in a special class, G Massia and J Rousset say that although certain clinical and anatomical differences exist between these two affections, there are also striking resemblances in their origin and evolution Always it is the same zone of skin that is attacked Both diseases are characterized by epithelial hyperplasia of the prickle cells, and there is invariably an infiltration into underlying parts of the skin Both frequently terminate in cancer, and in both cases the cancer is of dyskeratotic type One is forced to the hypothesis that both affections are cancerous from the beginning, and that their origin cannot be other than an epithelium of the skin or the demi mucosae in such regions as the nipples, glands, vulva, anus, axilla, etc The particular point of the epithelium or its adnexa appears to be the neck of the sebaceous glands that are more specialized in such regions This hypothesis receives support from various considerations (1) Those cancers of the skin that are known at the present time have not at any moment of their evolution the type of the dyskeratotic cancers (2) In Paget's and Bowen's diseases the sebaceous glands have disappeared at the points where they are ordinarily abundant (3) Cells are found which have undergone sebaceous degeneration at points of the epithelium in the vicinity of typical lesions of these affections (4) It is quite possible that the dyskeratotic cells are only Malpighian cells undergoing sebaceous degeneration through cancerous excitation (5) Transpar-

ent cells are normally found in the cellular débris of the neck of the normal sebaceous glands of these regions. If this hypothesis is accepted, Paget's disease is a cancer of slow evolution of special points of the integuments, having the type of transparent cell, which is found normally at the level of certain sebaceous glands. It evolves by substituting for normal tissue cancerous tissue composed at some points of dyskeratotic cells, but at others, still of prickle cells. In the deep tissues this cancer produces a special type of tumor known as dyskeratotic cancer, formed of globes whose center is composed of degenerated cells, with desquamation upon the surface. Under certain conditions this tumor may evolve exclusively into the deeper tissue, without Paget's disease in the nipple or elsewhere. The evolution is similar in Bowen's disease, but this disease seems to have the ability to develop at any point whatever of the skin and of certain mucous membranes which have sebaceous glands.—*Journal de Médecine de Lyon,* May 20, 1931.

The Explanation of Paracusia Willisiana.—Heinz Diehl points out in the *Münchener medizinische Wochenschrift* of May 15, 1931, the inadequacy of the usual theory that paracusia Willisiana (the ability of many persons with otitis media and otosclerosis to hear conversation better in presence of a loud noise such as that of a moving train) is due to the loosening up of the pathologic fixation of the middle ear by the vibrations of the noise, so that sound transmission is facilitated. While the bones of the ear are no doubt moved by the noise, it is not true that they are made more easily movable. Any real loosening up of these ossicles by the vibration would have to persist after the noise ceases, but such is not the case. It is worthy of note that this paracusia is observed only when the noise is low-pitched. High-pitched sounds, on the contrary, disturb these very patients seriously. The explanation is quite simple. The energy of a sound wave in the air per second is proportional to the square of the amplitude and the square of the number of vibrations. If two sounds of different pitch have a like intensity at a given place in the air, their amplitude must be to each other as is the number of vibrations. A tone, for example, of 100 vibrations must have an amplitude 100 times as great as a tone of 10,000 vibrations if the intensity of both is to be the same. In disturbances of sound conduction—stapes ankylosis, otitis media—the amplitude of the vibration of the middle ear apparatus is restricted, so that it cannot transmit enough intensity of the sound when the tones are pitched low. A person with normal hearing instinctively talks louder when riding in a train. The noise of the train is usually composed of vibrations lying below 100. But these are precisely the vibrations that the patient with otitis media does not hear well. Under these conditions he easily hears the raised voice of the normal person addressing him. But he does not hear better in a medical sense nor in the sense of a paracusia Willisiana. In fact no such entity as paracusia Willisiana exists. The patient in question hears many high-pitched sounds more easily under these conditions, simply because he remains unaffected by the low-pitched sounds.

"Prominent Heel."—Paul Bernard Roth directs attention to a condition which appears to have escaped all mention in books. The patient complains of pain on the back of the os calcis on the outer side. On examination a localized swelling is observed about half-way down the os calcis, opposite the lowest limit of the insertion of the tendo Achillis. The swelling is tender on pressure, is very hard, and gives the impression of being due to a bony outgrowth. In a lateral roentgenograph, however, no bony prominence is seen, and one is led to think that the lump must be due to a thickening of the fibrous tissue covering the back of the os calcis, or perhaps to a thickening of the periosteum. This is obviously due to irritation by the back of the shoe not fitting the heel properly. Several cases which came under the author's observation suggested that the shape of the os calcis might be the cause, and that the shoemaker was not alone at fault. In *Cunningham's Anatomy* the posterior extremity of the os calcis is described as "of oval form and rounded surface." On examining several specimens in his own possession and forty in the College of Surgeons Museum, it was found that in 17 of the 43 ossa calcis there was a backward projection on the outer side. The author, therefore, believes that when one meets with a painful lump on the back of the heel, this prominence exists to an extra degree. Other conditions for which it might be mistaken, such as inflammation of the bursa beneath the tendo Achillis and apophysitis of the os calcis, must be excluded. The treatment consists in the avoidance of all pressure for one or two months. This necessitates the wearing of shoes with no backs, or with the back cut opposite the lump. A moderately high heel is theoretically of advantage, as it reduces any strain there may be around the insertion of the tendo Achillis. A walking shoe which meets the requirements in these cases is now in the market. The removal of the prominence by open operation is entirely uncalled for. As there is already a condition known as "painful heel," it is suggested that the condition here discussed may be named "prominent heel."—*British Medical Journal,* August 15, 1931, ii, 3684.

LEGAL

ACCIDENTAL INJURY

By Lorenz J. Brosnan, Esq.

Counsel, Medical Society of the State of New York

The conditions under which we live in this generation have led many prudent men to hold so-called accident policies. Since a large number of physicians are the holders of these policies, it might be interesting to analyze a few cases which have come before the courts in recent years in which there was a contest as to whether death or injury was or was not the result of accidental means within the meaning of the policy.

One of the leading dictionaries defines accident as "an event which under the circumstances is unusual and unexpected by the person to whom it happens." It has also been defined as "an event which proceeds from an unknown cause, or is an unusual effect of a known cause, and therefore not expected." It might be argued from the definitions above stated that a result would be accidental even if produced by means all of which and every detail of which were intended, provided the result which follows the employment of such means is different from the result anticipated. Let us examine some of the authorities and see how the courts have treated concrete cases which have come before them for decision.

A case which illustrates the principle that a death is accidental in its causes is where the act or thing which caused an injury is clearly accidental, and the injury sets in motion the forces which cause death. An example of this class of case is found in an accidental minor injury causing blood poisoning, which in turn causes death. An example of a more difficult case, where the cause was intended, is illustrated in a case decided some years ago by the courts of our State. The deceased had ridden on a bicycle over a rough road and a few hours after returning home suffered soreness in his abdomen, which rapidly increased to great pain. The next day a physician diagnosed his trouble as appendicitis and advised an operation which was performed, but the man died within three days. In a suit to enforce payment of an accident policy, medical testimony was to the effect that the appendicitis had resulted from the bicycle ride "because the 'psoas' muscle, the function of which is to flex the leg upon the body and rotate the leg and thigh upward, lies in close proximity to the appendix, and in such position that when brought into play, as by riding a bicycle, it necessarily rubs against the appendix, and there being 'coprolites or concretions' (hard substances about the size of a bean) in such organ, such rubbing or play of the muscle caused irritation resulting in inflammation, which weakened the walls of the appendix, caused it to rupture, thus permitting the contents of that organ to enter the abdominal cavity, causing appendicitis, septic peritonitis and death." The court ruled in favor of the insurance company on the ground that while the result was extraordinary and was accidental, the means which produced it were deliberately intended and carried out precisely as intended.

Another interesting case along the same line is one which recently came up in this State, likewise in a case to collect on a policy covering accidental death. A patient went to a dentist for the purpose of having a tooth extracted and was given oxide gas. After a slight quantity had been administered the patient stopped breathing and died. An autopsy was performed and revealed a condition of status lymphaticus, which experts called in the case stated to be a congenital state or condition of unknown cause, characterized by an abnormal persistence of the thymus gland in the chest. The expert testimony was agreed that a person the subject of status lymphaticus was liable to sudden death from slight causes, and it was brought out that the precise cause of such death was unknown to medical science. The appellate court ruled that under the circumstances, the administration of gas being exactly as intended by both the dentist and the deceased, there was nothing accidental in the means causing the death but only in the results occasioned by the means and, therefore, there was no accident covered by the policy of insurance.

A slightly different situation arose in a case which was very recently decided by the highest court of one of our nearby States. Suit was instituted to recover on an accident policy covering, among other things, the effects of bodily injury sustained by accidental means while riding in an automobile. It seems that the assured with two companions had started out on a country road on a cold December evening in a closed car. The car became mired in the mud so deeply that the chassis of the car rested on the ground, and efforts to get the car out of the hole by its own power failed. Passersby agreed to send a team of horses to drag out the car, so the two companions of the assured proceeded on foot, leaving the assured with the car to await help and while waiting he was to repair a tire. The assured

did not repair the said tire and help did not come promptly, but he apparently sat in the car with the engine running for warmth, for the next morning he was found dead in the car, the engine still running, with the windows closed. The medical examiner diagnosed the cause of death as carbon monoxide poisoning. On the trial of the suit to recover on an accident policy, a verdict was rendered for the plaintiff and the insurance company appealed arguing as a ground for reversal that the facts as outlined did not show death by accidental means. The appellate court ruled that the definition of accidental had been satisfied, even though it was argued that the assured by permitting the motor to run with the windows closed had voluntarily exposed himself to the circumstances which led to his death. In affirming the award to the plaintiff the appellate court said:

"The second ground of defense is that the insured's death did not result from the effects of bodily injury caused by accidental means. The term 'accidental means' has been variously defined."

The court cited with approval the following extract from another case:

"The significance of this word 'accidental' is best perceived by a consideration of the relation of causes to their effects. * * * An effect which is not the natural or probable consequence of the means which produced it, an effect which does not ordinarily follow and cannot be reasonably anticipated from the use of those means, an effect which the actor did not intend to produce and which he cannot be charged with the design of producing under the maxim to which we have adverted (the maxim that every man must be held to intend the natural and probable consequence of his deeds), is produced by accidental means. It is produced by means which were neither designed nor calculated to cause it. Such an effect is not the result of design, cannot be reasonably anticipated, is unexpected and is produced by an unusual combination of fortuitous circumstances."

The court continued:

"Counsel for defendant urge that the deceased voluntarily exposed himself to the danger which caused his death. We cannot approve such an idea. The odorless and tasteless nature of the insidious monoxide gas prevents any intimation that the insured knowingly remained in a place of danger. While it is true that without the engine running no carbon monoxide would have been produced, and so to the extent that he started the car and closed the windows, his acts were voluntary; but without some intervening factor the natural and probable consequences of his acts would have produced no danger. It was that intervening factor—in this case, the proximity of the exhaust pipe to the ground, causing the poisonous gas to come into the car—which produced the unnatural condition and danger, a factor which cannot be attributed to the deceased nor one which occurs or is anticipated in the ordinary course of events under similar circumstances."

These cases, defining the rights of the policyholder and the insurance company, are of interest to every holder of an accident policy.

CLAIMED NEGLIGENCE IN ADMINISTRATION OF ELECTRO-THERAPY

The defendant in this case, who specializes in orthopedics, was consulted by a young married woman who complained of pain in the lower part of her back. The doctor suggested treatment by electro-therapy, to which she consented. Using a standard brand of diathermy machine, he moulded two tinfoil electrodes, caused the patient to lie down on one of them which was applied under her abdomen, and placed the other on her back weighted down with a sandbag. In this position a twenty-minutes treatment was administered.

She returned on four subsequent occasions and received like treatment. When she returned for the fifth treatment, the doctor discovered that she had sustained a small second degree burn about an inch in diameter on the back, at about the place where the electrode has been applied. The doctor treated this with mercurochrome and a dry dressing, and proceeded to give her another treatment, attaching the electrode at a point away from the location of the burn.

The patient called for subsequent treatments over a period of several weeks and when the doctor last saw and treated her the burn had entirely healed. The doctor contended that his machine was in perfect order and that the burn could only have been caused by the patient moving while the electrode was applied to her back.

An action was instituted against the doctor, claiming that she suffered a severe burn as a result of the doctor's negligence in absenting himself from the treatment room and permitting the patient to receive the treatment without the presence of either the doctor or a nurse. When the case came up for trial, the plaintiff's attorney stated to the judge that he had been unable to obtain medical testimony to support his case and requested an adjournment that he might secure such a witness. The trial of the case was adjourned, and when the case was again called for trial the plaintiff's attorney announced to the court that he had still been unable to obtain medical testimony, and at that time at the suggestion of the court consented to discontinue the action against the physician.

NEWS NOTES

FOURTH DISTRICT BRANCH

The Twenty-fifth Annual Meeting of the Fourth District Branch of the Medical Society of the State of New York was held on Wednesday and Thursday, October 21 and 22, 1931, at the Queensbury Hotel in Glens Falls, N. Y.

The meeting was called to order at two-forty P. M. by the President, Dr. Frank vander Bogart, of Schenectady, N. Y.

At this session the following papers were presented and thoroughly enjoyed by the large number of physicians present.

"Neurology in General Practice—The Early Diagnosis of Remediable Lesions," was given by Wilder Penfield, M.D., of Montreal.

"Gall Stones—A Study in Perspectives," was read by Edwin MacD. Stanton, M.D., of Schenectady, N. Y.

"Anthrax," Edward C. La Porte, M.D., of Amsterdam, N. Y.

"Certain Obstacles to the Development of the Language Function in Children," was presented by Samuel T. Orton, M.D., of New York City.

These papers were fully discussed by various members present.

In the evening a Dinner was given at the Hotel Queensbury to those in attendance by the Warren County Medical Society of the State of New York. Short talks were given by Dr. William D. Johnson, President of the Medical Society of the State of New York, and by Dr. T. P. Farmer, Chairman of the Committee on Public Health and Medical Education. The principal speaker of the evening was Mr. J. Thacher Sears of Glens Falls, who delighted his audience with his talk on "The Great War Path," describing the many locations of historical interest which so abound in this part of New York State.

The second session was called to order by Dr. vander Bogart at nine-fifty A. M., Thursday, October 22nd. At this session the following papers were presented:

"The State Orthopedic Program," by Walter J. Craig, M.D., of Albany, N. Y.

"Presentation of the Welfare Problem to the Board of Supervisors," by Raymond G. Perkins, M.D., of Malone, N. Y.

"The Lawyer and the Physician in Welfare Work," by John R. Parker, of Schenectady, N. Y.

"Medical Education," by Grant C. Madill, M.D., of Ogdensburg, N. Y.

These papers were fully and warmly discussed by many of the physicians present. At the close of the discussion the meeting adjourned.

This annual meeting was conspicuous in the large attendance of members from the different parts of the district, many of whom, because of the large area covered, had come long distances to be present.

SYLVESTER C. CLEMANS, M.D., *Secretary.*

HERKIMER COUNTY

The regular meeting of the Medical Society of the County of Herkimer was held at the Waverly Hotel, Herkimer, N. Y., Tuesday evening, October 13, 1931. Dr. H. C. Murray, President, called the meeting to order at 9 P.M. The following members were present: Doctors Murray, Brooks, Moore, Crofts, O'Neil, Love, Diss, Whittemore, Barnes, and Conterman. Two new physicians, having recently located in Herkimer, were present as invited guests, namely: Dr. Dominick Aloisio and Dr. W. J. MacDonald.

The minutes of the last meeting were read and approved. Discussion upon a motion that the President appoint a member to act as a reporter, brought out the fact that the by-laws of the Herkimer County Medical Society already provide for these functions through means of a Publicity Committee. The President then instructed the member of the committee then present to assume the duties of reporter.

A nominating committee was appointed by the President to make nominations for the various offices to be voted upon at the annual meeting of the Herkimer County Society to be held in December.

Dr. O. Houghton Love of Little Falls read an interesting paper on "Surgical Technique," emphasizing the value of teamwork between the surgeon and his assistants, attention to detail, avoidance of trauma, choice of anaesthetic, etc.

Dr. Howard C. Murray, President of the Society and delegate to the last State Medical Soci-

ety meeting, made a report of the State meeting and brought forth many interesting details and explanations of the business transacted there.

At the close of the meeting refreshments, consisting of sandwiches and coffee were served.

The program committee consists of Doctors T. B. O'Neil, O. H. Love and C. C. Whittemore.

FRANK B. COUNTERMAN, *Reporter.*

SCHOHARIE COUNTY

The seventy-fourth annual meeting of the Schoharie County Medical Society was held in Cobleskill, New York, on Tuesday, October 13, 1931, the business session in Hotel Augustan and the scientific session in the high school auditorium. The meeting was called to order by the President, Dr. Joseph F. Duell.

The possibility of a clinic on pediatrics being held in the county for our society was considered, and it was moved, seconded and carried that if possible, such clinic shall be held in Cobleskill on the first Thursday in December. Drs. D. W. Beard and J. F. Duell were appointed a committee to make arrangements.

On motion it was decided that all matters affecting the interest of our society and desirable for publication in the State Journal be given to the secretary to record and forward.

These officers were duly elected and committees appointed for our society for 1932:

President, Dr. Ward L. Oliver
Vice-President, Dr. Roy G. S. Dougall
Treasurer, Dr. Le Roy Becker
Secretary, Dr. Herbert L. Odell
Censor, Dr. Willard T. Rivenburgh
Delegate to State Society with power of substitution, Dr. David W. Beard
Legislative Committee, Drs. H. R. Bentley, L. R. Becker and C. L. Olendorf
Public Relations Committee, Drs. D. W. Beard, W. S. Pomeroy and L. R. Becker
Public Health Committee, Drs. D. W. Beard, W. S. Pomeroy and L. R. Becker
Publicity Committee, Drs. J. J. Beard, L. Driesbach and R. G. S. Dougall
Physical Therapy, Drs. M. Bruce, R. G. S. Dougall and D. W. Beard
Medical Economics Committee, Drs. Ward L. Oliver and David W. Beard

It was moved, seconded, and carried that Dr. Crampton's letter relative to medical broadcasting be referred to the Public Relations Committee.

Dr. Bentley, as Chairman of Legislative Committee, in his annual report, requested the members to express their opinion on certain measures that will probably be brought before the State Legislature this winter. On motion it was unanimously decided that Schoharie County Medical Society is opposed to any and all legislation that will lower the standard of the present Medical Practice Act.

On recommendation by the Comitia Minora, Dr. Duncan L. Best of Middleburg was elected to membmership.

Dr. George W. Augustin of Oneonta gave an especially entertaining paper on his "War Experiences as a Medical Officer."

Inaugurating a series of six post-graduate lectures on dermatology and syphilology, each to be given by a specialist on the second Tuesday of each month in Cobleskill High School at 2 P.M., Dr. Earl Dorland Osborne, chief dermatologist and syphilologist, City and Children's Hospitals. Buffalo, gave a masterly, illuminating, and deeply interesting paper on "Common Skin Diseases, Exclusive of Eczema," which was well illustrated with slides.

HERBERT L. ODELL, *Secretary.*

WASHINGTON COUNTY

The annual meeting of the Medical Society of the County of Washington was held at Hudson Falls, October 6, 1931, at 4.30 P. M., with 22 members and 6 visitors present.

The Treasurer reported $107.17 in the society's funds.

The President appointed Drs. Byrnes, Pashley, Sr., and MacDonald as a nominating Committee and the following officers were nominated and elected:

President, D. M. Vickers; Vice-President, D. E. MacArthur; Secretary, S. J. Banker; Treasurer, C. A. Prescott; Censors, A. E. Falkenbury, Samuel J. Pashley, Jr., and J. H. Ring.

Committee on Legislation: W. A. Leonard, Chairman

Committee on Public Relations and Medical Economics: M. A. Rogers, Chairman.

Committee on Physical Therapy: Samuel J. Pashley, Jr., Chairman.

The matter of the Governor's Special Health Commission as reported in the State Journal, was discussed and a motion passed that we call a

special meeting in the near future to consider our attitude toward this subject

Dr Munson presented the following resolution from the Board of Supervisors, which was approved

'In view of the fact that a number of cases of syphilis and gonorrhea are present in the county, and that difficulty is experienced in getting treatment, and that many of these cases have to be sent out of the county, it is resolved to call this to the attention of the Washington County Medical Society and request that the Medical Society may wish to designate certain physicians who may be willing to operate clinics in centers in Whitehall, Granville, Cambridge, and Hudson Falls"

A motion was made by Dr Byrnes and seconded by Dr Pashley, and carried that the President appoint a chairman of each district who shall call a meeting of the men in his community, and designate a man to carry on the county venereal work in his community Doctors Ring, Falkenbury, Leonard and Byrnes, were appointed local organizers

Dr B C Tillotson of Fort Edward, gave his presidential address on "Non-Epidemic Encephalitis,' mentioning the difficulties of diagnosis

Dr J T Park of Hudson Falls, presented a paper on "Therapeutic Fads and Fancies," mentioning the treatment of bedsores, hiccough, ringworm, whooping cough and pain of cancer

Dr James Vander Veer representing the State Society and Dr Albert Pfeiffer representing the State Department of Health discussed the reporting and control of venereal diseases

Dr A B Soule from the University of Vermont presented a paper on "Some Studies of the Renal Function"

S J BANKER, *Secretary*

A special meeting of the Washington Medical Society was held in Hudson Falls, on November 5, with 17 members present

The special committee on venereal disease treatment, reported that Dr Leonard had made arrangements with Drs Vicker and Fortune to treat cases at the Mary McClellan Hospital in Cambridge and that Dr Byrnes had appointed Dr C A Prescott of Hudson Falls

Dr J S Lawrence explained the preliminary report of the Governor's Health Commission, and Dr W A Leonard President of the State Sanitary Officers' Association discussed County Health Units The County Society voted to favor the principle of county health supervision, and to approve the resolutions adopted by the State Sanitary Officers' Association (See this JOURNAL July 15, page 909)

S J BANKER, *Secretary*

GENESEE COUNTY

A regular meeting of the Genesee County Medical Society was held on September 18, in the Blue Bird Inn, Batavia, with the president, Dr P J Di Natale, in the Chair and sixteen members present The subject of the evening was poliomyelitis and was led by Dr Loren B Manchester of Batavia, who has been appointed consultant in the disease by the State Department of Health The use of immune serum was urged and methods of the early detection of the disease were described

The session was closed with a dinner

FRANK R HALL, *Secretary*

The regular fall meeting of the Genesee County Medical Society was held on Monday, October 26, at 5 00 P M, at Batavia, New York

Officers for the ensuing year were elected as follows

President Dr G Henry Knoll LeRoy
Vice-President Dr Frank R Hall, Batavia
Secretary and Treasurer Dr P J DiNatale, Batavia
Delegate to the State Society Dr P J Di Natale, Batavia
Alternate to the State Society Dr I A Cole, Batavia

The Scientific Program consisted of a paper by Dr Clayton Greene of Buffalo, on "The Medical Man's Attitude on So called Acute Abdomen"

Twenty three members were present and three visitors Dr P J DiNatale, President, was the presiding officer

FRANK R HALL, *Secretary*

THE DAILY PRESS

Reg'lar Fellers — An Appetizer — By Gene Byrnes



From the *New York Herald Tribune*, September 18, 1931.

DIETING AS IT IS TOO OFTEN DONE

CONDITIONS FOR SUPPORTING LIFE

An editorial in the New York *Herald Tribune* of October 4 comments on remarks of Sir Halford Mackinder, President of the British Association for the Advancement of Science, who urged "that the remarkable accident of the earth having an ocean is the essential cause of those other cosmic accidents called life and man."

The editor comments:

"Astronomers frequently speculate about how many solar systems are to be expected in the universe of stars. The first necessary coincidence is that of near collision of two suns; for it was such a close approach, accepted theories run, that generated this solar system of ours. Stars are many but scattered. An orange on top of the Empire State Building, a second one at Bogota, Colombia, a third at the Azores, and others at equal distance in other directions would represent, it is computed, the average sizes and mutual distances of bright stars capable of creating planets. These oranges would move, to duplicate the average movement of the stars, about a half mile in a century. Calculate how long it would take for random motion of these oranges to cause collision between two of them and you have an idea of how often suns come near enough for planets to be formed.

"Small as is this chance, the stars are so many that no insignificant number of solar collisions probably has happened. Perhaps these have left behind them many planetary families; but, two more chances stand in the way, Sir Halford Mackinder pointed out, of the duplication of life. One is temperature. Any planet aspiring to duplicate the life record of the earth must be at just that distance from its sun which will provide a temperature between the narrow limits of freezing water and destruction of delicate materials like protoplasm. More than that, it is necessary for this aspiring planet to have a liquid ocean, a further accident which our earth probably owes to the detachment of a part of its original crust to form the moon. Had any link in this chain failed to be forged, Sir Halford suggested, life would have been impossible. Potentially, life may be implicit in all matter. Actually, it may be unique or almost so, if for no other reason than that other worlds have no oceans in which it could start."

NEW SOURCE OF RADIUM

A newly discovered source of radium is described in an editorial in the *New York Times* of October 31, as follows:

"The discovery of a deposit of radioactive pitchblende in the Great Bear region of Canada is an event of first-rate commercial and scientific importance. Czechoslovakia was once the world's largest producer of radium. It had to yield first place to the Chinkolobwe mine in the Belgian Congo. So rich is the African deposit that the Belgians have had a virtual monopoly of radium.

"The newly discovered Canadian ore yields from 3 to 4 grams of radium to the ton; the Congo deposits only a gram to every ten tons. The present price of $70,000 a gram ought to fall. Thousands of cancer patients will benefit if it does. The present world supply of radium is only 600 grams—less than three cupfuls."

AUTOMOBILE CONTROL

The New York Times of November 3 contains the following editorial note on the comparative ease of stopping an automobile going at various speeds and on various pavements

'At a recent meeting of the Society of Automotive Engineers one of the speakers produced a table which all automobile drivers should learn by heart Familiar enough to the expert, but possibly not to the layman, it deals with the distance and time it takes to stop a car going at different speeds and on different types of pavement

"A properly equipped car traveling at 20 miles an hour on a concrete road can be brought to a full stop in a few inches less than 15 feet But if it is traveling 40 miles an hour, it will require not twice as much room to stop, but four times as much, or 60 feet If it is traveling 60 miles an hour it will cover 135 feet of highway before it can be stopped

"The minute the car is tried out on other surfaces the 'coefficient of friction' diminishes and the required distances increase On firm gravel they are 27 feet 107 feet and 240 feet, respectively, for speeds of 20 40 and 60 miles an hour, the corresponding figures for 'wet creosoted wood block' are 133, 536 and 1,200

"This almost geometric progression affords one ready explanation of the observed close relation between high speeds and fatal accidents"

LABORATORY USE FOR MURDERERS

Cleopatra used slaves and condemned criminals as subjects for laboratory experiments with poisons, apparently with satisfactory results from her point of view, but the suggestion has been made by modern scientists to use those under sentence of death for experiments with life-saving procedures, as is indicated in the following editorial in the *New York Times* of October 28

"'My hand trembles when I think of passing from dogs to human beings,' wrote Pasteur to Dom Pedro, Emperor of Brazil, in describing his experiments with rabies in some unpublished correspondence unearthed by La Revue de l'Amerique Latine To make the transition easy and to lighten his own conscience, Pasteur suggested that a king or an emperor might authorize experimentation with criminals On the eve of his execution a condemned murderer was to choose between the scaffold and inoculation with a chance for life If the man lived, as Pasteur was sure he would, society would have to protect itself by keeping an eye on him for the rest of his days

"Although probably horrified by the proposal, Dom Pedro replied that death sentences were commuted in Brazil and that 'if the rabies vaccine has no incontestable effect, who would prefer a doubtful death to one which is almost certain? Even in the contrary case, who would consent to a possible if not a probable suicide?" The imperial refusal to treat condemned criminals as if they were dogs was softened by an invitation to visit Rio and develop there a yellow fever vaccine which could be used without grave risks"

NOISE ABATEMENT

What can be done to lessen city noises to an endurable softness is indicated in the following editorial in the *New York Sun* of September 29

"The Noise Abatement Commission, appointed nearly a year ago to study ways and means of minimizing a disadvantage shared by all large cities, in its first report records some specific accomplishments The I R T introduced the first noiseless subway turnstile in April, complete installation is now being carried out as rapidly as practicable The B M T is testing another type of silent turnstile Thus the cause of complaint standing fourteenth on the list of those received by the commission is on the way to being eliminated A conference on river and harbor noises in January brought some progress in this respect Changes in the Sanitary Code and in the city ordinances effected by the commission have virtually put an end to the loudspeaker nuisance in business neighborhoods and have helped to diminish the annoyance caused by thoughtless use of the radio in residential districts The Commission recommends first, that a noise squad from the Department of Health be assigned permanently to investigate complaints of unnecessary noise and to enforce pertinent regulations, and also, that an energetic educational campaign be launched to make the individual citizen conscious of what he must do to make the city a quieter place Louder than the lion's roar, by actual acoustical measurements, is the din of riveters, of steamship whistles and subway trains, only slightly less noisy the roar of elevated trains and the blare of loudspeakers and automobile horns If New York wishes to hear the lion's roar above the many-voiced city's babel there is a contribution to silence waiting to be made by nearly everybody"

BOOKS RECEIVED

Acknowledgment ot all books received will be made in this column and this will be deemed by us a full equivalent to those sending them. A selection from this column will be made for review, as dictated by their merits, or in the interests of our readers.

BEDSIDE INTERPRETATION OF LABORATORY FINDINGS. By MICHAEL G. WOHL, M.D. Octavo of 321 pages, illustrated. St. Louis, The C. V. Mosby Company, 1931. Cloth, $6.00.

EARLY THEORIES OF SEXUAL GENERATION. By F. J. COLE, D.Sc.Oxon., F.R.S. Octavo of 230 pages, illustrated. Oxford, Clarendon Press, 1930. Cloth, $6.00.

MRS. DOSE, The Doctor's Wife. By JOYCE DENNYS. 12mo of 154 pages, illustrated. New York, D. Appleton & Company, 1931. Boards, $1.50.

THE INBORN FACTORS IN DISEASE: An Essay. By ARCHIBALD E. GARROD, K.C.M.G., D.M. 12mo of 160 pages. Oxford, Clarendon Press, 1931. Cloth, $2.75.

DYNAMIC RETINOSCOPY. By MARGARET DOBSON. Octavo of 56 pages, illustrated. New York, Oxford University Press, 1931. Cloth, $2.50. (Oxford Medical Publications.)

THE DIAGNOSIS AND TREATMENT OF VENEREAL DISEASES IN GENERAL PRACTICE: The Routine Management of Syphilis and Gonorrhœa Employed in the St. Thomas' Hospital Venereal Diseases Department. By L. W. HARRISON, D S.O., M.B. Fourth edition. Octavo of 567 pages, illustrated. New York, Oxford University Press, 1931. (Oxford Medical Publications.)

A SURVEY OF THE MEDICAL FACILITIES OF THE CITY OF PHILADELPHIA: 1929 Being in Part a Digest of the "Philadelphia Hospital and Health Survey, 1929." By NATHAN SINAI, D.P.H., and ALDEN B. MILLS. Octavo of 298 pages. Chicago, The University of Chicago Press, [c.1931]. Paper, $1.50. (Publications of the Committee on the Costs of Medical Care: No. 9.)

THE "MUNICIPAL DOCTOR" SYSTEM IN RURAL SASKATCHEWAN. By C. RUFUS ROREM, Ph.D., C.P.A. Octavo of 84 pages. Chicago, The University of Chicago Press, [c.1931]. Paper, $1.00. (Publications of the Committee on the Costs of Medical Care: No. 11.)

A MANUAL OF CLINICAL LABORATORY METHODS. By CLYDE LOTTRIDGE CUMMER, Ph.B., M.D. Third edition. Octavo of 585 pages, illustrated. Philadelphia, Lea & Febiger, 1931. Cloth, $6.75.

SURGICAL CLINICS OF NORTH AMERICA. Vol. 11, No. 4. August, 1931. (Mayo Clinic Number). Published every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues). Cloth, $16.00 net; paper, $12.00 net.

GONORRHEA in the Male and Female. A book for Practitioners. By P. S. PELOUZE, M.D. Second edition. Octavo of 440 pages, illustrated. Philadelphia and London, W. B. Saunders Company, 1931. Cloth, $5.50.

A TEXT-BOOK OF GENERAL BACTERIOLOGY. By EDWIN O JORDAN, Ph.D. Tenth edition. Octavo of 819 pages, illustrated. Philadelphia and London, W. B. Saunders Company, 1931. Cloth, $6.00.

THE PRACTICE OF MEDICINE. By A. A. STEVENS, A.M., M.D. Third edition. Octavo of 1150 pages, illustrated. Philadelphia and London, W. B. Saunders Company, 1931. Cloth, $8.00.

DEMONSTRATIONS OF PHYSICAL SIGNS IN CLINICAL SURGERY. By HAMILTON BAILEY, F.R.C.S. Third edition. Octavo of 277 pages, illustrated. New York, William Wood and Company, 1931. Cloth, $6.50.

STUDIES IN THE PHOTO-ACTIVITY AND THERAPY OF THE TUNGSTEN-TITANIUM ARC. By J. BURDON-COOPER, M.D., B.S. and ARTHUR ROBERTS, T.D., F.R.C.S.E. Octavo of 85 pages, illustrated. New York, William Wood and Company, 1931. Cloth, $3.50.

THE CARDIAC CYCLE. By HARRINGTON SAINSBURY, O.B.E., M.D. Octavo of 79 pages, illustrated. New York, William Wood and Company, 1931. Cloth, $1.75.

AIDS TO SURGICAL ANATOMY. By RICHARD H. HUNTER, M.D., M.Ch. 16mo of 184 pages, illustrated. New York, William Wood and Company, 1931. Cloth, $1.50. (Students Aids Series).

AIDS TO MEDICAL TREATMENT. By J. T. LEWIS, M.D., B.Sc. and T. H. CROZIER, M.D., D.P.H. 16mo of 244 pages. New York, William Wood and Company, 1931. Cloth, $1.50. (Students Aids Series).

YELLOW FEVER: An Epidemiological and Historical Study of Its Place of Origin By HENRY ROSE CARTER, M.D. Edited by LAURA ARMISTEAD CARTER and WADE HAMPTON FROST. Octavo of 308 pages, illustrated. Baltimore, Williams & Wilkins Company, 1931. Cloth, $5.00.

ANNALS OF THE PICKETT-THOMSON RESEARCH LABORATORY. Vol. VII. The Pathogenic Streptococci: The Role of the Streptococci in Erysipelas Skin Diseases, and Measles. Quarto of 441 pages, illustrated. Baltimore, Williams & Wilkins Company, 1931. Paper $10.00.

THE MODERN THERAPEUTICS OF INTERNAL DISEASES. An Introduction to Medical Practice. By A. P. CAWADIAS, O.B.E., M.D. Octavo of 147 pages. New York, William Wood and Company, 1931. Cloth, $3.75.

SIMPLE LESSONS IN HUMAN ANATOMY. By B. C. H. HARVEY, M D. Octavo of 434 pages, illustrated. Chicago, American Medical Association [c.1931]. Cloth, $2.00.

INTERNATIONAL CLINICS. Edited by HENRY W. CATTELL, A.M., M.D. Forty-first Series, Volume III. Octavo of 326 pages, illustrated. Philadelphia and London, J. B Lippincott Company, 1931. Cloth, $3.00.

ASTHMA AND HAY FEVER IN THEORY AND PRACTICE. By ARTHUR F. COCA, M.D., MATTHEW WALZER, M.D., and AUGUST A. THOMMEN, M.D. Quarto of 851 pages, illustrated. Springfield, Charles C. Thomas, 1931. Cloth, $8.50.

APPROVED LABORATORY TECHNIC: Clinical, Pathological, Bacteriological, Serological, Biochemical, Histological. Prepared under the Auspices of the American Society of Clinical Pathologists by JOHN A. KOLMER, M.D., Dr.P.H., and FRED BOERNER, V.M.D. Assisted by C. ZENT GARBER, A.B., M.D. Octavo of 663 pages, illustrated. New York and London, D. Appleton and Company, 1931. Cloth, $7.50.

TABLES OF FOOD VALUES. By ALICE V. BRADLEY, B.S. Quarto of 128 pages. Peoria, Ill., The Manual Arts Press, [c.1931]. Cloth, $2.00.

BOOK REVIEWS

A System of Bacteriology in Relation to Medicine By Various Authors (Prepared under the direction of the Medical Research Council) Volume VIII Octavo of 390 pages, illustrated London, His Majesty's Stationery Office, 1931 Cloth, £8 8 0 a set, £1 1 0 each

This volume deals with the pathogenic fungi, actinomycosis, leptothricae, spirochetes of which there is an especially good account, rat bite fever, the leptospiroses, yaws and the normal bacterial flora of man

Under the heading of spirochetes, about 100 pages are devoted to an excellent discussion of syphilis This includes not only a full description of the treponema and its biology but also the pathology of syphilis, a most up to-date discussion of the Wassermann and various precipitation tests and notes on chemotherapy

There are several plates with beautiful illustrations of spirochetes E B Smith

Health on the Farm and in the Village A Review and Evaluation of the Cattaraugus County Health Demonstration with Special Reference to Its Lessons for Other Rural Areas By C-E A Winslow, Dr P H Octavo of 281 pages, illustrated New York, The Macmillan Company, 1931 Cloth, $1 00

In reviewing a book one must use internal and external evidence both The first impression that one has, *is that this book being sold for one dollar, the format* is excellent and it is beautifully illustrated, though the illustrations are without title and might as well be for any other demonstration as for this one

The writer, evidently employed to do the work in the very first sentence of his preface emphasizes the impartial character of the work, an outsider may wonder Evidently from these considerations, this is a piece of propaganda, and as one reads his impression is confirmed We find no evidence of this statement, so far as we observe, but obviously emphasis and inclusion of material is with reference to the impression that it may make

Our Government can run a colony more completely, according to its ideas, than its own self-governing structure and an outside organization, fully supplied with funds, can naturally carry on a health procedure better than elected officials dependent on the funds which they can secure from an electorate

We know, from outside knowledge that a very careful and earnest committee from the Medical Society of the State, after thorough investigation, agreed in criticism of the demonstration, and we know also that the chief medical critic in Cattaraugus County still represents the profession of his County in organized medical councils We are still of the opinion that, if outside organizations offered their assistance and money to and through the regular organized channel, rather than by domination of them, a demonstration would be more effective and the continued improvement of the public health would be greater than when the outside organizations make themselves *unnecessarily conspicuous* W D Ludlum

Fighting Disease with Drugs The Story of Pharmacy A Symposium Edited by John C Krantz Jr Octavo of 230 pages, illustrated Baltimore The Williams & Wilkins Company, 1931 Cloth $2 00

Many a layman is obsessed with the notion that drugs are poisons Even in our own ranks there are so called therapeutic nihilists This popular symposium on medicinal therapy should serve to enlighten those who wish to be educated The ancient and modern methods of therapy are compared The reader is taken on a travel trip to the various parts of the world, and is shown the various plant and animal sources of value to mankind He is also taken to the biological laboratories, to the mineral kingdom, to government laboratories, and is given a clear insight as to what is going on in the scientific world to fight disease Emanuel Krimsky

An Introduction to Gynecology By C Jeff Miller, M D Quarto of 327 pages, illustrated St Louis, The C V Mosby Company, 1931 Cloth, $5 00

The author a teacher of long experience, is convinced that the larger works on gynecology do not answer the need of the beginning student, for the reason, that he lacks the ability to use them selectively

This book is intended solely for the use of beginning students and it includes only the essentials of the subject Therapy is not considered in this volume, because the author believes that the treatment of patients is not the business of the junior student

All the facts that a junior student should know about gynecology are thoroughly covered in this volume which is illustrated with cuts taken from standard textbooks The book is divided into sixteen chapters, and covers the anatomy and physiology of the pelvic organs, as well as inflammatory conditions and new growths of these organs Other chapters are devoted to the glands of internal secretion, malpositions of the uterus, and to disorders of function

The book is clearly written, well illustrated and is an excellent textbook for the junior student W S S

New and Nonofficial Remedies, 1931, containing descriptions of the articles standing accepted by the Council on Pharmacy and Chemistry of the American Medical Association on Jan 1, 1931 Cloth Price, postpaid $1 50 Pp 481 + LVI Chicago American Medical Association, 1931

This volume is the annual publication of the Council on Pharmacy and Chemistry of the American Medical Association giving the latest authentic information concerning those of the newer medicinal preparations found worthy of the consideration and use of the medical profession Each year the Council scans the general articles under which the various preparations are classified and revises these to conform to the latest and best medical thought

A glance at the preface shows that a number of preparations have been omitted because they conflict with the rules that govern acceptance, because their distributors did not present evidence to demonstrate their continued acceptability or simply because the manufacturers have taken them off the market Important revisions have been made in a number of the general articles and in the descriptions of various preparations Among the new preparations that have been found by the Council during the past year to be eligible for admission to the book are Amytal and Pulvules Sodium Amytal, 3 grains barbituric acid derivatives for use preliminary to surgical anaesthesia, Thio-Bismol, quinine bismuth iodide sodium potassium bismuthyl tartrate and Tartro-Quinobine, bismuth compounds for use in the treatment of syphilis, Scillaren and Scillaren B preparations containing the squill glucosides, two new cod liver oil concentrates, Synephrine, a new vasoconstrictor, and synthetic thyroxine

'New and Nonofficial Remedies' should be in the hands of all who prescribe drugs The book contains information about the newer materia medica which can not be found in any other publication

OUR NEIGHBORS

STATE MEDICINE FOR MISSISSIPPI

The leading article in the October issue of the *New Orleans Medical and Surgical Journal* is the annual oration before the sixty-fourth annual session of the Mississippi State Medical Association on May 12, 1931, given by Dr. J. B. Bullitt of Chapel Hill, North Carolina. The speaker advocated State Medicine as the ideal system of medical service. He first enumerated three common defects of present-day physicians as follows:

"1. We specialize too much, too early, and too narrowly. None would decry the wonderful achievements of the specialties. They are choice grafts upon the parent medical tree, and they yield a luscious fruit; but they require careful selection and judicious pruning. They must not bear too early nor grow too rankly, and their number must be limited, lest they slay the life of the root that gives them sustenance.

"2. We hospitalize many patients needlessly. The facilities for diagnosis of obscure conditions and for treatment of many severe illnesses can be obtained better, or more cheaply, in hospitals than in most private homes; but only too often, in subjecting patients to hospital expense, we are consulting our own convenience rather than the needs of the case.

"3. There are some whose days of study cease early in their careers. They attend no medical meetings, they do not visit hospitals and clinics, their books are out of date, their journals are the advertising manuals of drug manufacturers. The cause may be indolence or indifference or poverty, but the results are the same."

Leading up to the remedy, Dr. Bullitt says:

"It is not our professional failures, however, that form the chief basis for the present discontent. The public is not stirred so much by our inefficiencies as by the high cost of illness, and we are less worried by our own imperfections than by our inadequate rewards.

"Certain items in our generally accepted social philosophy are directly applicable to our present medical problem: (1) each individual is entitled to fair remuneration for his labors, (2) community rights take precedence over those of any individual or class, (3) the sick, the weak and the needy are a proper charge upon the health, the strength and the wealth of their neighbors.

"Community interests and human sympathy alike demand that the healthy bear a part of the load of the sick, that the wealthy carry a part of the burden of the poor. How can this be done without offending that fine sense of independence that constitutes the most valued possession of a free people? Shall we attain the desired end through sickness insurance, or State Medicine, or some other form of socialistic effort?"

Coming more nearly to the point, the speaker referred to community action in disease prevention, as follows:

"In medicine our greatest achievements have been in prevention of disease. Most of this has been through a socialistic application of scientific knowledge. Individuals have pointed the way, but it is public organization that has banished yellow fever from our land, has halted the threatened spread of bubonic plague, has brought typhoid fever to the vanishing point over wide areas, and has accomplished countless other benefits of which we all approve.

"Is it necessary or is it expedient to apply this principle to curative medicine? Our individual interests as physicians must be subordinated to the real needs and welfare of the public. A partial application is of ancient and honored usage. Free hospitals were in existence two thousand years ago."

Dr. Bullitt discussed state medical service as the ideal solution, and said:

"In our ideal plan hospitals and laboratories, adequate to the needs and accessible to the people of each community, would be developed at public expense. Medical men, trained at public expense and maintained by public funds, would be distributed through these hospitals according to the needs of the population. Consultants and specialists, drawn from the more experienced and more skillful men, would be stationed at strategic points. Among this corps of specialists would be an adequate number charged with sanitary administration. Opportunities for graduate study would be afforded, and utilization of such opportunities would be required. Periodic examination for promotion and for continuance in the service would eliminate the unfit and indolent. Remuneration might be upon a fee basis, but probably salaries would be more practicable. The whole service would be free to the public. The organization and direction would be under the charge of medical men."

The objectors are discussed as follows:

"To the highly successful physician with a large and lucrative practice, the thought of a mere salary is naturally not appealing. The indolent doctor who has ceased study and whose practice depends upon his personality and upon

(*Continued on page* 1424—*Adv. xii*)



In vomiting cases as well . . .

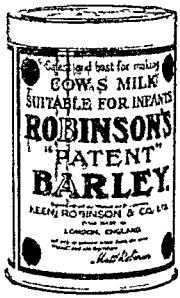
As a modifier and diluent in the healthy infant's diet, Robinson's "Patent" Barley has been recognized as standard by the medical profession for over three generations

During that period, physicians have proved that Barley Water, containing a minimum amount of Starch, is invaluable in the treatment of abnormal cases as well, since it serves to insure easily digested, broken milk clots

In vomiting, for example—whether of habitual, or of pyloric origin—reports prove that very satisfactory results are achieved with Thick Cereal Feedings prepared from Robinson's "Patent" Barley The resulting mixture, when cooled, is a thick, jelly-like food of very smooth consistency

. . .

In adult dietaries, too—during pregnancy, in cases of intestinal and kidney diseases, and in post-operative feeding—Robinson's "Patent" Barley is used constantly with success



ROBINSON'S *PATENT* BARLEY *is prepared from the finest barley Quality is controlled through routine biochemical and bacteriological tests It is a uniform, clean product, free from irritating husks and bleaching agents*

Robinson's *"Patent"* Barley

Standard since 1823



(*Continued from page* 1422)

the medical ignorance of the public resents interference with his inactivity. Most of us are in neither of those classes, but we are borne down by the inertia of conservatism; we cling to our desire for independence, and we fear a lowering of our economic status. Probably it is because of these fears and prejudices that we are prone to believe that State Medicine would destroy research initiative and would lower professional standards."

The oration ends with a reference to doctors who work for salaries in research institutions, leaving the inference that all salaried physicians will continually put forth every effort to practice medicine according to the highest standards of science, ethics, and research.

DOCTOR GONE WRONG IN RHODE ISLAND

It is the policy of the NEW YORK STATE JOURNAL OF MEDICINE to avoid printing anything which reflects on the doctor either in sarcasm or in dereliction of duty. However, the following article from the October *Rhode Island Medical Journal* is quoted in order to illustrate the high moral standard of practising physicians generally:

"The complete confidence which the patient reposes in her physician is one of the most sacred trusts that the ethics of the profession zealously guards. Conversely, the violation of this confidence for one's personal gain is repugnant to any physician worthy of the name.

"Recently, there has come to light through press reports and court records, a second outrageous example of such deplorable conduct on the part of a doctor practising in this state under a license which must have been erroneously granted, considering the individual's education and training, and considering the subsequent abuse of licensure privilege which the man has apparently demonstrated.

"Now, it appears that taking advantage of a mentally incompetent patient, he has allowed her to transfer her property to him, presumably for 'safe keeping,' whether by fraudulent design or not will later appear. At any rate, the court-appointed conservator must sue to recover all of the items of a rather competent estate, while the doctor in question complacently 'allows' his erstwhile patient a mere pittance for her support. The whole transaction, if correctly reported, classifies that physician for the title of 'The Meanest Man,' and is in the same category as 'drunk rolling' and similar low forms of robbery of a defenseless person.

"The whole profession rises in protest of this regrettable business that stains the good name of the splendid body of medical men in this State who have always stood for decency, ethics, and above all fair play to a patient.

"Should the facts of the case eventually prove to be substantially correct, every respectable physician should call upon the State Commissioner of Health to revoke the license of the guilty party, and thereby purge the profession of a parasite.

"The profession, the hospitals and the public of Rhode Island must not permit a malignant growth to sap the life blood of the fair name of our State. A radical operation appears to be indicated."

OBLIGATION OF PHYSICIANS IN ARKANSAS

An editorial in the June number of the *Journal of the Arkansas Medical Society* enumerates some of the obligations of the medical profession in educating the public, and says:

"1. Every physician can do his part in this work in his daily visits and contacts with his patients. If this personal contact with patients is not carried out in an interesting, enthusiastic and educational manner, the physician is not fulfilling his professional obligations. There are many ways in which information concerning

(*Continued on page* 1425—*Adv. xiii*)

(*Continued from page 1424—Adv xii*)

medical facts may be given to the public that are certain to be helpful in establishing a more confident and intimate relationship between the public and the profession

"2 Public health and other medical societies should be one of the important obligations of the county society These lectures may be abstracted and published in the daily press Under the supervision of the secretary or other officer or committee of the medical society, all medical news at his command should be made available to the press The press has shown itself willing and anxious to publish this information and to cooperate with the profession in every way

"3 The radio as a means of disseminating medical news and information in which the public is interested, and about which it should know is being employed extensively, and undoubtedly it will be used more Properly regulated and controlled by medical societies and their officers, this plan of giving out medical facts is certain to lead to results of great value Those who control the radio corporations are overwhelmed with applications for time on their programs to broadcast quack remedies and cures and they are anxious to know what should be accepted and what should not It is one of the obligations of the medical profession to give them this information

"4 The consensus among members of the medical profession generally is that some sort of publicity should be supplied by which the public will be made to understand the nature, the purposes and the results of the efforts made by scientific medicine for prevention and control of disease The profession of medicine is under obligation to protect the public from unsound programs as much as to see that it is informed on the proper principles A committee on public relations composed of members who have made studies of these problems and who appreciate the obligations of the profession to the public, is a valuable part of a State organization

"5 The organization of all medical activities in each State so that the public health association State medical association, and all other associations and auxiliaries are under the one head helps greatly to coordinate all medical activities This scheme brings the medical profession as a whole into the leadership of all activities pertaining to medicine within the State It is not only the privilege of the profession to assume this leadership, but it is also its solemn obligation to direct all medical activities

"An organization that is responsible for the health and lives of so many individuals each year and that is economically responsible for the expenditure of so much time, energy and money, has a large responsibility and obligation"

DIGITALIS ASSAY

—PROMOTING A MORE ACCURATE METHOD OF STANDARDIZATION
—ADOPTION OF THE INTERNATIONAL STANDARD OF POTENCY

IN 1928 the following recommendation was made by the Frankfurt Conference "That when the dosage of digitalis or its preparations is expressed in units of activity, the unit employed for any preparation *and in any country* should be an international unit, which should be defined as the specific activity contained in 0 1 gramme of the International Standard Powder '

A powder equal in strength to the International Digitalis Powder has been used as an official national standard in Germany since 1928

Since that time recommendation has been made to adopt the International Standard in both the French Codex and the British Pharmacopeia

Upsher Smith, pioneers in the improvement of digitalis production and standardization, have already adopted the International Unit, because it provides the clinician with greater protection by furnishing a more accurate method of assay

With the adoption of the International Unit we put one International Unit of digitalis in one cc of the tincture and in one capsule or tablet. Note how this simplifies dosage, thus

1 International Unit = 2 grains U S P Digitalis Powder

1 cc Tincture = 2 grains U S P Digitalis Powder

1 International Unit Capsule = 2 grains U S P Digitalis Powder

½ International Unit Tablet = 1 grain U S P Digitalis Powder

Full information on the International Unit is supplied in our new booklet "New Thoughts on Digitalis Action and Dosage"

Write for your copy today and for clinical trial package of Upsher Smith Digitalis

Upsher Smith Co.
Sexton Building Minneapolis, Minn

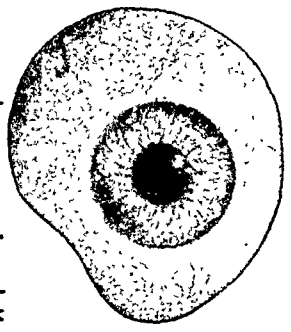
Mager & Gougelman, Inc.

FOUNDED 1851

510 Madison Avenue New York City
S.W. Cor. 53rd St.

Specialists
in the manufacture and
fitting of

Artificial Eyes



Large selections on request.
Prompt attention.

Oculists are cordially invited to watch us at work in our laboratories.

Write for our color chart and order blanks.

230 Boylston Street.....Boston, Mass.
1930 Chestnut Street.....Philadelphia, Pa.

Charitable Institutions Supplied at Lowest Rates

Chronic Constipation *and* Mucous Colitis



Cheplin's, *"the original"* Bacillus Acidophilus Milk, has successfully demonstrated its efficiency in these types of cases. Its high concentration of 250 million per c. c. assures you of maximum clinical results.

Distribution daily by leading dairies.

CHEPLIN BIOLOGICAL LABORATORIES
Incorporated
Syracuse, New York

ADVERTISING IN WEST VIRGINIA

A report on advertising was accepted by the West Virginia State Medical Association on May 18, 1931, and appears in the *West Virginia Medical Journal* of November. Extracts read as follows:

"Advertising by medical societies, whether it be national, county or state, is one thing; advertising by the individual is another. Whether the association should or should not advertise is a question of policy, not a question of principle, and equally good men no doubt stand on either side. Not so the question of individual advertising—this is a question of ethics, of principle, not policy, and deserves our condemnation.

"W. A. Shumaker, editor of *Law Notes,* has well said: 'What makes a profession? If there is such a thing as a profession as a concept distinct from a vocation, it must consist in the ideals which its members maintain, the dignity of character which they bring to the performance of their duties, and the austerity of the self-imposed ethical standards. To constitute a true profession there must be ethical traditions so potent as to bring into conformity members whose personal standards of conduct are at a lower level, and to have an elevating ennobling effect on those members.'

"Paid newspaper advertising is so obviously improper that it rarely occurs among physicians; there is, however, an insidious form of indirect advertising that shows itself in the news and personal-interest stories and by getting medical papers (inadvertently?) into the hands of laymen. Ofttimes the offending doctor makes himself ridiculous by pretending annoyance and failure to understand how 'the news got out.' This makes us all wonder how the newspaper man acquired such intimate knowledge of medical subjects. Our Principles of Medical Ethics declare that the furnishing or inspiring newspaper or magazine comments concerning cases in which the physician has been or is concerned, and all other like self-laudations, defy the traditions and lower the tone of any profession and so are intolerable.

"The assumption that any group of men associated together for the purpose of operating a clinic or hospital have any ethical rights denied the individual physician is entirely erroneous. The Principles of Medical Ethics specifically provides that no institution or group by whatever name called is permitted any more latitude in the matter of advertising than is permitted to the individual physician. The reasons for this are certainly obvious and convincing.

"The physician we meet in everyday life is frequently heard to complain that he is denied things which seem to be all right in those of more exalted standing. With the justness of this com-

(*Continued on page* 1427—*Adv. xv*)

(*Continued from page 1426— Adv xiv*)

plaint we fully agree, and we affirm that neither years, honors, nor knowledge confer upon their possessors any ethical rights or privileges not held at the moment of graduation

"Generally speaking, our association members are to be commended for upholding the ideals of our noble profession We have less to regret than some other parts of our country

"Now we shall step from the obvious to the debatable What shall we do as an organized body? Every reader of magazines and the daily press must have observed the almost universal health appeal that has been incorporated into modern advertising Farfetched, irrelevant and illogical as some of these advertising illusions to health may be, they indicate that manufacturers, merchants and tradespeople recognize the present trend in health education and are attempting to correlate commercial and health values

Many of superior knowledge possessing both money and education, are unable to choose between yeast, electric horse-collars jiggle belts, synthetic sunshine, and the source of sound medical advice—the physician Others are unable to choose between a doctor of medicine and the cultist, quack or charlatan, while more lack the ability to choose the best qualified physicians Without honest dependable direction from the medical profession, who of the general public can know how to get thin, gain weight, prevent headache and sleeplessness and preserve sight, hearing, and general muscular tone?

"Should our Association determine upon any publicity measures, we think they should be especially directed towards preventive medicine and periodical health examinations"

ANNUAL REGISTRATION IN TEXAS

The September *Texas State Journal of Medicine* has the following comment on its new law similar to that of New York State, requiring the annual registration of physicians

"The annual registration law requires that each physician licensed to practice medicine in Texas shall register each year and pay a fee of $2 00 for the privilege This law becomes effective January first Physicians are allowed sixty days in which to pay the fee It is highly desirable that the State Board of Medical Examiners shall be in a position to take up its work of enforcing the Medical Practice Act promptly on the first of January Indeed, good work is being done now, but financial support is rather inadequate and uncertain It is anticipated that activities will be more than doubled on the first of January if the funds are in hand with which to pay the cost

The big idea now is to secure an accurate list of the practicing physicians of Texas, white or black, legal or illegal, regular or irregular."

(*Continued on page 1428— Adv xvi*)



The Only
BREAST MILK
Adaptation
of its kind in the world

• •

ANALYSIS

Comparative Analysis of S. M. A. and Breast Milk

Chemical and Physical Analysis	S. M. A.	Breast Milk
Fat	3 5 3 6%	3 59
Protein	1 3 1 4%	1 23 1 5
Carbohydrate	7 3 7 5%	7 37
Ash	0 25 0 30%	0 213 0 226
pH	6 8 7 0	6 97
Δ	0 56 0 61	0.56
Electrical Conductivity	0 0022 0 0024	0 0023
Specific Gravity	1 032	1 032
Caloric Value		
per 100 c c	68 0	68 0
per ounce	20 0	20 0

Write for samples and literature

S.M.A.
CORPORATION
CLEVELAND OHIO

BUSINESS DEPRESSION

Has had little or no effect on the demand for our products

In fact, to date, our sales show a gain.

A material saving on drug bills is the reason.

MUTUAL PHARMACAL CO. Inc.

107 North Franklin Street
SYRACUSE, NEW YORK

(*Continued from page 1427—Adv. xv*)

The State Board of Medical Examiners makes the following request of the doctors:

"County medical societies have been requested to furnish the secretary of the State Board of Medical Examiners, Dr. T. J. Crowe, Mercantile Building, Dallas, with the names and addresses of all who are practicing medicine within their several jurisdictions, including those who are believed to be practicing legally, and those who are believed to be practicing illegally, white or black, of whatsoever school or cult. There is no list of the sort available. The Directory of the American Medical Association contains a list of the practitioners of Texas who are legally qualified to practice medicine, as of the time the information was obtained, which may be a year or so out of date. In Texas, where there is more or less constant change of location of doctors, that is a matter of importance. It is believed that there are many reputable and ethical physicians in the state, who have never qualified legally for the practice of medicine, and who can easily and should at once, qualify. The names of these are not included in any list, and we should have them on record. Certainly no list of practicing physicians includes chiropractors, for one group. The State Board of Medical Examiners wants to know about them. Every little bit helps. The report of even one name will be gladly received."

PAYMENT FOR SERVICES IN OHIO

A just grievance of the medical profession is that a physician is called to treat a case by a municipality or other organization, which afterward refuses payment on the ground that the obligation rests upon another party. Doctors feel that the responsibility to pay for medical services is as great as that of providing medical services to those who are otherwise unable to obtain it; and this opinion was upheld by the attorney general of the State of Ohio quoted in the September number of the *Ohio State Medical Journal*, as follows:

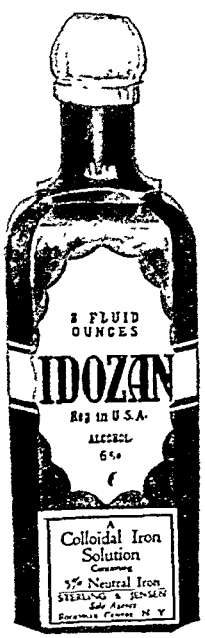
"An opinion (No. 3,325) interpreting the statutes relative to payment by a township of medical services rendered the indigent was handed down by the attorney general, in reply to a letter from a county prosecutor, in which the following facts were set forth:

"One of the townships of the county has a contract with a physician to take care of the indigent sick. A person moved from this township into an adjoining township, and some miles further from the center of the first township. While living in the second township, he became ill and the trustees of the second township called upon the physician who was under the contract with the first township to treat this person. They intended

(*Continued on page 1429—Adv. xvii*)

Immunity, *pathology, digestion, metabolism, etc.*

are essentially colloidal problems.



Literature and sample on request.

Prescribed in 8 oz. bottles

MADE IN DENMARK
IDOZAN
REG IN U. S. A.

Dose, dr. i. t.i.d. p.c.

Aside from the fact that it is effective in supplying iron, actually utilized in the body, IDOZAN has other advantages which are of great practical importance.

IDOZAN is very palatable, does NOT discolor the teeth, and is NOT constipating.

—IDOZAN has a peculiar effect on intestinal flatulence in lessening the amount of intestinal gas, thus relieving bloating, distention, and other discomforts.

STERLING & JENSEN

Rockville Centre *Sole Agents for U. S. A.* **New York**

(*Continued from page 1428—Adv xvi*)

to pay the physician from their own township funds, but upon investigation found that he was still a legal charge upon the first township, and notified the first township, within the statutory time, of the services rendered

"Subsequently, the question arose Does the second township pay the bill to the physician, and the first township reimburse the second township? or is this to be regarded as part of the contract of the physician?

"Mr Bettman, in his opinion, held that under Section 3480-1, General Code, medical services requested by the trustees of a township for an indigent person whose legal settlement is in another township, should be paid by the township requesting such medical services, and charged to the township of legal settlement

"Moreover, in the following statement he specifically held that the physician under contract was entitled to compensation not specified in his contract for rendering services in another township under these conditions

"'The mere coincidence that the township authorized to request medical services chanced to call the doctor under contract with the township to which the patient was a legal charge does not in my opinion, act as a bar to prevent the doctor from receiving compensation for his services, rendered at the request of the second township, from such township' "

REPORTS OF MEDICAL MEETINGS IN INDIANA

The September number of the Journal of the Indiana State Medical Association contains the report of the Bureau of Publicity, which includes the following descriptions of its routine reports to the American Medical Association

In accordance with a request received from Dr C P Fordyce former news editor of *The Journal of the American Medical Association,* asking that programs of important medical meetings giving names of speakers, exact titles for their papers and talks, etc, be sent to the American Medical Association, the Bureau of Publicity adopted a form for making reports of medical meetings So diligent have been the county society secretaries in using these forms and so successful has this method of reporting meetings proved to be that the American Medical Association has asked that each State Secretary adopt a similar form for reporting meetings to

(*Continued on page 1430—Adv xviii*)

RADON

Gold Radon Implants for Interstitial Use

The Scientific Means of Applying Radiation Intratumorally

Certificate of Guarantee Furnished with Each Preparation Assuring Accurate Dosage

RADON COMPANY, Inc., 1 East 42nd St., New York

Telephones VAnderbilt 3-2811 - 3-2812

ELECTRICALLY LIGHTED SURGICAL INSTRUMENTS

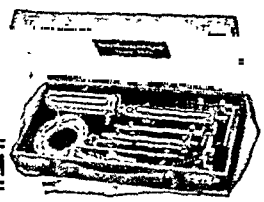
"E. S. I. Co."

The mark that stands for quality and service also represents a complete line of electrically lighted instruments for specialists in practically every field.

The tenth edition of the E. S. I. Co.'s catalog is interesting because it not only outlines the wide scope of the line, but describes the most recent developments in this important field.

Write today for a free copy . . . sent postpaid.

ELECTRO SURGICAL INSTRUMENT CO.
ROCHESTER, N. Y.





THE DOCTOR
THE NURSE
THE PATIENT

NO ONE is immune to perspiration and the discomforts and social implication that go with it, for perspiration often leaves in its wake an odor quite unpleasant.

Here is an opportunity for cooperation between the doctor, who prescribes the remedy, the nurse, who applies it, and the patient who may need it. The remedy is simple enough and safe.

NONSPI

(AN ANTISEPTIC LIQUID)

checks the perspiration and prevents the odor, too. It needs to be applied only once or twice a week under the arms and to those parts of the body not exposed to adequate ventilation. Trial supply gladly sent to physicians.

YES, I'd like to try NONSPI. Please send me a free trial supply.

Name.....

Address..... *City*..... *State*.....

THE NONSPI COMPANY, 117 West 18th Street, New York City

(*Continued from page* 1429—*Adv. xvii*)

the American Medical Association. This form, which is simple to the extreme, follows:

"REPORT OF MEDICAL MEETING"

"Name of Organization .....
"Place .....
"Date and time .....
"Speaker .....
"Title of paper .....
"Special features and comments:.....
.....
.....

"This blank is to be made out immediately following meeting and mailed to Thomas A. Hendricks, Executive Secretary, 804 Hume-Mansur Building, Indianapolis, Ind.

"Copies of the above form are distributed from time to time to the county society secretaries, who fill them out after each meeting and return them to headquarters office. Upon being received at headquarters office two copies are made of these reports, one being sent to the editor of *The Journal of the American Medical Association* and the other to the editor of the Journal of the Indiana State Medical Association. The original copy is kept on file at this office and is a constantly growing reference list to which any one may apply for information in regard to speakers and subjects for county society and district meetings. The secretaries and officers of county and district medical societies are urged to fill out these forms for each meeting and return them to headquarters office as soon as possible."

The expenses of the Bureau were as follows:

"Clipping service	$63.50
"Postage	191.70
"Stationery and mimeograph supplies	165.42
"Printing	8.80
"Traveling expenses of speakers	86.86
"Miscellaneous	78.90
"Total expense	$595.18"

ADVERTISING THE DOCTOR IN MINNESOTA

The October number of *Minnesota Medicine* contains the following editorial on advertising schemes to increase the doctor's practice:

"We are confronted from time to time with propositions conceived by some individual with an eye to business purporting to increase our field of professional usefulness. Most of us have the laudable desire to increase our clientele but we occasionally have a way of jumping at some tempting bait without careful investigation.

(*Continued on page* 1431—*Adv. xix*)

(*Continued from page* 1430— *Advertising*)

"A newspaper man conceives the idea that the local medical profession should receive more publicity, and works up the idea of a Sunday supplement array of photographs with an accompanying write up of the leading members of the local profession—for a consideration

'Or someone gets out a bulletin and to help defray expenses, seeks permission over the telephone to include your name—at a nominal charge

Or a persuasive individual shows you a copy of a directory of experts in the legal and medical profession which has been published for forty or fifty years You glance it over and sure enough it contains a very select list of the outstanding men in your locality and elsewhere You are secretly flattered

'Or some layman is getting up something new and different—a directory of reliable physicians all over the country Only those free from commercial taint and recognized by the profession itself are to be included Data given will be so complete that section of a physician for reference of patients will be easy How much demand for such a publication there will be however, is a matter of speculation

"A limited directory appears in a number of the state medical journals Paid insertions resembling professional cards with name, specialty and address appear monthly in the advertising section This practice falls into the category of local custom and cannot be criticized We can see some convenience in the method but most physicians are well acquainted with the profession of the state, and state journals have as a rule a limited circulation outside of the state We imagine few physicians would refer patients on the basis of state journal insertions Incidentally the practice furnishes an added source of income to the state journal and might be considered by our Association

The newspaper publicity mentioned is, after all, direct advertisement Directory insertions, while not strictly unethical, are probably of little value as a means of increasing one's practice"

FAITH HEALING IN TEXAS

The Texas State Journal of Medicine of October prints a letter from a leader of "a group composed of small but militant congregations which appear to be organized primarily for healing purposes and the emolument resulting there-

(*Continued on page* 1432— *Advertising*)

THERAPEUTIC ALMANAC



NOVEMBER



DECEMBER

Thanksgiving and Christmas cheer within. Snow, slush and bleak winds without. Influenza strikes; other febrile and respiratory ills, pneumonia, infectious diseases follow. Acidosis comes with them—or it may precede and predispose to disease.

Rx ALKA-ZANE

A teaspoonful in a glass of water, taken after effervescence has subsided, three times daily, will guard the alkali reserve and furnish active alkalization.

Note—Alka-Zane combines the carbonates, phosphates and citrates of sodium, potassium, calcium and magnesium. No sulphates, tartrates or lactates; no sodium chloride.

ALKA-ZANE *for Acidosis*

WILLIAM R. WARNER & CO., Inc. 113 West 18th Street, New York City

Please mention the JOURNAL when writing to advertisers

(*Continued from page* 1431—*Adv. xix*)

from." The letter is addressed to the State Health Officer and is as follows:

"'In cloase you will find a certificate for our inspectington before I give them out to my students. If it is O K with you please return it O K. Will I hafter go before a Notrie to sign these papers. As you see what I want to do what the law say and I know there will be fear on my mind.

"'I wrote the board when I began with this class October 30. address at that time 605 cage st present address Rt. 5 Box 340

"Very truly yours

"Mrs....."

The enclosure was a certificate which the healer expected the Commissioner to sign, and read as follows:

"'SPIRITUAL BIBLE CLASS, TEXAS'"

"'To all to whom these presents may come 'Greeting'

"'Be it known that.....having honorably completed the studies in the spiritual course. Able to heal pains by divine since. Give spirtual advice as the holy spirit dictate. You are granted this certificate, as a silent witness to the fact that you have devoted your time to prepare yourself for the work of God.

"Mrs.....

"Bible class teacher

"'Approved by the of health State of texas

"Austin texas.

"'Done at.....Texas This 14 th day of Aug. A.D. 1931'"

This correspondence led the editor to comment on the recent action of the national convention of the Episcopal Church assembled in Denver during the summer. This convention affirmed the spiritual value of prayer for the sick, but also recognized the necessity of the physical ministrations of physicians. The editor comments as follows:

"The commission pointed out in its report that while the church must teach spiritual healing, because it is a part of the Gospel of Christ, it must not teach or use any method tending to lead people to believe that it is the only, or even primary, purpose of the Gospel. Scientific medicine is given credit for what it has done for humanity in the alleviation of suffering caused by disease and accident, and in the elimination and eradication of contagious diseases. It is

(*Continued on page* 1433—*Adv. xxi*)

The recipe was good and the cook was not to blame



But the stomach, heedless of the parable of Marcus Aurelius toward cooperation, rebelled. The result was an excessive acidity that did the stomach no good and upset the whole man. The stomach has a way of its own in illness and health. Gastric hyperacidity often results when there is hardly any good reason for it. But CAL-BIS-MA promptly corrects excess acidity and keeps it corrected. Sodium and magnesium for quick neutralization; calcium and bismuth for prolonged effect, colloidal kaolin for adsorbing gases and toxic substances. No excessive gas formation to exchange one discomfort for another. No digestive ferments for make-believe. And that is in which Cal-Bis-Ma is different.

In Gastric Hyperacidity

CAL-BIS-MA

TRY IT AND BE CONVINCED. A SUPPLY IS YOURS FOR THE ASKING

WILLIAM R. WARNER & COMPANY, Inc., 113 West 18th Street, New York City

(*Continued from page 1432—Adv vi*)

stated that while this service has been incidental to the 'illumination of the spirit of God, the church will not fail to give due credit to the medical profession for its noble work for poor suffering humanity.' Stress should be placed on health rather than healing, and the 'sacrament of unction' has both psychological and sacramental value, according to the report. 'It is clearly scriptural, and has behind it the authority of apostolic times. We rejoice that there is a form of service for its administration. But no one, however high the value he placed on it would question that it is only a means to a spiritual end. A sane, constructive health movement, cannot be based on the use of consecrated oil. That is not its primary truth. The same may be said of "a gift of healing," so much disputed and about which we know practically nothing. No movement could be based on that.'

"There is no apparent reason why spiritual healing and material healing should not go hand in hand. If there is a reason why it may not be so, it is because of the insistence of the faith healer that his prayers and the faith of the patient will remove disease of whatsoever character and cure the patient without reference to material means. There is a growing tendency among thoughtful, educated people, interested in both religion and science, to draw the two together and make them complimentary of each other, quite in contrast to the but recently generally held idea that the two are antagonistic, at least, that they do not comport, one with the other. We believe we see in the instance above referred to a definite step in this direction, and we cannot help but feel that it is a hopeful sign, and it will be agreed, we are sure that we are sadly in need of hopeful signs just now."

BUDGET OF NEBRASKA STATE ASSOCIATION

The July number of the *Nebraska State Medical Journal* contains the following budget adopted by the Council of the Society —

"The following budget was recommended by the Council for the year 1932

Journal Fund, per member	$ 1 50
Defense Fund, per member	2 00
Salary Chairman Defense Committee	600 00
Salary of Secretary	600 00
Councilor Expense	360 00
Office Expense of Secretary	800 00
Reporter for meeting	150 00
Campaign Committee	500 00
Public Activities Committee	1,500 00
President's Expense	100 00
Salary Chairman of Public Activities Committee	1,000 00
Legislative Committee	100 00
Program Talent	500 00
Delegates to A M A and Council of Medical Edu[illegible]	



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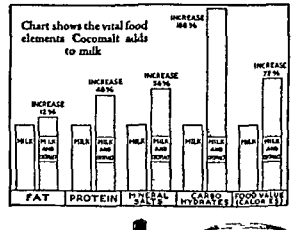
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RURAL DOCTORS IN WEST VIRGINIA

The October number of the *West Virginia Medical Journal* contains the following editorial on rural doctors in the State:

"In a recent editorial, the *Wheeling Intelligencer* deplored the present-day scarcity of country doctors in West Virginia. The editorial pointed out that the old generation of country doctors was fast disappearing and that some system should be worked out whereby the people in rural districts could receive adequate medical attention. As a remedy, the *Intelligencer* suggested that communities should be allowed to send one of their own boys to medical college, and that the student, after completing a part of the required course, should then be allowed to practice in his own community.

"There are several fallacies in the *Intelligencer* editorial. In the first place, country doctors are not dying out. In 1929 a bill was introduced in the West Virgina Legislature to accomplish exactly what is outlined in the newspaper editorial. The sponsor of the bill, speaking in its behalf, stated that in two years' time the number of country doctors had dwindled from 67 to 59. No one thought of doubting the statement until a representative of the West Virginia State Medical Association compiled a complete list of every country doctor in the State, with their names, ages, and addresses. There were more than 500 names on that list, and the list is larger today than it was in 1929. The residents in the rural sections of West Virginia have available and are receiving better medical attention today than at any other time in the history of this State.

"In spite of the great improvement in rural medical service during the past decade, we realize, of course, that it is not nearly as satisfactory as the medical service obtainable in a city. But that is a question of economics and not of philosophy. By the same token, the country stores are not as satisfactory as the city stores. The schools are not as good. The automobile mechanics are generally not as skillful. You can't put a complete line of merchandise in a crossroads store because the store would go bankrupt. Also, you can't put a complete line of specialists in a village because they can't make a living.

"The very idea of turning a second- or third-year medical student loose on our good people in the rural areas is atrocious. Our country brothers are too good for that sort of punishment. They should not be urged or coerced into accepting a substitute when they can get (though often difficult) the real thing. There is no substitute for the standards of medical practice. A patient either gets the real thing or he gets nothing at all. We hope that the day will never come when our rural residents are forced to depend upon medical service from a synthetic doctor.

"It is stated that the older generation of country doctors is dying out. That's true. But in their stead a new generation, fresh from the medical colleges of America, is coming on. Almost daily we hear the statement that the young doctors, just out of college, all rush to the larger centers of population and turn up their noses at country practice. This statement, though fashionable, is one of the many lay myths that come from the nowhere into the here. It is true that most doctors eventually wind up with a city practice. But few of them, especially in West Virginia, attempt to jump from interneship to urban practice. The vast majority carry their newly acquired knowledge to some rural section or small town where the cost of living is not too high and where they can practice in contentment and safety for five or ten years before tackling the more glamorous allurements of the city. When their nest-egg is of sufficient size, then, and then only, will they begin to look for a larger world to conquer."

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THE INTERPRETATION OF BLADDER SYMPTOMS

By VINCENT VERMOOTEN, M.D., New Haven, Conn.

From the Department of Surgery, Yale University, New Haven, Conn. Read before the Delaware County Medical Society at Delhi, N. Y., June 11, 1929.

IN order to understand and correctly interpret urinary symptoms one must be thoroughly conversant with the normal mechanism of urination. This can be studied through the cystoscope, as Young did many years ago and is more fully elucidated by a knowledge of Wesson's experimental work on the anatomy of the bladder trigone and sphincters.

Anatomy

The bladder consists of a main mass of muscle, the detrusor vesicae (which is with much difficulty separated into an inner circular and an outer longitudinal layer) a second sheet of muscle known as the trigone as well as two sphincters, an internal and an external, either of which can prevent incontinence.

The trigone anatomically is derived from the muscle layers surrounding the lower ends of the Wolffian ducts and lies as a separate layer on the floor of the bladder. It takes origin from the lower ends of the ureters, arches over the internal sphincter (under the mucosa) forming the "uvula vesicae" and is inserted in the posterior urethra in the region of the verumontanum.

The detrusor vesicae is supplied by both the true sympathetic nervous system from the third and fourth, sometimes also the first, second and fifth lumbar segments, via the hypogastric nerves to the vesical plexus, and by the autonomic or parasympathetic system from the first second and third sacral segments. These latter leave the sacral plexus by the nervus erigens which also contains peripheral sensory fibres from the bladder.

The trigone is supplied only by the true sympathetic, while the external sphincter is supplied by the pudic nerve which derives its peripheral and autonomic fibres from the sacral plexus.

The spinal centers that maintain the tone of these muscles are in the neighborhood of the fifth lumbar segment.

Physiology

Young and Wesson found that the emptying of the bladder was not, as formerly had been supposed, merely a contraction of the detrusor vesicae with a relaxation of the sphincter by its inhibition. On the contrary, the trigone being arched over the internal sphincter (which is normally in a state of tonic contraction) and being fixed at its insertion and origin when it contracts must shorten and in so doing, open the internal sphincter.

When the normal bladder contains urine, a rhythmical contraction is set up which increases in force and frequency as the bladder continues to fill. Soon the trigone also contracts slightly and may allow one or two drops of urine to enter the posterior urethra. This communicates itself to the brain as a desire to void. As the contractions become more violent the messages become more urgent until eventually the act of urination is accomplished.

The sensation of the desire to void depends on the intravesical pressure and not upon the volume of fluid in the bladder. The threshold of pressure of course, depends on the degree of irritability present.

Now the bladder, unless there is some systemic disease such as diabetes mellitus or insipidus or chronic nephritis or some nerve lesion which would impair its normal functioning, should require emptying only three to five times a day (depending on the patient's fluid intake) and not at all at night. In the absence of these lesions one should not ascribe the increased frequency merely to habit, age, hyperacidity or some similar condition.

The Bladder Capacity

The normal male bladder has a capacity of about 350 c.c. and the female about 500 c.c. Both may hold half as much again and still be normal but they should not hold much less. Accordingly, as our average output is 12-1500 c.c. a day a normal bladder will empty only 3.5 times. If there is any underlying pathologic change which will diminish the bladder capacity one can readily see that the patient would void more frequently. Any

extensive ulcerative process, such as tuberculosis, which infiltrates the bladder musculature and so diminishes the amount of urine it can hold, will of necessity cause frequency of urination. Interstitial cystitis which is an inflammatory process affecting the submucosa of the bladder, similarly diminishes its capacity, although in this instance it is a voluntary diminution, for the bladder can readily be distended under some form of anaesthesia. Due to the inflammatory reaction being in the submucous layer, distention of the bladder causes the mucosa over the diseased area to crack and bleed. This causes pain, consequently the patient empties his bladder just before this point is reached and as a result voids small quantities frequently.

Residual Urine

When the bladder is not able to empty itself completely, the amount remaining is known as the residual urine. Whether this be due to a benign or malignant enlargement of the prostate, a contraction of the vesical orifice, urethral stricture, diverticulum of the bladder, cystocele, myoma pressing on the urethra or to any other cause, the frequency of urination increases with the quantity of the residual, provided the capacity remains the same. This is readily understood if one realizes that the bladder, not being able to empty itself completely, requires a smaller amount of additional urine to reach the necessary threshold of intravesical pressure which will give the patient the desire to void.

Frequency

Frequency of urination apart from being due to a diminished bladder capacity (the result of the presence of residual urine or some other pathologic lesion) very commonly occurs in patients who have a normal or even an increased bladder capacity. This is due, not to over distention, but to an irritation or stimulation of either the trigone or posterior urethra. This is the type of frequency which is concomitant with infection, and as this is present in about 60% of urinary tract lesions, one can see how great a part trigonal or posterior urethral irritation plays in the production of the bladder symptoms. For this reason, probably, frequency of urination is the most common of all urinary symptoms. It is often the first and not uncommonly the only symptom which the benign enlargement of the prostate gives and is practically pathognomonic of the onset of a posterior urethritis in a gonorrheic who is being treated for an acute anterior lesion.

Pain

Pain is not a very common symptom of the lower urinary tract. We have the pain of the over distended bladder, which in reality is more an intense desire to urinate, together with a sensation of fullness and discomfort. Real acute pain is experienced in cases of elusive ulcer (interstitial cystitis) if the bladder is allowed to become too full; after urinating a dull ache remains present for half an hour or more. Rupture of the bladder may also be associated with very severe pain. Extensive bladder ulceration and large bladder tumors may cause a dull ache suprapubically. Foreign bodies (including stones) when accompanied by infection are most commonly responsible for stranjury and tenesmus causing intense discomfort in that way. Pain at the end of the penis indicates, as a rule, a lesion of the posterior urethra. Burning and smarting on urination is of course evidence of lower urinary tract infection, the inflamed urethra being generally responsible for these symptoms.

Urgency

Urgency, the hurried call to urinate, is the result of rather strong stimulation of the trigone. It practically always indicates an acute inflammatory process in the bladder which has involved the trigone, an ulceration of the trigone or posterior urethra or an acute posterior urethritis (either primary or secondary to an acute prostatitis) consequently it is almost always associated with frequency.

Hesitancy

Hesitancy, in the young, is most commonly the result of nervous inhibition. In the middle aged, it is more commonly the result of a strictured urethra but is then associated with a small stream, good trajectory and frequently with spraying. It is, however, a far more common symptom in elderly men and is then due to difficulty of the trigonal muscle to open the internal sphincter due to certain pathologic changes. These take the form of benign adenomata of the prostate which put the action of the trigone at a great mechanical disadvantage; or of infiltration of the internal sphincter or trigone or both with carcinoma; or, as in the case of contracture of the vesical orifice, with scar tissue. In the female, cystoceles, myomata, prolapsus uteri and other gynecologic lesions may mechanically interfere in the same way.

Acute Retention

Acute retention of urine, is, in the young, a relatively uncommon finding, although most urologists see at least one or two cases a year which are due as a rule to congenital lesions of one kind or another. The most common are stricture of the anterior urethra, congenital valves of the posterior urethra or diverticula of the bladder. In early adult life infections play the great part and take the form of acute prostatitis, or stricture of the urethra. Cord lesions occur later with resultant bladder paralyses causing acute retention, paradoxical incontinence or automatic bladders. Syphilis is the most common offender here, then

spina bifida, cord tumors, primary anemia and arteriosclerosis, not to mention trauma infections and metastatic lesions to the spine In women cystoceles, prolapsus uteri or myomata on the anterior surface of the uterus pressing on the urethra or distorting the bladder frequently are responsible for retention at this age In elderly men the benign and malignant enlargements of the prostate, contracture of the vesical orifice, median bars or acquired diverticula account for the onset of this condition Here the trigone, which is already markedly hypertrophied from overwork, is no longer able to open the internal orifice satisfactorily particularly in the presence of the œdema which occurs in an acute cystitis or the congestion of the vesical neck which results from a long automobile ride exposure etc

Incontinence

True incontinence, the condition in which urine constantly leaks from the bladder, is rare except as the result of trauma (operative or otherwise) for it requires the paralysis of both the sphincters which guard the outflow of urine from the bladder In women, in whom there is so little tissue between the bladder and vagina incontinence from vesico-vaginal fistulae occur not uncommonly; these, however, can be closed without much difficulty if operated on transvesically

Enuresis is frequently looked upon as nocturnal incontinence although it is not a true incontinence. Very frequently it is due to habit, occasionally to irritative lesions in the form of a redundant prepuce, a phimosis or a stricture of the external urethral meatus (the end result of a meatal sore) At times in persistent enuresis over many years, when all other causes have been ruled out, we find on cystoscopic examination valves of the posterior urethra or other congenital lesions

Hematuria

Hematuria is not a urinary symptom but to the patient at least it is an alarming and very positive finding and to the physician it should be a warning of disease which demands his immediate attention and respect, for it indicates a very definite pathological state the nature of which should be and in every case (with a rare exception) can be, determined

Hematuria may be terminal or total, that is one may pass a few drops of blood just at the end of urination or the entire urination may be bloody An ulcerative lesion in the posterior urethra, a vesical calculus when accompanied by straniury and at times a bladder tumor may occasion blood in the last few drops of urine passed In total hematuria the bleeding may find its source either in the bladder, ureters or kidneys This can, as a rule readily be determined during cystoscopic examination especially when aided by the urographic appearance of the kidney pelves and meters Systemic disorders such as the blood diseases, particularly the purpuras, are accompanied by hematuria but it is not uncommonly seen in acute or chronic nephritis We all know that acute nephritis is associated with red blood cells in the urine but that gross hematuria occurs in advanced chronic nephritis does not seem to be such common knowledge I have seen such patients bleed so much that the blood will clot in the urinal People with polycystic disease of the kidneys frequently complain of hematuria

With the more common causes for renal bleeding such as stone tumor, or tuberculosis, you are probably conversant However, not infrequently it may occur in acute kidney infections in the form either of a pyelitis or a papillitis and occasionally also, in cases of hydronephrosis, nephroptosis ureteral kinks or stricture

In the bladder itself, hematuria may be due to the presence of tumors (benign or malignant) stone acute infection ulcerations of one kind or another or last but by no means least, the ordinary benign adenomata of the prostate in which this is a finding in 40% of cases Bleeding from the urinary tract unlike that from the cervix or uterus is frequently an early sign of disease so that these patients when thoroughly examined, promptly and properly treated can as a rule be cured of their disease

Urine Examination

In conclusion I want to add just a few words about urine examination Many physicians are satisfied with the gross appearance of the urine and with a determination of the presence or absence of albumin and sugar Some go so far as to examine a centrifuged sediment for casts and they may incidentally notice some pus cells but the presence and character of an infection is left to the bacteriologist If, however, the centrifuged sediment of a specimen of urine is put on a glass slide dried and fixed over a flame, then stained with methylene blue and examined under the microscope (the work of but a few minutes) we can at once see pus cells and epithelial cells and we can recognize cocci and bacilli In this way we can without any delay or possible error get much nearer the true diagnosis Sometimes a perfectly clear specimen of urine will contain a surprising number of pus cells and organisms, occasionally as in a bacilluria just organisms and as in tuberculosis, pus cells alone On the other hand a very turbid urine may be found to be free from any inflammatory products and contain only phosphates carbonates, etc Thus, when we have examined the urine in this way, we are readily able to correlate the symptoms presented and so treat our patients far better by first correcting the underlying causes and then, if we are so fortunately situated that we are able to, we may attack the lesion directly

N. Y. State J. M.
December 1, 1931

REMOVABLE LAG BOLTS FOR FRACTURE FIXATION

By H. J. KNICKERBOCKER, M.D., GENEVA, N. Y.

THE objects of the method to be described are, anatomical reposition of fragments, their maintenance in position until healing has sufficiently advanced to assure permanency, and the removal of the internal fixation apparatus without secondary operation. It is best suited to oblique fractures of long bones, but may be used to advantage in numerous other types.

The principle employed is that of the lag bolt which, when properly inserted, draws the fragments together and holds them firmly in apposition until union has advanced to a stage allowing the removal of the bolt. If accurate approximation is made and advantage taken of the irregularities of the fracture line, sufficient strength is secured to permit the use of a single bolt. Multiple bolts are seldom required in simple fractures.

The bolts are made in different gauges, each of which is available in several lengths. Each gauge is provided with a simple wrench fitting the nut as well as the squared end of the bolt. The large hand drill used is furnished with interchangeable, quick detachable chucks which materially shorten the operating time. The drill, screw and shaft are made integral, of rustless material, doing with one operation what often requires three or more when screws and plates are used. The incisions are shorter than are usually necessary where other forms of internal fixation are used. In making incisions care should be used in placing them so that if possible the bolt will lie without lateral pressure in the incision line. If this is not possible, the bolt can be inserted through a stab wound or lateral incision made through the soft tissues to avoid pressure necrosis.

Exposure of the fractured area, reposition of the fragments and their temporary maintenance by means of bone clamps is similar to that employed in the use of bone plates. In selecting a bolt of the proper size, care must be used, first to

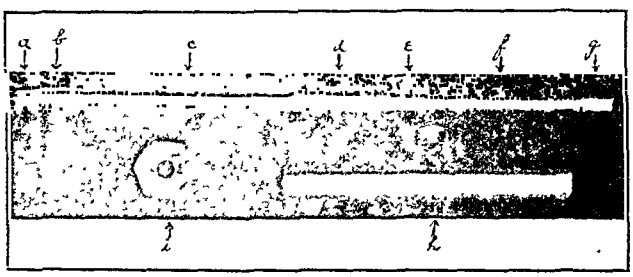


FIGURE 1
Unassembled.

a. Drill point with longitudinal groove extending through tap, for clearing drill hole.
b. Tap and screw.
c. Narrowed shaft to insure easy insertion through the drill hole in the proximal cortex.
d. Full sized shaft over which sleeve is placed. Fits loosely and securely.
e. Groove in shaft into which the point on the chuck engages thereby preventing the shaft from disengaging itself from the drill handle while in use.
f. Threaded part of shaft for reception of nut.
g. Squared end of shaft fits into chuck while drilling and tapping. Wrench fits squared end for adjusting shaft or removing bolt.
h. Sleeve which slides over shaft impinging on proximal cortex. Held in place by nut (i).
i. Nut threaded onto shaft to hold sleeve (h) firmly against proximal cortex.

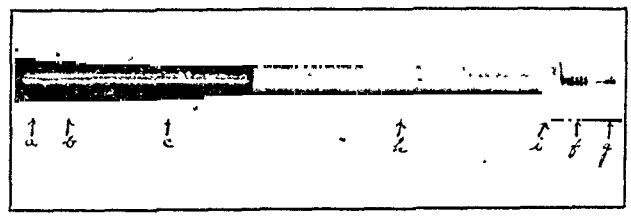


FIGURE 2
Assembled Bolt.

a. Drill point.
b. Tap, screw and groove.
c. Narrowed shaft.
f. Threaded part of shaft.
g. Squared end of shaft.
h. Sleeve.
i. Nut.

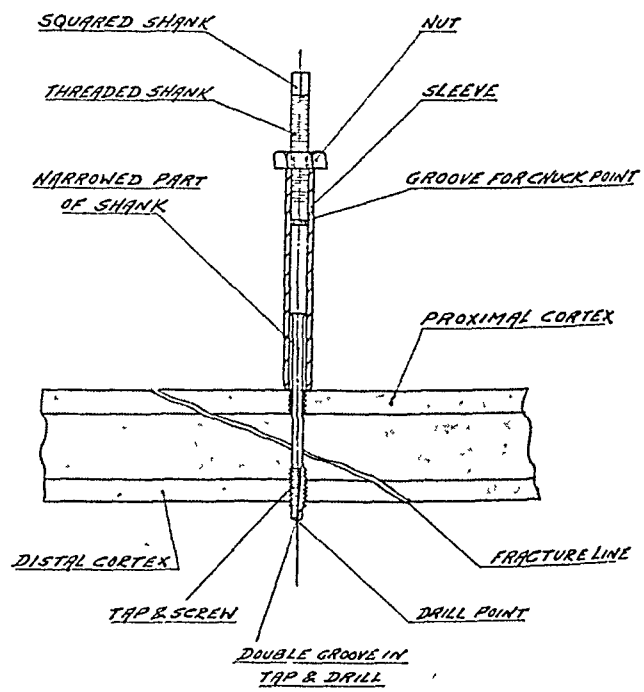


FIGURE 3

When nut (i) is turned down, pressure on sleeve (h) against the proximal cortex is made, and at the same time traction on the bolt at its insertion (b) in the distal cortex is exerted, thereby holding the fragments in approximation.



FIGURE 4

Mrs. E. H. Comminuted fracture with dislocation. Unable to hold by closed method. Note fracture into joint

get one of sufficient gauge that will hold firmly and not split the fragments while being placed; second to have one sufficiently long that it will, when in place, project beyond the skin level and not cause soft tissue pressure necrosis.

Having made the proper selection of bolt and determined that angulation in reference to the fragments which will give the best leverage, the proximal and distal cortices are drilled through until the end of the drill projects slightly beyond the bone at the exit hole. Care must be taken to protect the soft tissues, and also to insure that

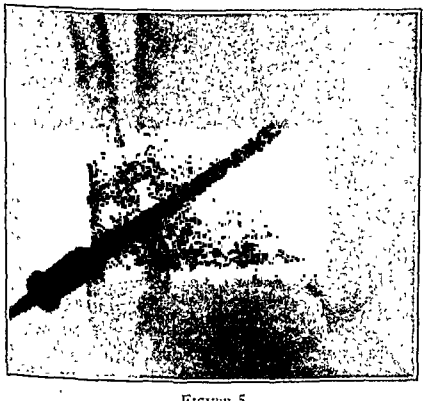


FIGURE 5

Mrs. E. H. Antero posterior after open reduction and bolt fixation. Plaster cast.

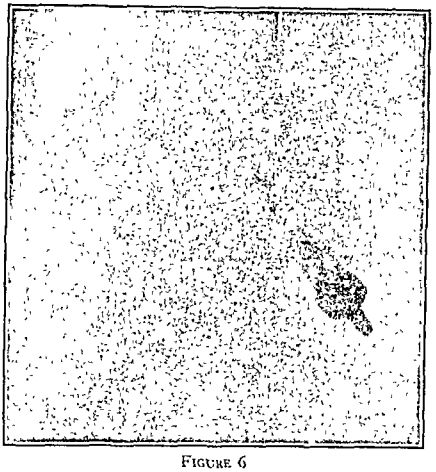


FIGURE 6

Mrs. E. H. Lateral after open reduction. Bolt fixation and cast Final result almost perfect function.

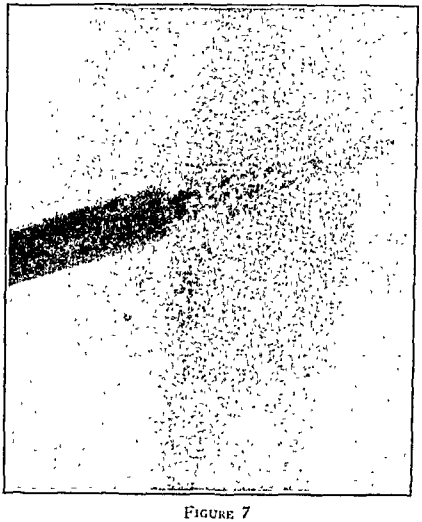


FIGURE 7

L. M. Male. Femur. Bolt in operation. Plaster spica. perfect result.

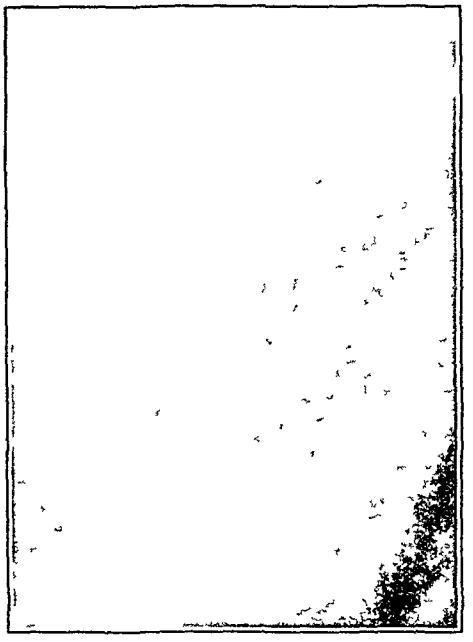


FIGURE 8
R. H. Fractured humerus at neck

the tap and screw are firmly engaged within the distal cortex. The hand drill is then detached, the sleeve slipped on, and the nut turned down until the proper tension is obtained. Too much tension

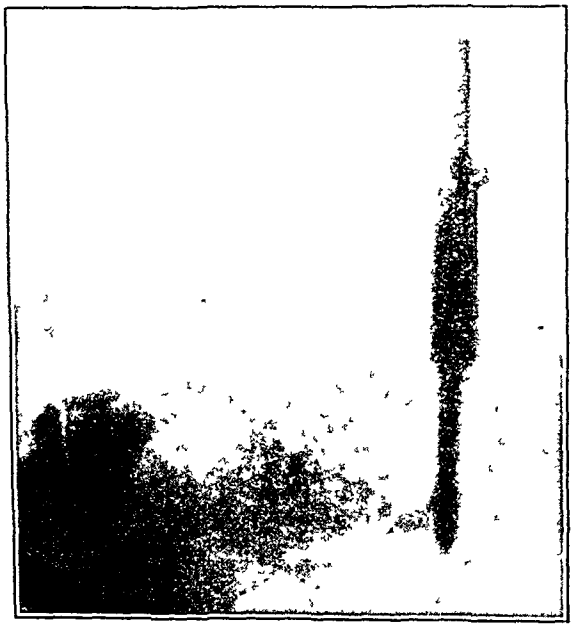


FIGURE 9
R. H. Fractured humerus at neck. Bolt in place. Plaster cast.

may split the fragments or force the fractured edges so closely together as to interfere with circulation, thereby delaying exudation and union. Too loose approximation will result in lack of fixation, and any motion allowed may result in fracture of the fragments while applying dress-



FIGURE 10
R. H. Fractured humerus at neck. Two weeks after removal of dressings. Perfect function eight weeks after injury.

ings or later. After closing the soft tissues, using absorbable sutures throughout, the projecting end of the bolt is wrapped about with loose gauze and a plaster cast applied.

When sufficient union has taken place to insure permanency of position of the fragments, a window is cut in the cast, the bolt removed, and fresh dressings applied. Evidence of drainage action of the bolt is almost always present. By the time the cast is removed, the soft tissues have entirely healed and little or no external evidence of the presence of the bolt is visible. If the bolt is left too long, a granulating sinus may require curetting. The holes through the bone are usually well under way in the process of filling in before any function of the part is indicated. A few weeks later they are seldom discoverable by x-ray. No instance of infection attributable to the bolt has been encountered in over fifty cases in which it has been used. Less callus formation than by any other method has been observed, a feature which is especially desirable in fractures near joints. The more accurate the approximation of the fragment, the less is the callus. No cases of failure to unite have been encountered, although diabetes and syphilis have been present in some cases. One case had both, besides being so obese that even a plaster cast afforded but poor immobilization.

THE TREATMENT OF NEUROSYPHILIS, OTHER THAN PARESIS, WITH MALARIA*

By ARNOLD PAIGE, M D, RAYMOND J RICKLOFF, M D, AND EARL D OSBORNE, M D, BUFFALO, N Y.

From the Department of Dermatology and Syphilology Buffalo City Hospital Earl D Osborne Chief and the private practice of Dr Earl D Osborne

DURING the past ten years the medical literature has been full of reports of the treatment of paresis with malaria therapy It has been generally agreed among experienced men in this field, that approximately fifty per cent of all cases of paresis go into a remission following the use of malaria therapy Of the fifty per cent of paretics that respond to this form of treatment, approximately seventy-five to eighty per cent have been found to become serologically negative at the end of four years It has always seemed to us, that, if this form of therapy is of such great value in the treatment of the most serious and fatal type of neurosyphilis, it should be of value in the treatment of earlier cases of neurosyphilis We refer particularly to early meningeal neurosyphilis occurring during or shortly after the primary and secondary stage and asymptomatic neurosyphilis of two to ten years duration With this in mind we have used fever therapy in one form or another in the treatment of all eligible cases of neurosyphilis referred to the department of Dermatology and Syphilology of the Buffalo City Hospital and in private practice during the past five years Our experience comprises the treatment of over four hundred patients with malaria therapy of which approximately fifty per cent were diagnosed neurosyphilis other than paresis

Our greatest difficulty in the compilation of satisfactory data has been the inability to follow up many of the patients who have been treated with this form of therapy In a large city hospital dispensary, a large percentage of the patients are in the floating population, coming and going from one city to another In spite of efficient social service follow-up, we have been unable to secure yearly follow-up examination in more than thirty per cent of these patients This compares favorably with the experience of the Essen Skin Clinic[1] in Hamburg and the Kyrle[2] clinic in Vienna whose percentages of follow-up examinations were twenty two and thirty-two per cent respectively However, in private practice our yearly follow-up has been at least ninety per cent efficient We feel that our experience has been wide enough and over a sufficient length of time to enable us to draw certain definite conclusions regarding the effectiveness of malaria therapy in neurosyphilis, other than paresis

In reviewing the foreign literature one is impressed with the great difficulty of drawing definite conclusions with which to compare the results obtained in Germany and Austria with those obtained in this country At the Essen Skin Clinic it was formerly the custom to give a full course of arsphenamine and bismuth, preceding the malaria therapy but recently the arsphenamine has been omitted Following the cessation of the malaria therapy two or three full courses of arsphenamine and bismuth were given The routine treatment in Kyrle's clinic in Vienna has consisted of a full course of arsphenamine and bismuth preceding the malaria and followed by two or three full courses In both clinics the number of malaria chills has varied from seven to ten whereas in this country the usual minimum has been twelve Regarding the statistics from Kyrle's clinic it is interesting to note that, in primary syphilis there were 31 per cent serological or clinical relapses and in secondary syphilis there was a blood Wassermann relapse of 37 4 per cent *in females and 52 4 per cent in males*, when the spinal fluid was negative, whereas, when the spinal fluid was positive, there was a serological relapse of 17 per cent in females and 19 5 per cent in males After the second year of infection there was a blood Wassermann relapse, in spinal fluid negative cases, of 30 per cent without exception, whereas, when the spinal fluid was positive, there was a serological relapse of 15 per cent Jacobs and Volwinkel[3] of the Essen Clinic concluded that malaria treatment in the secondary stage had not proved its value, but in the late stage it might give favorable results Kyrle believed that the time for malaria treatment was during the fourth to the sixth year after infection and he concluded that the treatment of syphilis by malaria in the early stages was of no greater advantage than energetic, combined treatment with arsphenamine and bismuth He also believed that a thorough course of malaria treatment was able to prevent the onset of late neurosyphilis when given in the late stage of the disease Jadassohn[4] *believed also that malaria treatment should not* be given in early cases but only in the late latent cases Jacobs and Volwinkel[3] of the Essen clinic were not as pessimistic as Kyrle,[2] nor is Ritter[5] of Hamburg and Heuck[6] of Munich They observed no relapses, serological or clinical However, this may be explained by the fact that, in Vienna, the patients received only one course of three grams of neoarsphenamine prior to the malaria and one course of three to six grams after the malaria No mention was made of the use of bismuth in Kyrle's clinic It is hard to compare the statistics of foreign writers with those of O I eary,[7] who secured eighty-two per cent serologic cures in patients with asymptomatic *neurosyphilis*, at the end of four years' observa-

* Read at the Annual Meeting of the Medical Society of the State of New York, at Syracuse, N Y, June 2 1930

tion following the malaria treatment. The foreign statistics are simply not comparable in any way because most of their checkups were done during the first or second year after the treatment and the patients received seven to ten chills compared to O'Leary's twelve to eighteen.

Choice of Cases

We agree with Cole[8] and O'Leary[9] that the proper choice of patient to receive fever therapy is the secret of a low mortality rate from this form of treatment. We are fully aware of the published mortality rates in the treatment of various classes of paretics, a mortality rate varying from two per cent in early paretics up to as high as thirty per cent in the treatment of the most advanced cases. We believe that a death rate of 30 per cent in far advanced cases of paresis is justifiable in view of the hopeless nature of the disease, but it most certainly is not justifiable in the treatment of the early cases of neurosyphilis. Recently, Stokes[10] has somewhat condemned the use of malaria therapy on the basis of its high mortality. Our figures agree with those of Cole[8] and O'Leary,[9] the former having a death rate of .5 per cent and the latter a death rate of 1 per cent. O'Leary[7] has recently stated that in his last two hundred cases the mortality rate was zero. Our death rate has been two per cent in paretics treated with malaria and one per cent in the treatment of cases other than paresis. Of these latter two patients, one died of acute diabetes which was not discovered until too late and the second patient died of a ruptured aneurism of the internal carotid artery prior to the onset of his malaria chills.

Contra-Indications to Malaria Therapy

In our choice of cases we have first submitted the patient to a careful general examination including liver and kidney functional tests as well as complete blood and urine examination. We have formulated the following list of contra-indications to malaria therapy:

1. Old age.
2. Marked arterio-sclerosis.
3. Advanced liver, myocardial and kidney diseases.
4. Severe anaemia and diabetes.
5. Ascending urinary infection.
6. Advanced aneurism.
7. Pregnancy.
8. Active tuberculosis.
9. Chronic alcoholism.
10. Rapidly progressive neurosyphilis.

Following inoculation, we have found it necessary to hospitalize all of our patients in dispensary practice, whereas, in private practice, we were able to allow them to return home until the day following the first malarial paroxysm. In this way the cost of the treatment was materially reduced for those in very moderate circumstances. This is a factor of prime importance in the economic consideration of this type of treatment.

Routine Examinations

We have allowed all of our patients, whenever possible, to have a minimum of twelve up to a maximum of eighteen chills. During the period of active malaria we do the following tests routinely:

1. A daily blood pressure determination. If the systolic pressure falls below 75 mm. of mercury, the malaria is immediately stopped.
2. Blood urea and urea nitrogen determination. If the blood urea rises to 75 mg. per 100 cc. of blood, the malaria is immediately stopped.
3. Tri-weekly red blood cell count, haemoglobin and urine examination.
4. Frequent palpation of the abdomen for any signs of enlargement of the liver and spleen and inspection of the sclerae for the earliest signs of jaundice. Marked enlargement of the liver and spleen does not occur in more than 5 to 10 per cent of cases in our experience.
5. Vandenberg and icteric index determination bi-weekly.

We feel certain that careful attention to the above-mentioned points together with personal examination of the patient each day, will reduce the mortality rate from malaria therapy to one per cent or less.

Economic Status

In addition to the hgh mortality claimed for malaria therapy by some authors, it has also been pointed out that it is too costly, both in time and money, for the average individual in moderate circumstances. We strongly disagree with this point of view. The average stay in the hospital is four to five weeks. For a semi-private bed the hospital charge averages five dollars per day, or one hundred and fifty dollars for a full month. Add to this, the moderate medical charge of one hundred and fifty dollars, making a total of three hundred dollars. The individual is usually kept from his work for approximately eight weeks. Contrast this with the treatment with tryparsamide, as recommended by Solomon[11] and Stokes,[10] of eighty to a hundred and twenty intravenous injections of tryparsamide, or thirty Swift-Ellis intraspinal treatments. We have seldom found the cost of malaria treatment to a poor person or to one in moderate circumstances to be a bar to this form of treatment.

Treatment Administered Prior to Malaria

We believe that all patients with early meningeal neurosyphilis should receive at least one full intensive course of treatment of arsphenamine and bismuth prior to malaria therapy. This opin-

ion is supported by those of Jacobs and Vohwinkel,[1] Kerl,[2] Mulzer,[3] Jadassohn[4] and O'Leary.[7]

Treatment Administered After Malaria

In early neurosyphilis, we believe that a minimum of two to three courses of arsphenamine and bismuth therapy should be administered after the malaria therapy has been completed. We usually do not begin this treatment for three months after the malaria therapy. In late neurosyphilis, including the asymptomatic and tabes dorsalis, we have routinely employed long courses of forty to sixty injections of tryparsamide combined with bismuth. We are not able to say at the present time that the use of tryparsamide in these cases offers any advantage over the use of arsphenamine. In most instances, however, the patients have had a large number of arsphenamine injections before consulting us. In view of the beneficial effect of tryparsamide in late neurosyphilis, we have felt that it should be combined with the malaria therapy rather than the continued use of arsphenamine.

Results of Malaria Therapy

As stated previously, we have analyzed the results in the treatment of two hundred patients with neurosyphilis, other than paresis. One hundred of these patients have received their treatment more than a year ago. The average was nineteen months. Of those analyzed 35 per cent had negative blood Wassermanns and in 29 per cent the spinal fluid was negative. It is evident from these figures that from a serological standpoint we are far from the figures of O'Leary[7] who reported 82 per cent serologic cures at the end of four years' observation following malaria. Evidently the period of greatest improvement in serology is from the second to the fourth year following treatment. It is also evident from our figures that a somewhat higher percentage of the blood Wassermanns became negative than of the spinal fluids. This is in contrast with the figures of the Essen Skin Clinic[1] and Kyrle's clinic[5] which reported the reverse to be true. Based on this observation we have, during the past two years, treated a number of Wassermann-fast cases with negative spinal fluids. In two patients sufficient time has elapsed for a recheck of the blood and in both instances the tests were completely negative. Chart I illustrates one of these cases and is self explanatory. This young lady with congenital syphilis had never had a negative blood test for a period of three years prior to our examination and from July, 1926 to March, 1929 had four strongly positive Kolmer and Kahn tests. The first negative test which she ever had, came eight months following the malaria treatment. Gougerot and Throlon,[13] in 1928, reported two similar Wassermann-fast cases brought to negative with fever therapy.

Early Meningeal Neurosyphilis Occurring During the Primary and Secondary Stages

In view of the findings of European investigators, as mentioned heretofore, we have not treated any of the patients with malaria until they have had a thorough treatment consisting of at least two or three courses of arsphenamine combined with bismuth. We still believe that the Swift-Ellis intraspinal therapy is extremely efficient in these early cases, but, if it can be shown that malaria is just as effective it would be more preferable from an economic standpoint. From our experience we favor the administration of two or three intensive courses of arsphenamine and bismuth followed by malaria therapy. We do not believe that malaria should be used during the first two years of the infection. Chart II illustrates a case of early meningeal neurosyphilis treated with malaria. He came to us with a history of a chancre one year previously for which he had received fifteen intravenous injections. His blood was strongly positive. He received a routine course of arsphenamine at the end of which the spinal fluid examination was very strongly positive. He then received eight intraspinal treatments at the end of which his spinal fluid was still strongly positive. This was followed by malaria treatment and thirteen months later his blood and spinal fluid were negative.

CHART I

No. 161. C. G. Age 18.—Congenital Syphilis. Wasserman Fast. Received 25 Arsphenamine, 15 Mercury Elsewhere.

Date	Blood Kolmer	Blood Kahn	Spinal Fluid Examination				Treatment and Progress Notes
			Kolmer	Kahn	Cells	Colloidal Benzoin	
7/17/26	4440	444	000000	000	2	00000033000000	10 bismuth
12/ 7/26	442000	234					8 arsphenamine, 10 bis
6/ 3/27	440000	034					8 arsph., 8 sulphars
3/10/28							40 bismuth
3/16/29	4440	444					
7/ 2/30							Malaria. 13 chills and 3 chills from typhoid vaccine
2/12/31	0000	000					No symptoms

CHART II

J.Z. WHITE MALE, AGE 38. NEUROSYPHILIS—EARLY MENINGEAL. ASYMPTOMATIC CHANCRE 1 YEAR AGO. 15 INTRAVENOUS AT THAT TIME

Date	Blood Wasserman					Spinal Fluid Examination							Treatment and Progress Notes
	Alc. Ant.		Chol. Ant.		Kahn	Wasserman				Kahn	Cells	Colloidal Gold	
						Alc. Ant.		Chol. Ant.					
	Full	Half	Full	Half		Full	Half	Full	Half				
7/30/27	4	4	4	4	444								8 arsphenamine.
10/ 4/27						4	4	4	4	444	20	2344421000	Started on intraspinal.
2/ 3/28						4	2	4	4	444	1		8th intraspinal.
2/27/28													MALARIA. 10 chills.
5/15/28	...	...	...	...	...								
6/16/28	...	...	...	...	...								
5/18/29	...	...	...	...	...	...	...	...	...	4			Feels fine. Works every day. No symptoms.

CHART III

NO. 491 H.G. FEMALE, AGE 40. NEUROSYPHILIS

ASYMPTOMATIC. MILD DIABETES. NO HISTORY OF PRIMARY OR SECONDARY. 8 INTRAVENOUS AND 16 INTRAMUSCULAR 10 YEARS AGO. PUPILS AND REFLEXES O.K.

Date	Blood Kolmer	Blood Kahn	Spinal Fluid Examination				Treatment and Progress Notes
			Kolmer	Kahn	Cells	Colloidal Gold	
7/26/26	4440	440	4440		7	000033333300000	Tryparsamide elsewhere.
6/ 2/27	0000	000					Had 1 course tryp. and bismuth. Wasserman neg.
4/17/28							Excitable, unable to sleep, hard to manage.
9/22/28							MALARIA. 15 chills.
4/ 3/29			0000	000	3	0000003330000000	12 tryp. Less excitable, sleeps well, more co-operative.
4/ 7/30			4400	300	5	0000003330000000	2 courses of tryp.
5/ 2/31	0000	000	0000	000	5	0000003330000000	Feels fine, very co-operative, gained weight, sleeps well.

ASYMPTOMATIC NEUROSYPHILIS

We believe this class of patient is ideal for malaria therapy inasmuch as most of them fall in the period of two to six years following their infection. This is another strong argument for the routine examination of the spinal fluid in every case of syphilis, in the early and latent stages as well as the late stage. Chart III illustrates an excellent result in this type of case. This woman was the mother of the young lady whose treatment record appears in Chart I. Attention is called to the fact that there was a relapse in the spinal fluid which one year later was entirely negative without any further treatment. Chart IV illustrates another case in which a positive spinal fluid was found in the course of a routine spinal fluid examination. Thirteen months later the spinal fluid was completely negative and two years later the blood became completely negative.

LATE NEUROSYPHILIS, OTHER THAN PARESIS

In these cases the symptomatic improvement was the outstanding feature of the malaria therapy. Frequently, route pains were intensified during the first three or four malaria chills but gradually lessened in severity and disappeared altogether before the treatment was finished. Crises of various types are similarly effected in many instances. The patients almost always feel better generally and have a different outlook on life. Oftentimes the patient will say that he feels like an entirely different person. Chart V shows an illustrative case of long standing. There was no response whatsoever to intraspinal therapy and there was rapid symptomatic progression of the disease. The beneficial effect from malaria was marked and immediate. His spinal fluid was not entirely negative a year and a half after the treatment. Chart VI illustrates an advanced case of meningovascular neurosyphilis. Note that the disease was of four years' standing. The serology was completely negative at the end of fifteen months following the malaria therapy.

With regard to primary optic atrophy, we have treated a number of cases with very gratifying

CHART IV

No. 6232, R.R.—MALE, AGE 46 NEUROSYPHILIS—ASYMPTOMATIC
NO HISTORY OF PRIMARY OR SECONDARY

Date	Blood Kolmer	Blood Kahn	Spinal Fluid Examination				Treatment and Progress Notes
			Kolmer	Kahn	Cells	Colloidal Benzoin	
11/12/27	4000	021					Routine blood Wasserman.
6/ 5/28	4430	444					24 silver arsphenamine, 40 bismuth.
1/19/29	4440	444	4400	4	6	000000333320000	MALARIA
5/ 6/30	4000	023	0000	0	4	000000333200000	20 tryparsamide. 20 bismuth.
1/ 6/31	2000	023					20 bismuth
5/26/31	0000	000	0000	0	4	000000333300000	Feels better than for 10–15 years Head clearer.

CHART V

No. 5171, M D MALE, AGE 52 NEUROSYPHILIS
PUPILS O K., REFLEXES EXAGGERATED PRIMARY 25 YEARS AGO
GUMMA OF ETHMOID AND SPHENOID AORTITIS

Date	Blood Kolmer	Blood Kahn	Spinal Fluid Examination				Treatment and Progress Notes
			Kolmer	Kahn	Cells	Colloidal Benzoin	
7/26/27	332000	234	444320	4	15	0000003333300000	1 course intraspinal.
8/ 9/27			442000	4	14	000003333300000	
11/ 7/27			442000	3	7	003000333300000	8th intraspinal. Rapid symptomatic progression of disease. Started on bismuth.
4/ 3/28							MALARIA. 8 chills 4 courses of bismarsen. 5 months after Malaria
7/24/29	3000	234	4440	4	6	000000333200000	
12/ 9/30	0000	000	4000	3	6	000000333 1000000	Feels fine Gained weight. Worked every day 32 mos after Malaria Now on bismuth.

CHART VI

P.L WHITE MALE, AGE 34 MENINGO-VASCULAR LUES
HEADACHE 1 MONTH CHANCRE 4 YEARS AGO NO TREATMENT LEFT HEMIPLEGIA 4 DAYS
CAME ON SUDDENLY

Date	Blood Wasserman					Spinal Fluid Examination							Treatment and Progress Notes
	Alc. Ant.		Chol. Ant.		Kahn	Wasserman				Kahn	Cells	Colloidal Gold	
						Alc Ant		Chol Ant					
	Full	Half	Full	Half		Full	Half	Full	Half				
5/23/28	4	4	4	4	444	4	4	4	4	444	147	0013332110	6 bismuth, iodies by mouth followed by 8 arsph. and 20 bis.
1/ 2/29	4	4	4	4	444								Second course 8 arsph., 15 bis Symptoms actually progressing. Loss of weight, left side weak, unable to work
7/28/29	4	4	4	4									MALARIA. 15 chills.
2/ 5/30	3	2	3	2	443								Feels fine. Working every day, gained weight
10/22/30	0	0	0	0	000	0	0	0	0				Had 40 tryp , bismuth after M Feels fine, working Left as good as right side.

CHART VII

No. 6323 W.M. Male, Age 55. Neurosyphilis

Primary Optic Atrophy Which Was Progressing. Ptosis of the Right Lid. One Intravenous 15 Years Ago

Date	Blood Kolmer	Blood Kahn	Spinal Fluid Examination				Treatment and Progress Notes
			Kolmer	Kahn	Cells	Colloidal Benzoin	
11/22/27	444300	034	40000	002	2	0000003330000000	Had 8 arsph., 8 bismuth. Eyes steadily getting worse.
1/28/28							Typhoid Vaccine. 15 chills.
4/10/28							Feels well. Eyesight stationary.
9/15/28	3200	003					Put on arsph. and bismuth.
2/ 2/29	3000	002	4000		3	0000003330000000	
9/20/29	0000	000					
7/ 2/30	0000	000	4000	003	6	000000333300000	
5/ 2/31	0000	000	4000		5	000000333300000	Eyes have been stationary for three years. Feels fine, working every day. Had 4 courses Arsph. and bismuth since Malaria.

results. Up until the last year we have treated these patients with intraspinal therapy followed by malaria. More recently we have used malaria alone followed by arsphenamine and bismuth. Sufficient time has not elapsed to evaluate our results. Of three patients who have been checked up serologically one year following the fever therapy, none has shown any progression in the subjective or objective findings, and none of the spinal fluids have, as yet, become serologically negative, Chart VII gives the details of an illustrative case. The patient was treated with typhoid vaccine intravenously because we were unable to get a postive inoculation with Plasmodium vivax. His blood became negative a year and a half following the fever therapy and has since remained negative. At the end of over three years his spinal fluid was still positive but his vision has been stationary and he has felt fine.

There is one important question which has not as yet been answered although there are some data on the subject. This question is: Does malaria therapy prevent the later development of paresis or tabes dorsalis when given during the early asymptomatic or latent stage? We know of no cases reported except those of Thurzo and Nagy. This is obviously a very important question in the evaluation of malaria therapy and will require years of observation before definite conclusions can be reached.

Conclusion

We believe that malaria or some other method of fever therapy is a valuable adjunct in the treatment of neurosyphilis. From a study of the literature and our own experience we believe the ideal time for malaria therapy is from the second to the sixth year of infection. We believe that the percentage of serologic cures will gradually decline in proportion to the duration of the infection. Malaria therapy should be preceded by adequate arsphenamine and bismuth to the extent of at least two or three full courses and followed likewise by arsphenamine, bismuth or tryparsamide as indicated. With a thorough understanding of the applications and limitations of malaria therapy, it is a safe and efficient method of treatment.

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IDIOPATHIC DETACHMENT OF THE RETINA AND ITS TREATMENT*

By EDMOND E. BLAAUW, M.D., BUFFALO, N. Y.

"Un sujet si complexe mais si important."

GONIN'S name has recently become quite popular in ophthalmology. This is deservedly due to his perseverance, and he has been crowned with success. His igni-puncture in detachment of the retina is comparable to the iridectomy in glaucoma, which has made the name Albrecht von Graefe immortal. Detachment of the retina has been regarded as a Crux Medicorum with an almost desperate outlook. All previous treatments have failed. Gonin's igni-puncture has raised the chances of cure from one percent to at least fifty percent. This does not allow us to neglect the study of the old problem of so-called idiopathic detachment of the retina.

This is one of the most distressing maladies with which we come in contact. Although this condition may be found at all ages even in the newborn, it most frequently is encountered during the more active period of life. As a thunderbolt out of a clear sky this malady may develop within a few hours. In some patients prodromal symptoms may be present for days and weeks before the final loss of sight. The course of the process can not be predicted. Localized detachments may remain unaltered for years but usually they become total.

The literature is abundant, case reports, especially the favorable ones are numerous. One of the most important contributions is made by Theodore Leber in the von Graefe-Saemisch hand-book, second edition. It appeared in 1913 and covers 259 pages. We find in it all details as to pathogeny and treatment and it may be considered as known property of my auditors. Only a few salient points must be recapitulated. Under the diagnosis "primary detachment" two great classes are included—those where the detachment comes from behind the chorioid and those where the causal factor is found in front of the retina. This will be mostly a pre-retinitis which begins in the ciliary body, resp. the orbiculus ciliaris without serious complication of the vitreous body. The vitreous body may be primarily affected—in these cases tears are to be found in the retina. Leber insists that these tears must be present and particularly mentions the large ones near the ora serrata.

During the last few years there has been an increased interest in the subject. It is therefore proper to describe Gonin's views. I find his great interest in this condition dates from before 1904, when he relates the frequent findings of rents or holes in the retina in connection with a detachment. For Myopic (of every degree) and senile eyes the process seems to start with a retraction or detachment of the vitreous body from behind. We cannot fancy such an occurrence unless a pre-existing but undetected chorioiditis is present. Because of the disturbed nutrition of the vitreous body, the connective tissue part of the vitreous condenses in its forward zones behind the lens, while the posterior part of the cavity fills with an expressed aqueous fluid. This condensed vitreous tissue becomes invaded with epithelial cells, partly pigmented, from the ciliary body and forms connections with the retina or more diffuse membranous strands. Localized chorioretinitic processes may favor adhesions with the wall. The retina becomes torn through contractions of these strands. This opening (the tear) allows the vitreous fluid to undermine the retina and lift the membrane from its pigment-layer. The vision becomes disturbed, the patient consults the ophthalmologist, who diagnoses a detachment. The opening which allows this contact between the pre-retinal and retro-retinal space must be closed. This is done with a perforating igni-puncture, which if successful cements the sclero-chorioido-retinal layers and the vitreous body. The chorioid takes care of the retro-retinal fluid and the retina again becomes readapted against the pigmented layer.

Most of the theoretical conceptions have been formed after microscopical studies. When Gonin published his first article he had examined three cases of idiopathic detachment which brought the number to eight. It should be understood that these eyes were removed because of subsequent irido-cyclitis or glaucoma.

But whatever the theory—the rent was the great damaging agent and its communication had to be blocked. In 1913 Gonin performed a penetrating igni-puncture, when no rent was found and had success—the retina became readapted. From 1920 on he has continued with increasing success. Leber has stated "the detachment arises with the tear" but he did not think that production of a chorio-retinitic synechia was necessary—had there not been many procedures partly successful where puncture of the retina with withdrawal of the sub-retinal fluid was a part of the procedure, so that an opening in the displaced retina was considered favorable because it diminished its tension. Leber had come to the conclusion that the therapy should be more aggressive, that the puncture should be made while the detachment is recent. We should not wait until the fluid has gravitated.

Penetrating thermo-cautery punctures have been performed in 1881 and 1882 by de Wecker and Masselon and Abadie in Paris and although successes were registered the method was abandoned, because the results could not be foreseen.

* Read at the Annual Meeting of the Medical Society of the State of New York, at Syracuse, N. Y., June 3, 1931. Illustrated with lantern slides.

Experiments on animals by Wernicke in 1906 showed that an adherent scar could be produced, though a detachment followed in the opposite direction. In 1920 Gonin presented his Referat before the French Opht. Soc. at its annual meeting: "Pathogénie et Anatomie pathologique des Décollements rétiniens." In this work he confirms the pull on the inner side of the retina with the predominant role of the vitreous body and the importance of the retinal tear. By careful ophthalmoscopy one usually finds the tear. (In his last communication 1930 he finds it in 96%.) When a tear cannot be found it must be considered to be in the most peripherical region where we cannot penetrate with the ophthalmoscope. In 1921 Gonin published, in the Ann.d'Oc.p.175 :le traitement du décollement rétinien, wherein he expresses the possibility to reattachment of the retina if one is able to close the causal tear and cause adherence of the retina to the bulbar wall by means of scar tissue. Of course he is somewhat hesitant and considers it a last resort. We soon see him lose his hesitancy and attack an only remaining eye. He describes a most careful ophthalmological examination, not only for finding the tear (meridian after meridian, from the disc to the nearest point toward the ora serrata) but also of the vitreous (deductions from microscopical findings do not inform us about the living vitreous). According to Gonin the prognosis of the detachment is determined by the vitreous. He considers the pathogeny of the detachment very complex. The vitreous changes are related to chorioidal changes. It is very probable that the underlying uveal changes are dependent on changes in the general condition of the patient. He considers (and not he alone) the detachment as a disease with a simultaneous local and general character. It seems slightly a contradiction that Gonin concentrates his attack to a so local part of the process—but by this he has been able to preserve many patients from blindness.

We then come to the conclusion that detachment of the retina must be considered as an episode in the course of a chronic disease of the eye. This process in the eye begins in the periphery of the chorioid and ends with the total retinal detachment, shrinking of the retina, often with iridocyclitis, cataract formation, secondary glaucoma or phthisis bulbi. We know that the chorioidea can become affected through Syphilis, Tuberculosis, Rheuma and Gout, and foci of infection. We must therefore examine the body and these underlying factors should be treated. We may go further and take advantage of the absorbent power of mercurial inunctions though syphilis may be absent, as soon as evidences of peripheral chorioiditis are recognized.

When the examination has shown that the eye will respond to igni-puncture, a detailed drawing of the findings must be made, the meridian localized, marked with dots at opposite sides of the limbus, then the parallel circle or distance from the ora serrata; that is the farthest point nearest to the cornea which we can see. The disc diameter serves as measure, 1,5 mm long. The number is added to 8 mm the distance from the limbus, a little more in high myopia (9 mm) a little less in hypermetropia (7 mm). At the nasal side the distance of the ora serrata from the limbus is slightly larger. The cord may be taken for the curve. The igni-puncture is made to include the adherent part of the vitreous.

The after-treatment is of much importance. The heavy part of the vitreous should rest on the cauterized part of the wall, so if the tear is above, the patient lies as flat as possible with raised feet, while with a low tear the head should be slightly raised or when the tear is in the side of the eye the patient must lie on that side. He should remain as immobile as possible for about a week. The eye should not be examined ophthalmoscopically before the sixth day. Igni-puncture may have to be repeated.

The traction theory had not found many advocates in the profession. It is no wonder that in the discussion in 1920 Gilbert Sourdille, Professor in Nantes opposed it. He has not changed his theoretical view, which with a report of his successful cases has lately been published by his son, Gabriel P.S. in his doctorate thesis "Succès Opératoires dans le Traitement du décollement rétinien" with a much suggestive subtitle "est-il indispensable d'obturer la déchirure?" He does not accept the traction theory and the great importance of the retinal tear, arguing from the fact that the etiologic factors of a detachment are multiplex, often systemic and its prevalence in myopia, that bands are never seen with the ophthalmoscope and that tears are often absent. He does not deny the important role of the vitreous tissue, but considers this the result of lesions in the chorioid and retina.

The cells of the pigment layer form tufts in which the outer segments of the rods and cones are anchored. These cells become changed through the influence of a lesion or circulatory disturbance in the chorioid, not only in myopia and old age but also in those obscure cases where the patient suffers from a general affection: Nephritis, Aortitis or arterial hypertension. Adherence to the retina is endangered, a detachment becomes imminent. The primary changes are established in the choriocapillaris; this layer should be influenced. The retroretinal fluid is as a rule formed consecutive to the detachment. In the great majority it has a chorioidal origin; it is often a transudate or it may be an exudate. The vitreous changes are secondary. One is astonished by the frequent finding of advanced sclerosis of the arterial vessels and capillaries of the chorioid in old people especially in the equatorial region. Sourdille's aim is to restore the lost adhesions of both retinal parts by the formation of new ad-

lesions between the choroid and retina These changes must be limited to the strictly necessary areas The retroretinal fluid must be evacuated, so that the retina by its own weight may fall back to its original site The technical difficulty is to produce a sufficient but not excessive cicatricial adherence The permeability of the retinal vessels also has suffered They are prone to produce fluid even in the absence of any pronounced serious choroiditis Sourdille prefers to use the small galvanocautery loupe and injections of 1-1000 cyanide of Hg These are given when the detachment is extensive, they are painful (novocain, acoin, allonal—no morphine)

The galvanocautery is used in small detachments where at the most three punctures will be required and where the detachment is only slight The retina must be perforated but the penetration should not exceed a distance of two to three mm The adhesive reaction must take in the entire extent of the detachment The maximal intensity must be directed toward the most exposed point, to guard against reoccurrence This is the upper part of the detachment where the weight of the retina and the intensity of the lesions create a zone of less resistance and thus the incipience of the process The determination of the upper limit is very difficult The reapplication of the retina in the upper bulbar part after the retroretinal fluid has gravitated downward is not a true adherence At the tear the epithelium has suffered most A white spot with more or less pigment is a sign of retinal atrophy, the result of vascular changes of the choroid The black spots may also be the result of the detachment The evacuation of the retroretinal fluid should be as complete as possible The evacuation with the initial puncture of the sclera is insufficient, because the fluid reforms rapidly and the sclerochoroidal opening closes quickly, therefore the retina must be perforated systematically so that the retroretinal fluid may drain into the vitreous space

Complete immobility must cause the heavier retina to fall back on the choroid and remain there as long as the reaction lasts This is aided by a binocular non compressive bandage worn for six to eight days

The number of punctures made depends on the extent of the ablatio With a total detachment four punctures are made in the four meridians between the muscles at a distance of fifteen to eighteen mm from the limbus, never less than 12 mm and avoiding the vortex veins Even in partial detachment multiple punctures must be made These are made with a V Graefe's knife or a modification (S's sclerotome) in a meridial plane, the cutting edge forward, stabbing without cutting so deep that the retina is perforated, at least one cm Small turning motions will let the fluid escape under the conjunctiva Then opposite each opening made a few drops of 1-1000 cyanide of Hg with novocain are injected The novocain may be replaced by Acoin which produces an analgesia of from 10-12 hours The galvanocautery performations are made au rouge vif, the point must not penetrate more than 2 to 3 mm and is removed after 1 to 2 seconds The patient is to lie flat on the back for total and macular detachments without pillow, besides as in Gonin's after-treatment The eye remains under atropine (and dionin) The same for the first ophthalmoscopic examination It may be advantageous for the prevention of reoccurrences and after the application of cyanide of Hg to make a capitonnage electrolytique to increase the adhesions Five or six of the finest straight needles are introduced deep in through the sclera and connected with the positive pole of an apparatus for electrolysis During 5 to 6 seconds a 2 to 3 milliampere current is passed through This must be followed with a binocular bandage for at least 48 hours If the vitreous is clouded 5% sodium chlorine injections or a 1-5000 to a 1-3000 cyanide of Hg are given subconjunctivally once or twice a week

General treatment is always associated with the surgical, with myopia intravenous injections of cyanide of Hg, with a detachment of circulatory origin as in old people, with emmetropia Acécome, nitrites, iodium, with a nitrogenous retention (azoteme) strict diet with lactose drips per rectum The decubitus should be maintained at least for a fortnight Sourdille has to his credit 71 cures and 6 important improvements among 169 operations 19 of his successes were with detachments older than 3 months and 9 older than 6 months

To further understand the diversity of the predetachment process the study of Kummell's (Hamburg) contributions should be read The bulbar tension which in acute cases is often found low should be recorded This explains the danger of compressive bandage as a form of treatment We see in Lagrange's advocacy of colmatage the practical application of these observations For Kummell the tear is the result of pressure from behind and is secondary This does not mean that the tear is of no consequence To the contrary, the tear must be closed as a first indication for reapposition of the retina

The Diagnosis

The diagnosis of a detached retina is not always easy and often is not made as Elschnig and Axenfeld mention Instead of the red fundus reflex the color is more grey because the neural parts become destroyed and the connecting tissue proliferates The reflex is bluish or greenish grey sometimes glittering or may be white or bluish white We have a flat detachment which has fairly well retained its transparency and no shrinking or difference in color is observed Sometimes the disc and surrounding retina show the picture of diffuse retinitis and a superficial examination may miss the detachment The color is darkest

in haemorrhagic detachment, it may be greenish and but little light emerges from the fundus even with a dilated pupil. The examination with red-free light shows increased light reflexes from the retina and small folds and a slight turbidity. It is of special value where only a little fluid has lifted a large retinal area. Even then the transparency may remain for some time. In a beginning detachment at the posterior pole and the macula the red-free light shows folding of the limitans interna by characteristic reflex lines.

The reduction of the transparency is no indication of the age of the detachment, because the detached retina can remain transparent for years, while in a recent detachment the retina may appear white. The red reflex from the chorioid with transparent detachment is slightly diminished, while with a tumor the reflex is more grey or white.

The ophthalmoscope shows us a more fluid vitreous and disorganization in myopia and old age. The fibrillar tissue has become delisquent contracted and separated from the fluid part. This retraction of the vitreous begins posteriorly. Gonin notes greyish black opacities often in myopic eyes with retinal detachment, quite a distance in front of the disc (parallaxis). These he also found in high myopia without detachment and considers them as expression of detached posterior surface with forward retracted vitreous body. Amsler calls attention to a round or oval opening surrounded by a ring-shaped opacity through which the fundus details may be seen with striking distinctness (Kraupa 1914; Pillat 1922 have described and verified this) presenting a strong parallaxis with the fundus. This represents the posterior insertion of the hyaloid membrane into the disc surroundings which has become detached. If changes in the chorioid and retina are found at the same time a retinal detachment may be imminent.

An entirely different picture is seen at the periphery: there are greyish-white opacities or bands parallel to the ora serrata which reveal a densification of the hyaloid tissue; pigmented elements may be enclosed probably due to a migration of epithelial elements of the ciliary region or may be remnants of hemorrhages. They have an unfavorable prognosis in an eye without detachment. In front of retinal holes, small nodules or cotton-like masses can be observed which appear as being a torn-away fragment of the retina. If they are more white and numerous hanging in the vitreous—in an older detachment they may be fibrin remnants of old hemorrhages.

Epithelial bands which have been found in recent retinal detachment may be seen ophthalmoscopically as shinning lines on the anterior surface of the retina. Gonin does not consider these the primary cause of detachment. A diffuse vitreous change more pronounced in the central region has a rather infaust prognosis because it seems to express a generalized state of hyaloid retraction and a strong tendency to a hypotony.

Small retinal hemorrhages are frequently found in recent detachments in the neighborhood of a tear. They are not the result of the tear because they are not usually located at its margin. During a rapid extension of the detachment one may see an increase of hemorrhages. They may precede the detachment. A retinal hemorrhage is often the forerunner of a detachment which may follow some days later. If they are not traumatic they are from the chorioidea and due to circulatory disturbances (arterio-sclerosis, nephritis or diabetes). No sharp limitation exists between the spontaneous detachment and the one which follows profuse hemorrhages in the vitreous without traumatism or the one which is a late complication of a perforating wound with intra-ocular hemorrhage.

A word about retroretinal fluid. Different authors (Kümmell, Birch-Hirschfeld, Loewenstein, Baurmann) have found the retro fluid to be highly albuminous. Others consider it similar to the pre-retinal fluid. This fluid causes the gravitation of the detachment, if it begins in the upper part of the bulb, which happens in the majority of the cases.

The Tears.

Various forms have been found. They may be so small (from a diameter of 3/5ths of a disc to 12 disc diameters) that they simulate punctiform hemorrhages or so large that the retina is partly torn away. This occurs especially when the detachment begins below. There may be only one hole or they may be multiple in the same segment. At times a second hole is found in the opposite diameter. The folds of the retina may cover one another and thus hide the tear. In general the more recent the detachment the better the chance of finding the tear. Tears may develop secondarily after detachment. The deep red color of the chorioid and the distinctness of its vessels show the opening in the retina. Red-free light will show the margins in the retina opaque while the chorioid is black by contrast. Sometimes a flap is found in front of the retinal hole. Full dilatation is always necessary. "The tear must be found"—otherwise there can be no successful igni-puncture. (Gonin.) When the tear is open the margins produce a parallax with the chorioid.

Tears may be mistaken for hemorrhages—old chorioidal peripherical scars but these often have a pigmented border, blood vessels of the chorioid when they are broad and only visible for a short distance—or cystoid cavities—a tear has a sharper border.

Contraindications to Igni-puncture.

We must consider the patient from a general standpoint. The after-treatment consists of com-

plete rest for at least a week. This excludes very obese and old patients. The mental attitude and the social status are important.

In local conditions of the eye the most dangerous one is a manifest cyclitis and pronounced low tension. This and serious vitreous and retinal changes inform us that such eyes are too diseased. If no tear can be found, even if suspected, igni-puncture should not be attempted. In the large retinal detachment at the ora serrata the vitreous seems to play a prominent part. Gonin has recently attacked these retinal dialyses with some four or five punctures and thus has been more successful than previously. As a rule their prognosis is infaust, as well as the presence of multiple tears which must be the expression of a very disorganized retina. A pupil which does not dilate sufficiently, a too opaque medium, a too old detachment where the folds have become rigid through secondary processes; when the tear is too near the macula—these are all contraindications; when vitreous changes obscure the very fine retinal vessels which may be seen ophthalmoscopically as clear glittering small knobs: circumscribed synechiae between the vitreous and retina. Detachments after cataract operation have a bad prognosis if igni-puncture it attempted. Perforating igni-punctures are not without danger, they may destroy the last vestige of sight, more tears may originate or the vitreous may become more cloudy, hemorrhages may occur in the second week after the successful operation. This may be so because the clot becoming mobilized, later retinitis proliferans is found. Necrosis in the retina may appear with secondary perforations after or from igni-puncture.

Success may be expected when a single, typical, not too large retinal tear is found in the equatorial region, when a sextor shaped movable retina is found more or less connected with a tear, when the vitreous is only slightly cloudy, transparent especially before the extreme retinal periphery and when the anterior bulbar segment is free of irritation.

Indications will multiply with acquired experience. Gonin has turned the ophthalmologist away from the too pessimistic viewpoint of laisser aller, he has pointed the way to a more aggressive interference so that no unnecessary time is lost with indifferent measures and has demonstrated that early closure of the opening in the retina will in the great majority stop the progression of retinal displacement. For this he deserves the thanks of his Professional Brethren and of the victims of this ominous and so interesting calamity. Early recognition and early treatment will have to be learned by the medical profession as well as by the laity. Absolut fest steht bereits heute, dass die Goninsche Operation der Netzhautablösung einen wesentlichen Fortschritt bedeutet. A. E. Elschnig.

We call it a cure when the retina has returned to its previous place, although only rarely the function of the readapted part is entirely restored. In many cases the deterioration of the vision progresses while cases may exist where the detachment is permanent, but becomes demarcated with a much better prognosis as to the remaining vision. In highly myopic eyes linear scars will sometimes be found in the periphery which indicate a readaptation of a detached retina or where a detachment has become limited, apparently without damage to the rest of the eye. Observations where the retina became spontaneously readapted under peaceful measures notwithstanding the retina was perforated are not extremely rare although recurrences follow. (Arch. f. Aughk. 103 S. 271 A. Elschnig.)

Sven Larsson produced an adhesive chorioiditis with electro-endothermy (diathermy and electro coagulation). The sclera is carefully freed of blood after dissection of the conjunctiva away from the limbus including the area of detachment. The muscles in the field of operation are severed and sutured for replacement. A canthotomy may be done. The large negative electrode is put on the leg, a small one on the sclera (Acta Ophth. 8 S. 172).

Guist (Vienna) is trying to induce an adhesive chorioiditis with chemical agents. He attempts to perforate the chorioidea without loss of blood and then touches that spot with a Kaliätzstift; contact during one second showed experimentally no danger for the retina in animals. He has had six successive successes (One case was detachment after extractio lentis)—Ophth. Ges. Wien. December 16, 1930.

N. Y. State J. M.
December 1, 1931

THE TREATMENT OF INFECTIONS

By HENRY S. MARTIN, M.D., and L. L. KLOSTERMYER, M.D., WARSAW, N. Y.

*Clinical Results Obtained with Blood Transfusions and Intravenous Injections of Mercurochrome—220 Soluble**

THE treatment of severe infections is probably exceeded in importance by no other subject in the practice of medicine. For many centuries physicians have put forth a vast amount of effort to overcome infections. Great progress has been made but the problem remains far from solved. When a sure cure for these conditions is discovered the practice of medicine and surgery will suddenly become one of comparative simplicity.

Green describes the function of blood as follows: "The life of human tissues is dependent upon the nutriment carried to the living cells by the blood stream, the removal of waste products or specific toxins, the maintenance of the vital chemical changes indispensable to normal functional activity and the supplying of stimuli, whether chemical or physical, such as are necessary to the normal processes of human life." If we accept his definition then it is reasonable to believe that a patient with anemia is not able to combat severe infection efficiently. Septic cases are always handicapped by a rapidly developing anemia and it follows that the nearer normal the patient's blood can be kept, the greater his chance of recovery.

Blood is a viscous fluid which remains in the circulation and aids greatly in the treatment of infection by its hemoglobin content, antibodies and activating substances. The benefit obtained is more indirect than direct, that is, the benefit is more from the effect of the blood upon the patient rather than its direct effect upon the bacteria.

By far the majority of writers on blood transfusion believe that it is of great value in the treatment of infection especially if anemia is present. Blood is a specific against surgical shock so it is indicated decidedly before and after major operations for severe infections. The patient in shock certainly has lessened resistance to infection.

With reference to the method of transfusion, we are partial to the Unger because it is efficient, the technique is simple and any amount of practically unaltered blood can be quickly transferred. The instrument which we use is the Unger apparatus as modified by Martin. However, we have no objection to any other efficient method providing that the transfusion be quickly and aseptically performed, unaltered blood used, and all of the blood definitely injected into the patient's vein.

The arguments against mercurochrome intravenously are especially that it causes harmful reactions and that it will not sterilize the blood stream. When mercurochrome is properly indicated, the reactions are usually insignificant. Deaths ascribable to mercurochrome are very rare. In our experience no deaths have resulted from the use of mercurochrome and autopsies on fatal cases of this series revealed no evidences of damage to kidneys or other parenchymatous organs. Walker and others state that mercurochrome exerts no bactericidal action when injected intravenously. Young and Hill also hold the same view. This by no means proves the measure worthless as many seem to believe.

Young, Sanner and Hill and many others may be cited who have convincing experimental and clinical evidence of the value of mercurochrome in infections. Mercurochrome influences the natural protective mechanism of the patient by stimulating antibody formation and increasing phagocytosis. Goldziehr and Peck found that the endothelial cells were stimulated to greater activity by the injection of colloids—the phagocytic power of the Kupffer cells increased following stimulation of the recituloendothelial system. Hill states that by emphasizing the reaction of the patient rather than the direct-killing of bacteria, we get on a satisfactory basis to explain why we get results in such a wide variety of infections.

Blood transfusions and mercurochrome are used as aids to the usual recognized treatment of infection and decidedly not as specific therapeutic measures. In severe cases of infection, a blood transfusion is given. On the following morning 1% mercurochrome solution is given intravenously. If the case is not extreme, not one of peritonitis, the toxemia not marked, and the hemoglobin not below 85%, the mercurochrome may be given first. In peritonitis cases, the blood transfusion is given always now on the day following operation. The mercurochrome is given twenty-four hours later. In our experience this sequence gives better clinical results for the reason that blood not only efficiently combats infection but is the best detoxicating agent, and thus the patient is better prepared to utilize the mercurochrome. A most important point in the use of these agents is that the patient must have a fair degree of resistance, that is, his powers of resistance to infection must not be paralyzed. Giving a moribund patient protein and a dye of even slight toxicity, is but an insult, for he is not able to utilize them.

Reactions following blood transfusions are more frequent in septic conditions than in clean cases. This is probably due to the comparative

* Read at the Annual Meeting of the Medical Society of the State of New York, at Rochester, N. Y., June 3, 1930.

inefficiency of the kidneys and liver to care for added protein and also to bacterial cleavage or lysis of bacteria by the bacteriolytic power of the donor's and patient's serum rather than to blood incompatibility. Ives reports one thousand transfusions without harm to the donors or patients. In our entire series of three hundred and fifty transfusions since January, 1926, reactions were 10% but none were alarming and there were no fatalities attributable to the transfusions.

Reactions (Figures 1 and 2) following one hundred and twenty consecutive injections of mercurochrome used alone were compared with reactions resulting from fifty consecutive injections of mercurochrome preceded by blood transfusions. The analysis shows that the blood transfusion-mercurochrome sequence reduced reactions as follows: The initial temperature rise was slightly less; the net fall somewhat greater.

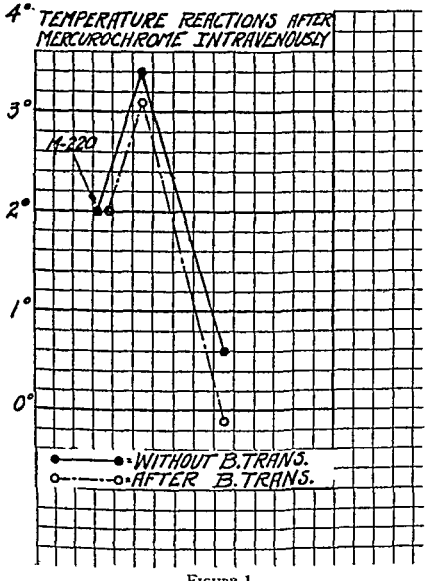


FIGURE 1

Temperature reactions following mercurochrome intravenously with and without blood transfusions.

Chills were reduced from 43.3% to 24%; severe chills from 17.2% to 2%. Vomiting reduced from 28% to 16%; severe vomiting from 7.2% to zero. Enteritis reduced from 32.4% to 10%; severe enteritis from 11.6% to zero. The reduction in enteritis is especially important in the treatment of peritonitis cases.

This résumé comprises 135 cases of various types of infection which we personally treated at

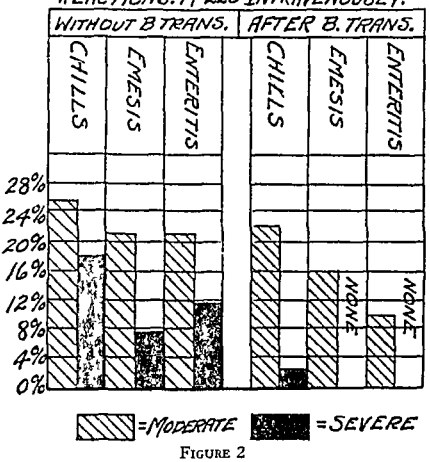


FIGURE 2

Comparing percent of chills, emesis and enteritis following mercurochrome intravenously with and without blood transfusion.

the Wyoming County Community Hospital. A summary of 75 cases which received mercurochrome injections but no transfusions, showed that: Prompt recoveries following injections of the dye were 33 or 44.2%. Total recoveries were 61 or 81.5%. Deaths were 14 or 18.5%.

In several cases mercurochrome seemed to be the deciding factor as regards recovery. Of the 14 cases which terminated fatally, 9 were complicated by bacteriemia, 2 were moribund and 1 was moribund with staphylococcic bacteriemia. The dye seemed to be of no value in streptococcus veridans endocarditis and in staphylococcic bacteriemias.

Results obtained in a series of 15 cases of bacteriemia treated by blood transfusion-mercurochrome sequence were: Recoveries 10 or 66.7%. Deaths 5 or 33.3%. Of the fatal cases 2 were of extreme cellulitis with pyarthrosis and 3 were of fulminating puerperal sepsis. One puerperal case admitted on the day following delivery, died four days later of metastatic streptococcic and staphylococcic abscesses—we know of no treatment which will favorably influence such a fulminating case. The treatment seemed to act especially well in 2 cases of septic sore throat and 2 cases of mastoiditis. All cases of the group were extreme.

In a summary of 60 cases of severe infection treated with transfusion-mercurochrome sequence: Prompt recoveries were 16 or 27.7%. Total recoveries were 48 or 80%. Deaths 12 or 20%. This summary includes a group of 25 cases of acute appendicitis complicated by diffuse

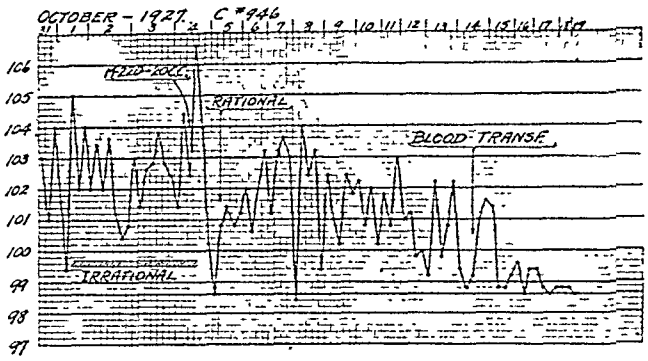


FIGURE 3

(Case No. 946.) Case of septic sore throat in a woman, age 42. One intravenous injection of mercurochrome resulted in considerable general and local improvement. Her condition then remained rather stationary until a transfusion was given. The temperature was normal on the following day and further convalescence was uneventful.

peritonitis or abscess. Of this group there were three deaths from general peritonitis. The value of the transfusion-mercurochrome sequence is evidenced by comparing this group with a similar group of 38 cases treated only by the usual recognized methods. Although the infections of the former group of appendicitis cases were more severe than those of the latter, the mortality was 12% as compared with 21%.

CONCLUSIONS

1. Both blood transfusions and intravenous injections of mercurochrome used independently are of definite value in the treatment of infection.
2. The favorable action of both blood transfusion and mercurochrome is due to increasing the patient's resistance to infection rather than to direct bactericidal power.
3. Blood transfusions and intravenous injections of mercurochrome are safe procedures provided the proper conditions and indications are present as regards both patient and physician.
4. Reactions following intravenous injections of mercurochrome are markedly lessened in frequency and severity when the mercurochrome is preceded by a blood transfusion.
5. The measures should be used early and repeated as often as indicated.
6. As an aid to the usual measures employed in the treatment of severe infections, the blood transfusion-mercurochrome sequence shows a distinct advantage over either blood transfusion or mercurochrome used independently.

It is impossible here to present more than a few briefly illustrated case records to demonstrate

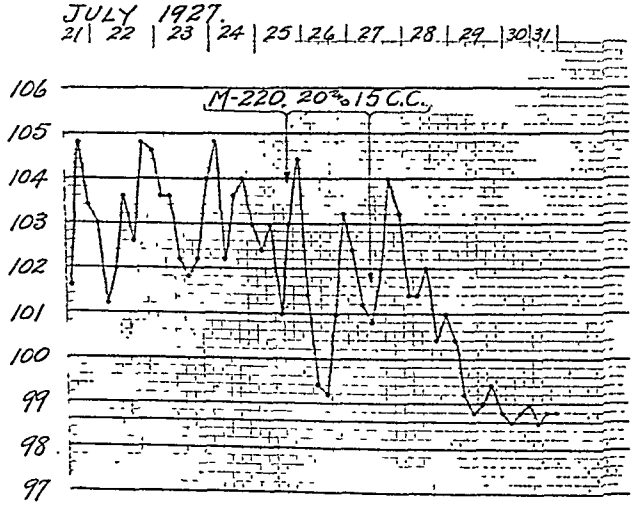


FIGURE 4

(Case No. 344.) Case of erysipelas of four days' duration in a man, age 37. Entire face and most of scalp extremely infected. Condition subsided rapidly after two intravenous injections of mercurochrome.

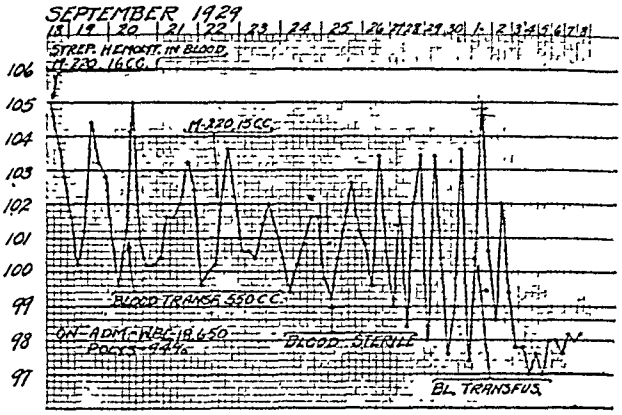


FIGURE 5

(Case No. 3626.) Woman, age 25, developed puerperal sepsis two days following an instrumental delivery. Admitted to the Hospital three days later. The blood culture was positive for streptococcus hemolyticus. The white blood cells were 18,650 with 94% polymorphonuclears. The hemoglobin was 55%. Given two transfusions and two injections of mercurochrome followed by recovery.

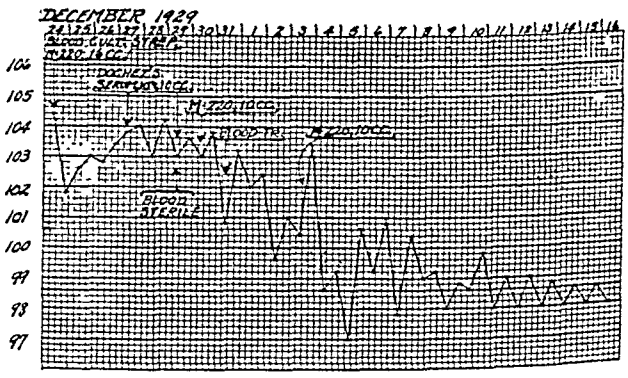


FIGURE 6

(Case No. 3866.) In this case of erysipeloid cellulitis with streptococcus bacteriemia in a youth of 18 years, the effect of blood transfusion and mercurochrome injections resulted in definite improvement but the two injections of Douchez's serum were of no benefit.

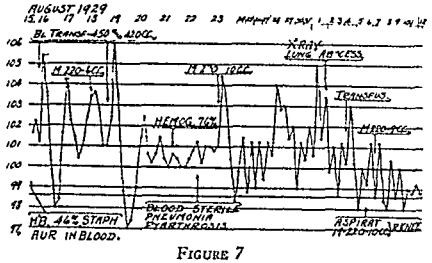


FIGURE 7

(Case No 3533) Boy, age 3½ years, developed a right peritonsillar abscess and left suppurative otitis media after two weeks of severe sore throat On admission the abscess was incised and drained No other surgery Blood culture positive for staphylococcus aureus Hemoglobin 46% Two abscesses of the right lung developed on the 13th and purulent synovitis of the right knee on the 19th hospital days Discharged fully recovered on the 33rd hospital day It is believed that transfusions and mercurochrome were responsible for his recovery

the results which may frequently be obtained in the treatment of severe infections with blood transfusions and with mercurochrome In this series there are many other cases of good results and also of failures but we strongly believe that our results at present are very definitely superior to our results obtained previous to the use of the

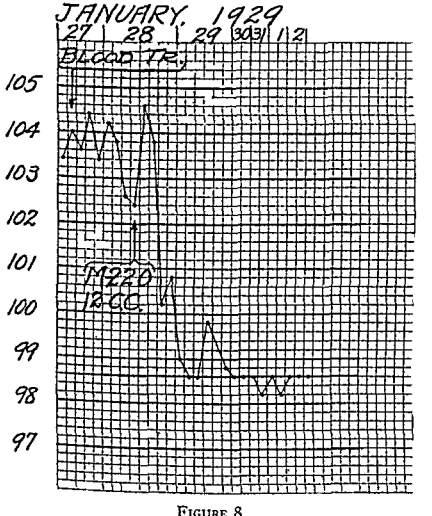


FIGURE 8

(Case No 1396) Case of acute pyelitis of three days' duration in a girl age 12 One blood transfusion and one intravenous injection of mercurochrome resulted in prompt recovery

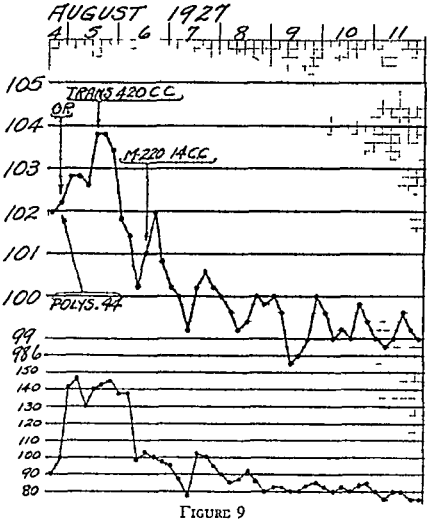


FIGURE 9

(Case No 1824) Case of appendicitis with diffuse peritonitis of three days' duration in a boy, age 10 years Hemoglobin 55% White blood cells 24,000 Polys 94% Clinical improvement was as dramatic after blood transfusion and mercurochrome as the pulse and temperature curves indicate

transfusion-mercurochrome sequence (Figures 3-9)

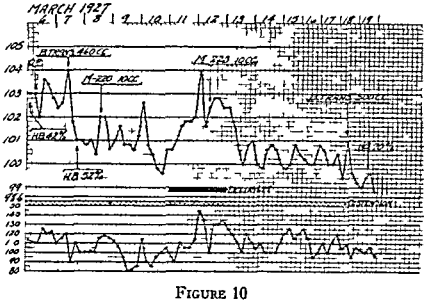


FIGURE 10

(Case No 1517) Case of appendicitis with diffuse peritonitis of three days' duration in a girl, age 9 Hemoglobin 42% Improvement followed each transfusion and each mercurochrome injection Recovery was complete

We wish to acknowledge with gratitude our indebtedness to the following investigators and clinicians for giving us their personal opinions and for furnishing us with material regarding the treatment of severe infections W Ross Thomson, M D, Warsaw, N Y Harold W Jones, M D, Philadelphia, Pa, Justina H. Hill M S Baltimore, Md, H A B Dunning, M.D, Baltimore, Md, W Eric Drake, M.D, Baltimore, Md

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THE TREATMENT OF DERMATOPHYTOSIS*

By PAUL E. BECHET, M.D., NEW YORK, N. Y.

THE first scientific data obtained on dermatophytosis occurred as early as 1857, when Devergie[1] described an eruption on the groin which he called herpes inguinal, and described a microsporon as the causative factor. Hebra[2] in 1860 reported a similar eruption under the designation of eczema marginatum. Köbner,[3] Pick,[4] and Kaposi[5] confirmed the presence of a fungus in similar eruptions. Pellizari[6] in 1888 reported seven cases of ringworm of the hands. Djelaleddin-Mouktar[7] in 1892 gave the first description of the disease, reporting twenty-five cases, and in 1910 Sabourand[8] discovered that the fungus causing eczema marginatum, also caused a vesicular eruption on the hands and feet. Ormsby and Mitchell,[9] in a paper read before the Section of Dermatology of the American Medical Association, in June, 1916, were the first in this country to describe dermatophytosis. Strangely enough, this excellent paper, did not arouse the intense interest it should have elicited, because it was not until August, 1919, that White's article[10] appeared. In the interim I was able to note the report of only one case, presented by Cook[11] at a meeting of the Minnesota Dermatological Society on February 13th, 1917, and a letter from White[12] to the Editor of the *Journal of Cutaneous Diseases*, dated November 27, 1918, containing some personal observations on this, now well recognized, and wide-spread disease; which I venture to say, without fear of contradiction, presents at this time, our greatest therapeutic problem.

For the sake of brevity, I shall discuss the therapeusis of ringworm of the feet and hands only, and my main object in presenting this paper to the Section, is to stimulate research in the treatment of this most obstinate affection, as our present methods of treatment are far from satisfactory and leave much to be desired. Charles J. White[13] states "the local treatment of this disease has proved most disappointing and disconcerting to the patient and to the physician. The possible duration of the disease up to thirty years seems to corroborate this pessimism." This opinion is shared by many dermatologists and the more experience one gains in the treatment of this obstinate dermatosis, the less faith one has in our present methods of treatment. The complexity of the clinical manifestations of dermophytosis is fully equaled by the multiplicity of its therapeutic measures; there is not a single method of treatment which gives uniformly satisfactory results, what may almost act as a specific in one case, may dismally fail in another; the need for concerted effort to discover a specific, is therefore very pressing, and I ardently hope that one will soon be found; for there is hardly a single skin disease, which can incapacitate a patient more than a severe vesicular outbreak of dermophytosis.

It is hardly necessary before an audience of this character, to state that therapeutic measures

* Read at the Annual Meeting of the Medical Society of the State of New York, at Rochester, N. Y., June 3, 1931.

depend much on the stage of the disease. In the presence of an added acute eczematoid dermatitis one would certainly not use active keratolytic or fungicidal agents, on the other hand in the chronic, soggy, thickened stage, we are apt to be too cautious in using active agents. As the fungi are most numerous in the deep epithelial layers, the best hope of cure is to cause exfoliation of the epithelial layers as quickly and thoroughly as possible, and then use our fungicides; at times these two steps in treatment may be used simultaneously. Let us discuss briefly the better known therapeutic agents under separate headings.

Chemotherapy

Whitfield's ointment remains the most popular remedy in the treatment of ringworm of the extremities, and it is a very useful one despite the fact that it frequently fails. It is possible that some of its failures are due to two factors, its use in too weak concentrations, and its use in the presence of an eczematoid dermatitis, which condition it would tend to seriously aggravate. Its salicylic acid content is extremely valuable as a keratolytic, and in combination with benzoic acid has been demonstrated by Gould and Carter[14] to have a noticeable fungistatic effect on trichophyton interdigitale purpereum, and gypseum, the commonest fungi found between the toes. Schamberg and Kolmer[15] with a different series of fungi found that salicylic and benzoic acids gave relatively low fungistatic results, however, they used these acids separately, and on Trichophyton rosaceum, microsporon audouini, and achorion shoenlenii, a group of fungi relatively infrequent between the toes. These observers found that iodin transcended all other medicaments in restraining the growth of certain moulds. Yet it is a well-known fact that iodin is not a particularly brilliant remedy. Williams[16] reported the case of a boy who had used iodin on his toes for weeks, yet an enormous quantity of fungi was found. It may well be that the benefit derived from Whitfield's ointment is due to the exfoliation it produces, and not to any direct fungicidal action. As Highman[17] has pointed out the incorporation of fungicides in oil, cream, or ointment, diminishes their effect two to five fold, and in this opinion I heartily concur. Fungicides or keratolytics seem much more active in my hands when used in aqueous or alcoholic solutions. Wise[18] is apparently of the same opinion, as in a recent article on the subject, he advocates the use of alcoholic solutions of salicylic acid, and aqueous solutions of Liquor Burowii. Wet dressings of the latter are used as a preliminary to the application of salicylic acid, which is used in strengths of 20 to 30% as a desquamative. In vesicular trichophytids of the hands this solution is reduced to 10 or 15%, after thorough desquamation, a modification of Dreuw's chrysarobin ointment is used. These measures advocated by Wise are of gr value. In my own practice I use the chrysarol combination in chloroform or flexible collodion preference to an ointment base.

C. J. White[19] seems greatly impressed with value of a 2% aqueous solution of mercu chrome 220 soluble, painted on twice a day, fact he regards it as the most effective drug t he has used. Mitchell[20] speaks highly of the al holic solution of cinnamon oil and thymol, el orated by Myers and Thienes;[21] he believes it su rior to Whitfield's ointment. Kingery and A kisson[22] proved that an aqueous solution of thyr in a 1:1000 dilution was 100% fungicidal after minutes of contact with approximately 40 diff ent strains of fungi; even a minute's exposu killed 93%. Despite the fact that drugs may most active fungicides in vitro, yet lose much their power in vivo, thymol, on the face Kingery and Adkisson experiments, should given an extensive clinical trial. Sharlit a Highman[23] introduced tetraiodomethenamine flexible collodion. This drug is an unstable iodi compound, capable of giving off free iodine mo slowly than iodine crystals. It has not beco popular. Swartz, Blumgart and Altschule[24] us ethyl iodide vapor well diluted with air, using c.c. of the drug, and spreading the inhalation ti over about 20 minutes, administered daily. Seve teen cases of epidermophytosis were treate with exceedingly good results.

Castellani[25] recommends a saturated alcoho solution of basic fuchsin, with phenol, acetone a resorcin. It is applied daily to the affected par

Feldman and Ochs[26] reported most favorably the use of potassium permanganate in strengt ranging from 1:5,000, to the full saturated sol tion. White and Greenwood[27] also found it ve valuable. It would be interesting to note at th time that it was the favorite remedy of Dr. Duncan Bulkley some thirty years ago, in t treatment of vesicular eruptions of the hands a feet. I am also convinced of its value. Ruggles found the following ointment valuable.

Phenol .....grs	xv	(1)
Zinci, oxidi	5iss	(6)
Ung. picis liquidi	5iii	(12)
Ung. aqua rosae		5iuss (18

Radiotherapy

There seems to be no great amount of enthu siasm in the use of the *x*-ray in dermophytosi MacKee[29] in his text book states that all types o the disease react better to drugs than to irradia tion. Wise is also not optimistic. The results have obtained in uncomplicated dermophytosi are equally indifferent, but in the treatment of super added eczematoid dermatitis, and th

vesicular tricophytids of the hands, the *x*-rays in my experience have proved of great value.

Vaccinotherapy

The use of vaccines and trichophytin are in the early experimental stage, and it is therefore impossible to evaluate them. Mitchell has found trichophytin useless. On the other hand Van Dyck, Kingsbury, Throne and Myers[30] have treated 100 cases with intradermal injections of trichophytin with the following results:

Apparently cured	32
Greatly improved	28
Slightly improved	21
Unimproved	19

Résumé of Personal Experience

Extensive clinical observation has convinced me that eczematoid dermatitis is a most frequent complication of tinea of the feet and hands and that when it does occur it should be treated as an eczema; strong parasiticides only make matters worse. It is here that the *x*-rays are most useful. The method which gives me the greatest hope of possible cure in uncomplicated tineas is thorough exfoliation with strong alcoholic solutions of salicylic acid. When the skin has thoroughly peeled off parasiticides are applied, my favorites are thymol, potassium permanganate, chrysarobin, mercurochrome, and iodine preferably in solution. It seems to me that eventual therapeutic success is dependent, on long continued treatment rather than on any single remedy.

As prophylaxis against recurrences I would mention scrupulous cleanliness of the toes, and nails, the constant wearing of foot covering in public baths, gymnasia, etc., sterilization of socks, and even of shoes if possible. Desensitization with trichophytin may or may not have a sphere of usefulness; this must be left to future experimentation. I feel that the future specific for tinea of the feet and hands will be discovered through the elaboration of the methods of such pioneers in Chemotherapy as Schamberg, Kobner, Myers, Thienes, Kingery, and Adkisson, and that the new drug will be as successful in vivo as it will be in vitro. Vaccinotherapy will probably prove of no more value in this dermatologic "bête noir," than it has in other dermatoses.

In conclusion it may be stated that long therapeutic experience convinces one that none of the remedies heretofore used, have proved real specifics. They are, however, of considerable value. It is to be hoped that a real specific for this widespread affection will soon be discovered.

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Annual meeting, Buffalo May 23 25 1932

POPULAR MEDICAL PUBLICITY

The officers and committees of the Medical Society of the State of New York have given serious thought to the attitude of the people toward practitioners of medicine The people see on the one hand groups of scientific healers ranging from blatant quacks to those slightly trained in sectarian schools of therapeutics At the other extreme the people see physicians who have been trained in scientific medicine in universities and hospitals and licensed by the State after searching examinations The people do not always discriminate between these two groups or recognize the superiority of the trained physician

The methods of these two groups are diametrically opposed The quack and the healer practice intense salesmanship and promise results impos

MEDICAL PROGRESS

The Early Diagnosis and Early Treatment of Arteriolar (Essential) Hypertension.—David Ayman states that the early diagnosis (as well as the prevention) of essential hypertension has not yet been included in the active scope of modern medicine. This is due to four factors: (1) There is the fear of producing anxiety in the patient by too frequent blood pressure readings. This fear is unfounded, as it has been shown in a series of patients who took their own blood pressure readings for from two to three years that there were no harmful psychic results. (2) The lack of specific therapy has been a deterring factor in early diagnosis. As in other diseases in which there is no specific therapy, such as tuberculosis, success should be greatest in the treatment of early cases. (3) Delay in early diagnosis is due to the frequent, though unjustifiable, assumption that the disease commences in middle life. It has been shown, however, that in the history of a large percentage of hypertensive patients vasomotor symptoms began in early life. (4) Physicians, with the exception of those in insurance companies, do not consider with enough suspicion elevation of blood pressure mildly above the average in young persons. In people whose systolic or diastolic blood pressure is 10 mm. above the average, especially if they belong to a hypertensive family, the diagnosis of essential hypertension may be made, after all other possible causes of hypertension have been excluded.

One of the most important of the characteristics of essential hypertension is not the elevation of blood pressure but rather the fluctuation or variability of the blood pressure. In a group of 76 unselected hypertensive patients whom the author followed for a year and a half, 56 per cent at some time or other had a drop of their blood pressure to normal on resting. It is thus possible to have a normal blood pressure in essential hypertension. Joseph H. Pratt and the author have demonstrated that the symptoms associated with early hypertension are of psychic or vasomotor origin, and that they are found in dynamic individuals who always seem to be under tension. The therapy of early essential hypertension should, therefore, attempt a modification of the special dynamic hypertensive personality. The individual's pace must be slowed up. The necessity is for both mental and physical relaxation. The use of sedatives may afford assistance. Among the best and least expensive of these are the bromides, phenobarbital, and chloral hydrate. —*New England Journal of Medicine*, August 31, 1931, ccv, 9.

Treatment of Muscular Indurations by Novocaine.—Fred Wachsmann, writing in the *Deutsche medizinische Wochenschrift* of May 22, 1931, says that the dynamic equilibrium of persons engaging actively in sports is peculiarly labile. Especially in those undergoing a course of training is there a ready change from a state of sympathicotonia into that of an alkalinizing vagotonia. During strenuous training the muscle is hypotonic, but through disuse or wrongly dosed stimulation a state of hypertonia may set in, which offers a ready basis for an aftermath of local induration. There is a tendency now to assume that the sensory nerve endings become irritated by the exercise involved in steady devotion to sport, and also after hematomas, resulting in a spasm of the musculature, by which the muscles are shortened, and the glycogen metabolism is brought to a standstill, while the muscle function is diminished by accumulation of lactic acid and by readier susceptibility to fatigue. The muscles most affected are the triceps brachii, in ski-jumpers, the soleus in track-runners, the arm flexors in oarsmen, the pronator in tennis players, the shoulder muscles in gymnasts, the psoas in hurdle-jumpers, etc. In view of the difficulty of measuring the suitable dosage of massage, and the frequent failure of heat applications and hydrotherapy to relieve the indurations, Wachsmann has been trying the effect of small injections of novocaine made directly into the muscle affected. He has had brilliant results from injections of ½—2 c.c. (8 to 30 minims) of a 0.5 percent solution, occasionally using as much as 4 c.c. (60 minims). The reaction represents a kind of irritation therapy. In a total of 30 cases injected, he has found only 4 that did not yield to the treatment. A single injection has often proved sufficient, but in some cases 2 or 3 injections have been administered at 3 day intervals.

Control of Hiccough with Carbon Dioxide by a Simple Rebreathing Method.—Since there are reports in the literature showing that carbon dioxide, which acts directly upon the respiratory center, is a most reliable method of stopping hiccoughs, Lewis A. Golden urges that it be more extensively used. Because of the false assumption that its use demands an expensive and cumbersome apparatus, he describes a simple and readily available method which he has found quite effective. An ordinary paper bag of medium size and strength is placed over the patient's face, and held so that it tightly encloses the mouth and nose. The patient is instructed to breathe into the bag. As the available oxygen in the bag

is replaced, the exhaled carbon dioxide accumulates so that in several minutes there is enough to produce a therapeutic effect. Golden has treated six patients by this simple method. In one patient the hiccough, which had been continuous for two days, was checked in four minutes and up to the date of writing there had been no relapse. Of the other patients all but one were relieved in from three to six minutes. One had a recurrence several hours later, which he easily relieved at home by the same method.—*New England Journal of Medicine,* June 4, 1931, cciv, 23.

The Influence of Intercurrent Infectious Diseases upon Chronic Nephropathies.—Berta Aschner says that, among diseases that have been cured or remarkably improved by intercurrent attacks of acute infection, renal affections, especially chronic nephroses, hold an important place. Four cases are reported in which acute attacks of infection exerted a favorable influence upon chronic diseases of long duration. Two of these were cases of nephrosis, which either improved or were temporarily cured by attacks of erysipelas. In the first case a woman of 39 responded admirably to an attack of erysipelas involving the entire length of the right arm, after which she remained in excellent health for a period of 5 years. Upon recurrence of the nephrosis at the end of that time, however, no treatment of any kind, including protein therapy, was able to restore her to health. The second case was that of a man suffering with arteriosclerosis associated with high-grade albuminuria and hydrops. The urine was heavily loaded with white and red cells, and the albumin amounted to 18.5 per thousand. Here, too, an attack of erysipelas caused great temporary improvement, so that, although the patient died shortly afterward from cardiac and vascular complications, the astonishing fact was revealed at autopsy that there was neither grossly nor microscopically any least sign of renal pathology. There can be no doubt that we are dealing here with an autoprotein action, but attempts to apply this principle therapeutically by administering the usual forms of protein treatment proved wholly unsuccessful both in the author's cases and in one of Karacsony's, in which no effect could be produced either by peptone, nucleinic acid, or the patient's own serum. This is a field of effort in which no pains should be spared to achieve the results that have been attained in disease of the nervous system treated along these lines. The literature contains a number of other interesting examples of cases of chronic nephrosis which have been cured by acute infectious attacks, including croupous pneumonia, measles, and streptococcus peritonitis.—*Klinische Wochenschrift,* August 15, 1931.

The Value of Fever Produced by Diathermy in Multiple Sclerosis and Other Chronic Diseases.—William D. Schmidt and Benjamin P. Weiss emphasize the fact that of the various agencies used to raise the body temperature for therapeutic purposes diathermy is the only one which permits the physician to control the fever. The remarkable results obtained with diathermy in paresis led them to apply this form of treatment to other chronic neurological diseases—multiple sclerosis and encephalitis. In these affections also they have succeeded in obtaining remarkable clinical results, which were usually noted in from thirty to ninety days. While marked organic syndromes have cleared up to a marked degree, it is too early to predict permanence. Patients must be carefully selected for this form of treatment. Those of normal weight stand the treatment better than the obese, and women better than men. There should be no marked evidence of degeneration of the cardiac, renal, vascular or nervous systems, and the patient should not be over 50 years of age. During the treatment all the constitutional phenomena of fever appear, such as herpes, marked sweating, and leucocytosis. There is a rise in the ferment and antiferment content of the blood, increase in the metabolic rate, and an increase in resistance to invading micro-organisms. The treatment should be interrupted if the blood urea rises to 70 mg. per 100 c.c., if the systolic blood pressure falls below 35 m.m., if there is beginning bronchitis, muttering delirium, signs of pulmonary edema, weakened cardiac sound, or marked exhaustion, or if the thermoregulative center becomes unbalanced. In applying the diathermy an ordinary high frequency machine may be used, if it is sturdy enough to stand the strain of running for hours. The technique is that usually employed for the production of therapeutic fever by diathermy. The amperage is increased until it reaches 2,500 to 3,000 milliamperes, and maintained at this level until the desired temperature is attained. It usually requires about two hours and a half to elevate the temperature six degrees; the patient then remains covered for at least two hours. During the treatment a sedative is necessary. The authors use luminal, 1 grain, and bromides, 30 grains.—*Physical Therapeutics,* September, 1931, xlix, 8.

The Electrocardiogram in Congenital Disease of the Heart.—On the basis of a personal case M. Stejfa points out the importance of the electrogram in the diagnosis of congenital heart lesions. Only by this means was it possible to make a diagnosis of a perforation of the septum during the patient's life. The case was in addition characterized by a transposition of the large vessels and also of the ventricles, revealed at

autopsy, in a youth of 19. The electrocardiogram, which records the progression of electric phenomena, is in principle a functional method. But since its conformation depends also on anatomical circumstances, it is to some extent applicable in the diagnosis of congenital disease. It may furnish the following indications: (1) The intense systolic souffle with its maximum of intensity in the second left intercostal space beside the sternum, even when not accompanied by a murmur—given a pronounced right predominance, which cannot be explained in any other way clinically (as for example by kyphoscoliosis, mitral disease, sclerosis of lung or pleura, fibrous phthisis, etc.) may be regarded as a symptom of a congenital disease, without formal radioscopic confirmation. (2) When clinical examination leads one to suppose there is a congenital lesion of the heart (because of cyanosis and systolic heart murmur) and the electrocardiographic tracing is normal, a stricture of the pulmonary artery cannot be assumed, for in all the cases that have been verified at autopsy the predominance of the right heart had been established (except the author's own case with block of the right branch of Tawara). In these first cases, which have been defined by a normal electrocardiogram, we must rather assume the persistence of the arterial canal, or Roger's disease, or possibly lesions associated with atrophy of the right ventricle. (3) Following an electrocardiographic examination which establishes in a congenital affection an organic lesion of the bundle of His or of Tawara's branch, we may suspect a lesion of the interventricular septum. Since there are a number of symptoms which have not as yet been susceptible of diagnostic interpretation with complete certainty, because there are relatively few cases in which clinical examination can be controlled by autopsy, every physician who has made interesting findings by means of the electrocardiogram with reference to congenital heart lesions should make it a point to publish them for purposes of comparison.—*Archives des maladies du coeur, des vaisseaux et du sang,* August, 1931.

Pneumoperitoneum in the Treatment of Tuberculous Enterocolitis.—Andrew L. Banyai, writing in the *American Journal of the Medical Sciences,* September, 1931, clxxxii, 3, quotes figures showing that tuberculous disease of the intestines is far more frequently a complication of pulmonary tuberculosis than is generally realized. He states that the prognosis is not necessarily hopeless, and reports a series of 44 cases in which he has employed pneumoperitoneum, with resulting symptomatic relief in 31 (70.4 per cent.). In 14 cases relief was complete, in 10 partial, while in 5 diarrhea ceased though other symptoms persisted; diarrhea ceased while other symptoms persisted in 2 cases. The duration of symptomatic relief varied from a few days to two years. The technique of pneumoperitoneum is simple and without danger. The best site for the injection is three fingers' breadth below and to the left of the umbilicus; if fibrosis has resulted from this side having been used too often, the needle may be introduced at the same level on the right side. Manometer readings are taken during the injection, though this is not so important as in artificial pneumothorax. The subjective feeling of the patient, the distention of the abdomen, and increased intensity of tympanitic percussion sound are far better guides in controlling the amount of oxygen injected than the manometer. Positive pressure oscillations appear usually after 300 to 500 c.c. of oxygen have been introduced, though in some instances they are not evident even after 1000 c.c. of oxygen have been injected. The abdomen should be underinflated rather than overinflated. The treatment should not be given during menstruation. The thereapeutic effect of pneumoperitoneum is considered to be due to the direct chemical influence of oxygen, the increased intra-abdominal pressure, and the hyperemia of the peritoneum and intestinal serosa. A decrease in the peristalsis following oxygen inflations was noted in the majority of cases in this group. By these accomplishments one approaches the ideal aimed at in the treatment of any form of tuberculosis, that is, possible maximum immobilization with improved nutrition. The author feels that his results are sufficiently encouraging to warrant the more frequent use of pneumoperitoneum in the treatment of intestinal tuberculosis.

Hypertension and Inhalation of Pure Oxygen.—Experiments are reported by A. S. Berljand and Ch. J. Weinstein with reference to the effect of pure oxygen inhalation in that type of hypertension that is due to toxinfectious causes. The 25 subjects examined were chiefly diabetics, with a few arteriosclerotic patients and one suffering from nephritis. Ten normal persons were also used as controls. Three types of reaction were observed after inhalation of oxygen: (1) In normotonics, insignificant rise of systolic and diastolic blood pressure, still evident 15-20 minutes afterwards. (2) In some hypertonics, an increase of blood pressure immediately after inhalation, falling in 15-20 minutes to a point below the original. (3) In other hypertonics, an immediate drop in blood pressure after inhalation, which remained constant 15-20 minutes after the experiment. In the days following, the pressure was usually lower than on the first day; toward the end of the observation, that is, 10-14 days later, it was appreciably less in 23 of the 25 patients than before the experiment was made. In normotonics there was no effect of any kind at the end of this period in the way of either in-

crease or decrease. The question whether oxygen is absolutely hypotonic in its action must therefore be answered in the negative. With regard to the mechanism of its action in hypertonics we may suppose that it counteracts some component of the increase of blood pressure, with a degree of energy proportional to the energy of such component in any given case. Carbon dioxide might be such a substance, stored up in the blood and acting as a vasoconstrictor. Hyperventilation would then cause a fall in blood pressure, in which case we might give the name hypercapnic to this type of hypertension. Certain authors have expressed the view that the fall of blood pressure is due to decrease of calcium ions, as the result of beginning alkalosis. The authors were unable to demonstrate any difference in the content in calcium ions before or after the oxygen inhalation. In cases of essential hypertonia, where some writers claim that calcium plays a great part, they could not observe any influence exerted by carbon dioxide. Whether these forms should be regarded as hypercapnic or anoxemic therefore remains uncertain at the present time.—*Münchener medizinische Wochenschrift,* August 28, 1931.

The Use of Wet Quinosol Dressings.—It is still a debated question, says Sigwald Bommer, in the *Deutsche medizinische Wochenscrift* of August 28, 1931, whether wet medicated dressings offer a satisfactory mode of treatment. If they are strong enough to kill the bacteria, they are liable to be injurious to the skin. Having found boric acid dressing irritating, and in conflict with a dietetic treatment he was using, he made comparative tests of these and quinosol dressings, placing one drug on the right upper arm and the other on the left, in 45 patients suffering with lupus vulgaris. He observed the effects of 4 different solutions: (1) 1-2000 in boiled tap water, (2) 1-1000 in the same, (3) 1-1000 in 0.85 per cent. sodium chloride solution, (4) 1-500 in the same. The boric acid was used in 3 and 1.5 per cent. solutions. Quinosol is sulphuric acid ortho-oxyquinoline-potassium, consisting of approximately equal parts by bulk of oxyquinoline and potassium bisulphate; it is chemically related to yatren. When the applications were made on sound skin in normal persons, there was no difference in the effect between the two substances. But in cases of ulcerated lupus vulgaris the superiority of quinosol was striking. In deep ulcers of hypertrophic lupus there was an astonishing decrease of secretion, with prompt drying up at the bottom and complete cicatrization in very brief time. In five of the patients there was a burning sensation for about 15 minutes after the dressing was applied. It followed invariably, being greater after solutions 1 and 2 than after 3 and 4. The sodium chloride has the effect of decreasing the burning sensation and the irritating effect of quinosol. In lupus vulgaris any irritation has the effect of increasing the inflammation, and is therefore to be sedulously avoided. Bommer believes that even the weaker solutions he has used are still somewhat too strong, and that a further decrease is desirable in many cases. In those who from the start tolerated the treatment without any difficulty, and who had closed foci or slightly hypertrophied lupus nodules, there was prompt disappearance of all inflammatory symptoms in the vicinity of the lupus nodules.

Influenza-Bacillus Endocarditis Assuming the Picture of Endocarditis Lenta.—In view of the fact that only 21 cases have been found in the literature in which a purulent endocarditis could be unequivocally attributed to the influenza bacillus, Heinz Frank believes that a case of his own offers points of special interest. A man of 32 had suffered with mitral insufficiency from early youth, certainly from the age of 12 years. He was first admitted for an acute inflammation of the hip joint in addition to this old lesion. The fact that the case yielded to salicylates in 3 days makes it safe to assume that the affection was rheumatic monarthritis. That endocarditis was present at this time is unbelievable, since the time required for sedimentation of blood corpuscles quickly rose to normal, the patient was apyretic and had gained 7 pounds. Two months later he was admitted again, with shortness of breath, slow fever, attacks of weakness, and a sense of general discomfort. All the signs of a septic endocarditis were present: anemia, enlarged spleen, intermittent fever, embolism, signs of focal nephritis. That this endocarditis was caused by influenza bacilli cannot be doubted, since these were found in the blood five times and cultured in pure culture, without other kinds of bacteria being demonstrable. The condition presented all the symptoms of the affection called by Schottmüller endocarditis lenta: an obscure beginning, long subfebrile to febrile temperatures, enlarged spleen, increasing anemia. In addition the fact that septic endocarditis established itself upon a valvular defect in an old rheumatic endocarditis is a very frequent finding in endocarditis lenta in the stricter sense of the word. The case was differentiated from true endocarditis lenta only by the fact that *Streptococcus viridans* could not be demonstrated in blood culture, but that influenza bacilli instead were present. The actual clinical findings were in no way different. All the 21 cases in the literature as reported by nine authors, have terminated fatally. It is therefore almost certain that endocarditis in which the influenza bacilli are demonstrated in the blood stream results in death of the patient.—*Münchener medizinische Wochenschrift,* September 4, 1931.

LEGAL

PHARMACIES—POWER OF STATE TO LEGISLATE ON QUESTION OF OWNERSHIP

By LORENZ J. BROSNAN, ESQ.
Counsel, Medical Society of the State of New York

In our large cities the old-fashioned apothecary shop is rapidly disappearing. The chain-store system of drug shops, in some cases extending over the entire country, has replaced the individual in this all-important field. The most important function of a pharmacist is the correct and accurate compounding of prescriptions written by a physician. The responsibility of a pharmacist in this respect is indeed great; if he errs, he is in a position not only to undo the work of the physician but to cause great suffering and even death to the patient. It is obvious that the practice of pharmacy is inextricably interwoven with the public health. In the State of New York the Statute (Education Law, Article 51) sets up a State Board of Pharmacy with powers of regulation, supervision and control over the practice of pharmacy. The statute sets forth the qualifications necessary before a pharmacist can be licensed and also provides for the revocation of such license in the event that the pharmacist should prove false to his trust.

The change in ownership and mode of operation of pharmacies and drug stores in connection with the growth and expansion of corporations in this country is responsible for the passing of statutes which provide, in substance, that no such store shall be owned or operated except by a licensed pharmacist or druggist. These statutes are not retro-active and hence do not apply to the ownership of pharmacies or drug stores which existed prior to the passage of the statutes in question.

In Pennsylvania a short time ago, the constitutionality of a statute of this general character was challenged by a corporation which operated a chain of drug stores. It was contended that the statute in question was unconstitutional in that it contravened the due process of law clause in the Fourteenth Amendment of the Constitution of the United States. The case was carried to the Supreme Court of the United States. The majority of that Court adopted the contention of the drug store corporation and held the statute unconstitutional on the record then before them. There was, however, a vigorous dissent by Mr. Justice Holmes, concurred in by Mr. Justice Brandeis. In taking the position that the act in question was constitutional, the learned Justice said:

"A standing criticism of the use of corporations in business is that it causes such business to be owned by people who do not know anything about it. Argument has not been supposed to be necessary in order to show that the divorce between the power of control and knowledge is an evil. The selling of drugs and poisons calls for knowledge in a high degree, and Pennsylvania after enacting a series of other safeguards has provided that in that matter the divorce shall not be allowed. Of course, notwithstanding the requirement that in the corporations hereafter formed all the stockholders shall be licensed pharmacists, it still would be possible for a stockholder to content himself with drawing dividends and to take no hand in the company's affairs. But obviously he would be more likely to observe the business with an intelligent eye than a casual investor who looked only to the standing of the stock in the market. The Constitution does not make it a condition of preventive legislation that it should work a perfect cure. It is enough if the questioned act has a manifest tendency to cure or at least to make the evil less."

In New York the statute with respect to the ownership of pharmacies and drug stores reads, so far as material:

"Every pharmacy shall be owned by a licensed pharmacist and every drug store shall be owned by a licensed druggist; and no copartnership shall own a pharmacy unless all the partners are licensed pharmacists and no copartnership shall own a drug store unless all the partners are licensed druggists; except that, any corporation, organized and existing under the laws of the state of New York or of any other state of the United States and authorized to do business in the state of New York and empowered by its charter to own and conduct pharmacies or drug stores, and, at the time of the passage of this act, still owns and conducts a registered pharmacy or pharmacies or a registered drug store or drug stores in the state of New York, may continue to own and conduct the same and may establish and own additional pharmacies or drug stores in accordance with the provisions of this article, but any such corporation which shall not continue to own at least one of the pharmacies or drug stores theretofore owned by it or ceases to be actively engaged in the practice of pharmacy, shall not be permitted thereafter to own a pharmacy or a drug store; and except that any person, not a

licensed pharmacist or a licensed druggist, who at the time of the passage of this act owns a registered pharmacy or a registered drug store in the state of New York, may continue to own and conduct the same in accordance with the provisions of this article, and except that the administrator, executor or trustee of the estate of any deceased owner of a registered pharmacy or drug store, or the widow, heirs or next of kin of such deceased owner, may continue to own and conduct such registered pharmacy or drug store, in accordance with the provisions of this article"

Shortly after the decision of the Supreme Court of the United States, the New York State statute was challenged as being unconstitutional Two cases have already come before the lower Courts, in the first of which the statute was held unconstitutional, the Court following the ruling of the Supreme Court of the State of New York In the second case the New York State statute was upheld This second decision is extremely interesting and of great importance

An individual not a licensed pharmacist sought to compel the State Board of Pharmacy to issue to him a certificate of registration of the ownership of a pharmacy, but the Board refused to issue such certificate on the ground that the man was not a licensed pharmacist Resort was then had by this individual to the Court, where the statute was held constitutional It was urged by this man that the decision of the Supreme Court of the United States was authority for the granting of such certificate, but the Court held that each case must stand on its own facts and the record before the Court in this case was sufficient to uphold the constitutionality of the statute In order to understand the reasoning of the Court, it is necessary to quote at some length from the opinion

"The reason for denying to a corporation the right to practice a profession is clearly to prevent the shifting of personal responsibility for inferior quality of personal service Personal ownership and resulting personal responsibility is essential to the safety and health of the public in the practice of any profession For the same reason, it is a reasonable requirement that before a proprietary interest in a pharmacy can be acquired such prospective owner must have become a licensed pharmacist

"The chief function of a pharmacy is to dispense to the public (either compounded under a physician's direction or prescribed by a physician without the necessity of compounding) various drugs and chemicals, the quality of which is an important factor Upon the potency of the drugs and chemicals sold and the quality of the work in compounding them may depend the efficacy of the cure The skill of the physician may be offset by the inferiority of a pharmacist's drugs which have been prescribed It is common knowledge that time is an important element to be considered in the preserving of drugs and chemicals Some become ineffective for a prescribed purpose after they have been permitted to age beyond a certain time, others by chemical change, may be converted into poison In plain speech, public welfare requires that the proprietor of a pharmacy should know his business The health of the public suffers if his stock of drugs is allowed to deteriorate, the safety of the public is endangered if he employs clerks of inferior skill

"No one questions the reasonableness of the statute which requires a practicing physician to be licensed by the state Can it not be said with equal reason that a license should be required of the proprietor of a pharmacy who is responsible for the quality and potency of the drugs and chemicals which the physician prescribes to effect a cure? Is it not reasonable that the state should have some control over the man whose responsibility it is to employ men and women of expert knowledge to compound the prescriptions of a physician? If we license the physician, should we not license him who is largely responsible for putting the physician's advice into effect?

"It is by a statute such as the one under consideration that the state in the interest of public health and welfare can to some measure control the quality of service to be rendered to the sick In effect, the command of the statute is addressed to the owner or proprietor of the pharmacy There the responsibility should remain Possible penal consequences for illegal acts by the proprietors of pharmacies is not enough The demand is for consistent quality of pharmaceutical service Public health means sound health, and it may reasonably require carefully regulated pharmacies to preserve it

"Approaching from another point of view the question of the reasonableness of this statute, the record shows that following the close of the World War illicit traffic in habit-forming drugs and prohibited intoxicants showed a state-wide increase Large profits to those who could legally dispense such products lured persons of inferior character and a low type of mentality into the field of pharmacy Those who sensed the public necessity of high grade pharmacies in communities realized that the profession was being degraded and the effect of its public service handicapped Men of broad knowledge upon the subject, with unquestioned purpose to protect the public, appeared before the Legislature and the governor in support of the act now challenged Their arguments apparently carried conviction It cannot be doubted the Legislature recognized a new evil to be met and prevented 'The needs of successive generations may make restrictions imperative to day which were vain and capricious to the vision of times past'"

The Court then took up the decision of the

Supreme Court of the United States dealing with the Pennsylvania statute and held that it was not conclusive upon the record before him, and the Court then said:

"I return to the question before the Court: Is the statute which the petitioner has challenged reasonably adaptable to and in the interest of public health and general welfare? The answer is supplied by the particular record before the Court in this proceeding, the dominant note of which is the protection of the public. It leads me to the conclusion that the statute does not violate the provision of the constitution which the petitioner invokes. While it may affect his right to pursue his vocation in the way he desires, it does so with authority of law. 'Any trade, calling or occupation may be reasonably regulated if "the general nature of the business is such that unless regulated many persons may be exposed to misfortunes against which the Legislature can properly protect them."'"

It is probable that these apparently conflicting decisions of the lower Courts of the State of New York, one holding the statute unconstitutional and the other holding it constitutional, will be carried to the highest Court of this State and perhaps even to the Supreme Court of the United States. Only in this way can a final determination be had as to the constitutionality of the New York statute.

SUIT FOR PROFESSIONAL SERVICES—MALPRACTICE COUNTERCLAIM

An elderly woman sustained a fall on the sidewalk, injuring her shoulder. A neighborhood doctor was called who examined her and turned her over to a surgeon for hospital care. With the aid of *x*-rays, the surgeon diagnosed the injury to be a fracture of the anatomical neck of the humerus with comminution of the great tuberosity, the parts being completely separated. He reduced the fracture and put her in traction with weights, utilizing the Balkin frame. The patient remained in the hospital about five weeks and then went home with her arm in a brace, her condition having progressed normally. At that time the surgeon turned the care of the patient over to her family doctor. The last time the surgeon saw the woman was a few weeks after her discharge from the hospital when she called at his office to pay him a part of his bill, and at that time she seemed to be in every way satisfied with the treatment she had received.

The surgeon attempted to collect the balance of his bill for professional services and, in so doing, was obliged to institute an action in the Municipal Court to enforce payment. The patient put in a defense that the surgeon had been negligent in his treatment of her, demanding affirmative judgment against him in the sum of $1,000.

When the matter came up in Court before a judge and jury, the attorney for the patient did not attempt to prove any malpractice and withdrew the malpractice counterclaim, but he proceeded with the single defense that the doctor's fee was too great for the services which had been rendered. However, a verdict was found by the jury in favor of the doctor.

ALLEGED INJURIES BY X-RAY MACHINE

A woman about the age of sixty years, as a result of a fall, suffered an impacted fracture of the wrist and her family physician reduced the fracture and applied splints. Subsequent to this treatment the physician, desiring to ascertain whether the reduction was proper, sent the patient to the defendant doctor for the purpose of having an *x*-ray picture taken. The defendant doctor placed the woman's wrist on the table on top of the *x*-ray plate, and proceeded to adjust the *x*-ray machine for the purpose of taking the picture. Very unexpectedly, a steel counterweight supporting the tube and cone carriage which weighed about twenty pounds, snapped and the carriage dropped upon the splints that were around the woman's wrist. She complained at the time that it had jarred her and hurt her but made no particular complaint, and apparently the carriage had dropped so slowly that the splints were not even disturbed.

However, the patient instituted suit against the doctor in charge of the *x*-ray machine, claiming that due to the accident her wrist had never properly healed and that her fingers had become permanently stiffened and that flexion and closure of the fingers had become imperfect to about fifty percent of normal. An examination of the patient by an expert on behalf of the defendant disclosed no condition present in her arm or hand which was not the natural outcome of a fractured wrist in a woman the age of the patient.

When the action came to jury trial the evidence failed to show any injuries traceable to the accident. Judgment was, therefore, directed by the Court in favor of the defendant doctor, dismissing the complaint. An appeal was taken by the plaintiff to the Apellate Division of the Supreme Court but the dismissal of the complaint was sustained, finally terminating the matter in favor of the doctor.

NEWS NOTES

PRINCIPLES OF POPULAR MEDICAL PUBLICITY

The Press Publicity Committee, whose appointment and personnel were announced in this Journal of November 1, page 1344, met on November 10 in the New York Academy of Medicine, and elected Dr. Alec N. Thomson, of Kings County, as Secretary.

The Committee designated one of the two representatives from each District Branch to be Chairman of a Branch sub-committee. An immediate duty of this chairman is to get in touch with each County Society in his District, and secure the appointment of a member to represent the County Society on the District sub-committee.

The Committee adopted the following principles regarding the methods of its procedure and the standards for giving out popular medical publicity by physicians:

"The medical profession in the State of New York, as represented by the Press Publicity Committee of the Medical Society of the State of New York, is keenly aware of the desirability of providing the press with authentic medical news and placing the views of the organized profession before the public. The interests of public health education frequently demand that individual physicians broadcast over the radio on medical topics or write for lay magazines or newspapers. On the other hand, it is necessary that copy of this type adhere to the highest standards and that the self-advertisement of quacks, faddists and irregular practitioners be curtailed as far as possible. The following regulations have been formulated to assure the press of a regular supply of authentic medical news and to protect the public against publicity seekers in the profession and charlatans without.

"1. Requests received by individual members for expressions of opinions on medical matters by newspapers or reporters shall be referred to the Chairman of the Branch Sub-committee of the Press Publicity Committee of the Medical Society of the State of New York of the district to which he belongs. Preferably such information shall be given to the press in the name of the Press Publicity Committee of the Medical Society of the State of New York. When this is impossible, the phrase, 'Dr. So-and-So, speaking for the Press Publicity Committee of the Medical Society of the State of New York,' should be used.

"II. Any State Society member who, by invitation or upon his own initiative, writes an article on a medical topic for publication in the lay press or to be broadcast over the radio, shall submit the said article to the branch sub-committee of this Committee prior to publishing or broadcasting it.

"III. No State Society member shall broadcast an article over the radio, or issue it directly or indirectly to a lay publication, without the approval of this Committee.

"IV. Any State Society member who publishes an article on a scientific subject in the lay press or broadcasts it over the radio shall use *only one title* in conjunction with his name to establish his authority to speak on the topic in question.

"V. Any officer or chairman of a committee of the Medical Society of the State of New York who writes an article in the lay press or delivers a speech over the radio on an extra-scientific subject shall use *only the title of his office* and not any of his personal titles.

"VI. This Committee will approve all authentic scientific articles which are not of a self-aggrandizing nature.

"VII. To guide physicians who desire to write articles for lay consumption, the following definitions are submitted:

"A. *Permissible medical publicity* is the issuance of a public report concerning an event of general interest or importance. It stresses the happening rather than the individual.

"B. *Undesirable medical publicity* is the publication of individual activities designed to magnify the importance of that individual in the eyes of the public.

"C. *Propaganda* is a systematic effort to gain public support for public health activities.

"D. *Public health education* is the impartial instruction of the public in facts related to the prevention and treatment of disease. It stresses the facts rather than the individual presenting them."

The Committee also made the following announcement regarding its activities:

"In formulating the activities of this Committee, we have immediate and remote activities in mind.

"Our immediate activities embrace contacts with the press, with radio stations, and with lecture platforms for the supervision of publicity emanating from the officers and individual members of the Medical Society of the State of New York for public consumption. They include also the preparation and issuance of authentic, up-to-date medical articles and statements of the ideals

of the State Society, to the public press and through the press to the public.

"Our more remote purpose is eventually to establish a liaison with various public health agencies, and in a friendly and cooperative spirit, to supervise the pamphlets, books and other publicity material which they issue to the public so that these may be issued with the approval of the Committee on Press Publicity of the Medical Society of the State of New York."

On November 11 this report was submitted by the Chairman, Dr. Samuel J. Kopetzky, to the Executive Committee of the State Society, which approved it and ordered it published in the Journal, together with an editorial explaining the principles and their application by the District Branches and County Societies.

The Executive Committee also authorized the preparation of reprints of the articles for distribution to the newspapers of the up-State districts under the supervision of the chairmen of the Branch sub-committees.

A. M. A. CONFERENCE OF SECRETARIES AND EDITORS

The Annual Conference of the Secretaries and Editors of the State Medical Society, conducted by the American Medical Association, was held on November 13 and 14, 1931, in the building of the Association at 535 North Dearborn Street, Chicago, Illinois. Those present from New York State were Dr. D. S. Dougherty, Secretary, Dr. O. S. Wightman, Editor-in-Chief, and Dr. Frank Overton, Executive Editor. Sessions were held on Friday morning and afternoon, with a noon luncheon between the two; and on Saturday morning. The Conference chose as its chairman Dr. Earl Whedon, Secretary of Wyoming State Medical Society, who used a loaded five-shooter as a gavel, explaining that the weapon was a badge of authority on his sheep ranch at home, even as a battle mace represents the national dignity and power in the English parliament. Dr. Whedon proved to be a diplomatic presiding officer who judged with promptness and diplomacy.

The speakers included representatives of the American Medical Association: Dr. E. Starr Judd, President; Dr. Edward H. Cary, President-Elect; Dr. Edward B. Heckel, Chairman of the Board of Trustees; and Dr. W. C. Woodward, Chairman of the Committee on Legislation. Then, too, there was Dr. Olin West, Secretary and General Manager, who was the genial representative and mentor of every State Society, giving a clear expression of the attitude of the medical profession toward the subjects discussed by the speakers.

"The Official Records of the Office of a State Secretary" was the subject of a paper by Dr. Emma W. Pope, Secretary of the California State Society. The ideal methods described by Doctor Pope may be found in actual use in the office of the Secretary of the Medical Society of the State of New York.

Dr. C. B. Conklin, Secretary of the Medical Society of the District of Columbia, spoke on some legal points in connection with the practice of medicine by corporations, involving the incorporation of county medical societies for the purpose of contracting to give medical services, as in Iowa. (See the N. Y. JOURNAL, March 15, 1930, page 368.) A corporation is an individual in the eyes of the law, but it cannot attend a medical school or be imprisoned, or make a diagnosis of sickness. A corporation must, therefore, act through hired physicians, thus opening up the question of relative responsibilities of the employer and his agent. While it seems to be a universal principle of all the States that a corporation cannot practice medicine or law, doctors or lawyers may form partnerships in which the members do the actual practice as individuals.

Dr. J. H. Demster, full-time editor of the Journal of the Michigan State Society, spoke of the ideals of an editor of a State Journal in making it a really representative organ of its society and the constituent county societies. Dr. O. S. Wightman, Editor-in-Chief of the NEW YORK STATE JOURNAL OF MEDICINE, spoke of the varied forms of the State Journals, each of which is adapted to its particular State. "The best Journal," he said, "is the one that is read."

"Medical and Hospital Service for Veterans" was the subject of an address by Dr. C. B. Wright, of Minneapolis. Doctor Wright explained that the medical profession was opposed to the bill to give free treatment to all veterans, insisting that the Government limit its action to disabilities incurred in actual service during the war. This attitude had aroused resentment among ex-soldiers, but the veterans were not satisfied with the provision of the United States Government that the patients must go miles away from home and undergo long delays in order to get treatment, some dying of acute appendicitis before they could reach a hospital.

Physicians generally accept the principle of free treatment to all veterans, because it is an established fact; but they advocate the principle that the treatment be given in the patient's own community by the doctor and hospital of his choice. The veterans are accepting

this plan whenever it is explained to them. The speakers suggested that every medical society, from the State to the County, should get in touch with its Legion and explain the advantages of "home" treatment.

Dr. Rollin T. Woodyatt, of Chicago, advocated the use of the hospital and its staff as a practising group, basing his suggestion on his experience in the war, when a group of medical officers at an army camp gave treatment to the people of the town. He also had some experience with a similar group in Chicago. (New York is watching an experiment along this line in Cooperstown, Otsego County. See this Journal, May 15, 1931, pages 642 and 653.)

Dr. A. N. Thomson, of Brooklyn, described the successful coordination of the civic activities of the five County Medical Societies of Greater New York through monthly meetings of their presidents and representatives.

Dr. A. H. Freiberg, of Cincinnati, explained the significance of medical leadership in directing the health activities of agencies of a governmental and civic nature.

The sessions closed with a discussion of medical service in Europe under governmental auspices, by Mr. Nathan Sinai, of Ann Arbor, Michigan. In discussing this paper, Dr. D. S. Dougherty, Secretary of the New York State Society, called attention to the difficulty of separating preconceived attitudes from conclusions reached after actual investigations.

One of the most valuable features of the Annual Conferences is the opportunity to meet the representatives of other States and discuss their mutual problems; but only a limited time is available for these meetings. Possibly the difficulty could be solved by holding an informal evening smoker where the members would feel free to become acquainted.

SECOND DISTRICT BRANCH

The Second District Branch of the Medical Society of the State of New York, comprising Long Island, held a most successful meeting on the afternoon and evening of Thursday, November 19, 1931, in the St. George Hotel, Brooklyn. The President, Dr. L. A. VanKleeck of Manhasset, and the Secretary, Dr. Alec N. Thompson of Brooklyn, had worked long and hard in preparation for the meeting, and the outcome justified their efforts.

The afternoon session was scientific in character and was attended by one hundred physicians. The following program was carried out according to the scheduled time limits:

2:45 p.m. 1. The Polio Epidemic.
- (a) Statement of extent, mortality, etc. Herman T. Peck, M.D.
- (b) Post-polio care from the standpoint of the
  1. Pediatrician: Benjamin Kramer, M.D.
  2. Neurologist: Harold R. Merwarth, M.D.
  3. Orthopedist: Herbert C. Fett, M.D.

3.10 p.m. 2. Pneumonia.
- (a) Types and typing: Max A. Goldzieher, M.D.
- (b) Serum therapy: Thomas A. McGoldrick, M.D.
- (c) Carbogen therapy: John J. Wittmer, M.D.
- (d) Supportive treatment: Henry M. Moses, M.D.

3.35 p.m. 3. Health Examination from the Standpoint of
- (a) Urology: Nathaniel P. Rathbun, M.D.
- (b) Gastro-enterology: Albert F. R. Andresen, M.D.
- (c) Ophthalmology: John N. Evans, M.D.
- (d) Internal Medicine: Simon R. Blatteis, M.D.
- (e) Proctology: Michael Canick, M.D.
- (f) Cardiology: William E. McCollom, M.D.

4.10 p.m. 4. Address on Goiter, with lantern slides: Martin B. Tinker, M.D., Ithaca, N. Y.

These papers were delivered to the editors at once, and will be published in an early issue of this Journal.

The evening session consisted of a banquet which was attended by three hundred guests, and was followed with addresses on the general topic "What about Governmental Medicine?"

Dr. William D. Johnson, President of the Medical Society of the State of New York, made an eloquent protest against the assumption of dictation by government officials and lay organizations.

Dr. Allan J. McLaughlin, Medical Director, United States Public Health Service and formerly Massachusetts Commissioner of Health, told of how the cooperation of family doctors is essential in conducting the work of state departments of health. He explained

that the leadership of health departments lies in fields into which physicians are not prepared to enter; but he advised their withdrawal from the fields as soon as family doctors organize themselves to give service to the public in distinction to private individuals.

Michael M. Davis, Ph.D., Director of Medical Services, Julius Rosenwald Fund, and Member, Executive Committee of the Committee on the Costs of Medical Care, set forth the motives which led governmental bodies and lay organizations to enter the fields of the practice of preventive medicine at a time when physicians were not prepared to undertake the work; but he expressed the willingness of these organizations to leave the fields to the medical profession as soon as the doctors were ready to assume the activities.

Dr. Livingston Farrand, LL.D., President of Cornell University, and Chairman of Governor Roosevelt's Special Health Commission, explained the objects of the Commission and answered objections to the establishment of County Health Departments.

The after-dinner addresses were of entertaining interest, and of great practical value, and will be published in this Journal with the scientific papers which were read at the session held in the afternoon.

GRADUATE FORTNIGHT OF THE NEW YORK ACADEMY OF MEDICINE

The Fourth Annual Graduate Fortnight of The New York Academy of Medicine held during the last two weeks of October attracted physicians from all parts of the United States and Canada. There were more requests for tickets to the afternoon clinics than could be filled. The attendance at the evening meetings taxed the capacity of the large lecture hall.

An outstanding feature was the exhibit. It attracted great interest and was commended by all who saw it. A physician of international prominence expressed himself in regard to it as follows:

"In visiting the rooms of the Academy one could gain more information on the heart than anywhere else in the world. The unprecedented excellence of the material does great honor to the Academy and to the organizers of the Fortnight. I do not believe that so much about an important subject has ever been taught in so short a time. It is something new in the history of medicine."

JOINT COMMITTEE ON GOVERNOR'S HEALTH COMMISSION

This Journal of October first reported the organization meeting of the Joint Committee appointed to consider the recommendations of Governor Roosevelt's Special Health Commission, and also printed the full text of the preliminary report of the Commission in order that the members of county societies throughout the State might take intelligent action in regard to the proposals. An index of information relating to the Commission was printed in the Journal of October 1, page 1200.

The Joint Committee has done an immense amount of investigation, and has held hearings to which it has invited representatives of county societies. Formal hearings were held in four cities as follows:

Buffalo, October 27, attended by 39 representatives from 10 county societies.

Syracuse, November 10, attended by 9 representatives from 7 county societies.

Albany, November 17, attended by 14 representatives from 13 county societies.

New York City, November 24, at which representatives from the Metropolitan District were heard.

Hundreds of sheets of the stenographic reports of the meetings and hearings have been taken, and yet the testimony has been marked with moderation and has shown evidence of thought on the part of representatives of the county societies. The investigation has been conducted by the State Medical Society on a constructive basis.

The next great task of the Joint Committee is to formulate a report, which shall be based on the opinions and facts presented by the representatives of the county societies. This report will then be sent to the Council, and will be forwarded by it to the House of Delegates which will meet in special session some time in December, if possible, to consider the report, and to express the attitude of the Medical Society of the State of New York toward the legislation proposed by the Governor's Special Health Commission.

NASSAU COUNTY

The second regular monthly meeting of the Nassau County Medical Society was held in the Nassau County Bar Association Building in Mineola on the evening of October 27, 1931, with about sixty members present. The President, Benjamin Allison, M.D., presided.

In the business session, an amendment was proposed to create an additional officer in the society, so there will be the President, the President-elect, and the Vice-President. The society was informed of the efforts being expended by the officers of the society to supervise all clinics in the county, and to have none functioning without the approval of the society. A survey is being made to determine how many clinics are in operation and to investigate their natures.

Dr. Van Kleeck, president of the Second District Branch Medical Society, made an earnest appeal for the support of his home medical society in attendance of the dinner and meetmg in the St. George Hotel, Brooklyn, Nov. 19, 1931, the program of which will concentrate on the subject of state medicine. Inasmuch as the Second District Branch has one-fourth of the entire membership of New York State Medical Society, this meeting will be of prime importance.

Thomas H. Russell, M D., Associate Surgeon, Post-Graduate Hospital, New York, spoke on the "Diagnosis and Management of Gastric and Duodenal Ulcers," and exhibited some excellent lantern slides and x-ray films to illustrate cases. He emphasized the importance of the type of pain experienced by the patient, and showed that the cycles were as follows: Gastric Ulcer: (Four Cycles) "Food—Relief—Pain—Relief." Duodenal Ulcer: (Three Cycles) "Pain—Food—Relief." He stressed the finding of tenderness on deep palpation, even after the attack has passed. With the newer knowledge of x-ray and using the extreme Trendelenberg position to secure filling of ulcers in the cardiac end of the stomach, one rarely fails to corroborate the diagnosis. He presented one film of unusual clarity, which showed free gas bubbles in the abdomen, making the diagnosis of perforation.

H. G. WAHLIG, *Secretary.*

BRONX COUNTY

A regular meeting of the Bronx County Medical Society, held at Elsmere Hall, on October 21, 1931, was called to order at 9 P.M., with the President, Dr. Smiley, in the Chair.

The following physicians were elected to membership: Drs. Isidore F. Fishman, Louis J. Goldstein, David O. Gorlin, Meyer Jerome Karsh, Henry Kissel, J. Irving Kushner, Harry Levitt, Paul Luttinger, Charles Schuman, Abraham S. Shatz, Thamara M. Stander, and Mark M. Umansky.

Dr. Smiley reported on a meeting of the Coordinating Committee, and Dr. Archer reported for the Committee on Medical Economics.

The Plan for Medical Relief during the present emergency, which had been proposed by the Presidents of the five County Medical Societies of Greater New York, and which had been approved at a special meeting of the Comitia Minora, was ratified by the Society.

This plan places welfare organizations in charge of the relief. Doctors respond to calls originating in either a welfare organization or a public health nurse or doctor reporting a case of need to the organization. A panel of doctors ready to give medical service is on file with the organization, as is also a table of zones in which the doctors will make calls. The organization agrees to pay the doctor one dollar per visit, with a maximum of twenty dollars per week to be paid to any one doctor. Every physician taking a case agrees to give the patient the necessary amount of treatment regardless of the pay he receives.

The Society adopted resolutions in memory of three deceased members, Drs. Theodore H. Kellogg, William E. Howley, and James F. Kiernan.

The President's inaugural address was given by Dr. Irving Smiley, who summarized his recommendations as follows:

1. To fortify our Society by including every

practicing physician in the Bronx as a member.

2. To endeavor to centralize all public health problems under the guidance of the Society.

3. To provide and maintain a permanent machinery for the continuous cooperation of all factions interested in the health problems of the community.

4. To inject itself into the social, civic and political affairs of the community.

5. To mobilize all the forces possible, necessary to acquire and retain the good-will and confidence of the public.

6. To bring about an effective salesmanship in the marketing of our knowledge, skill, and experience.

7. To inaugurate a plan of consistent and continuous publicity by the courageous use of the press and whatever other means we may deem necessary in order to establish an intimate and cordial relationship with the public.

8. To sell, as it were, the family physician back to the public as the most consistent and enduring factor in all the health problems confronting it.

Following Dr. Smiley, addresses on present day problems in medicine were delivered by Dr. Charles Gordon Heyd, President, Medical Society of the County of New York; Dr. Walter D. Ludlum, President, Medical Society of the County of Kings; Dr. Albert L. Voltz, President, Queens County Medical Society; and Dr. Charles R. Kingsley, Jr., President, Richmond County Medical Society; Dr. Daniel S. Dougherty, Secretary of the Medical Society of the County of New York; and Dr. Alec N. Thompson, of the Medical Society of the County of Kings.

At the conclusion of the program, a vote of thanks was extended to our guests of the evening.

I. J. LANDSMAN, M.D., *Secretary.*

RENSSELAER COUNTY

The Rensselaer County Medical Society met at the Leonard Hospital, Troy, on Tuesday evening, November 10, 1931. The regular business session was delayed, and the scientific session was started first, with a paper by Dr. Helmer P. Howd on "Ruptured Uterus." A case of this sort was cited before the meeting.

Dr. John J. Curley presented a case history of nephrolithiasis with x-ray pictures and a follow-up history.

Dr. Emmott Howd presented a case of osteomyelitis with x-ray pictures and pathological slides.

Dr. Stephen H. Curtis then described and presented a case of diabetes with arteriosclerosis and ulcers of the lower extremities, which was greatly improved by the use of insulin and a high carbohydrate diet.

The business session opened at 10 P. M. with President E. F. Connally in the chair. Dr. C. J. Handron acted as secretary pro tem.

A report from the entertainment committee was given by Dr. Warren W. St. John. He stated that our annual turkey dinner will be held at the Hendrick Hudson Hotel on Wednesday, December 9th, 1931.

Dr. Gabriel Tucker of Philadelphia and Dr. J. B. Harvie of Troy will be the speakers at this annual dinner meeting.

Drs. T. S. A. O'Connor, J. J. Rainey, A. W. Benson, W. W. St. John, C. F. Kivlin and J. H. Flynn were appointed as the medical economics committee.

Dr. J. T. H. Hogan was appointed as representative to attend the hearing on the County Health unit bill.

The names of Drs. F. J. Scott, Charles Lewis, Wm. McDonald, and Frank Davenport were presented as candidates for membership in the society.

Drs. J. H. Flynn, C. F. Kivlin, J. J. Rainey, J. T. H. Hogan, and A. J. Hambrook were appointed as a nominating committee.

After recess they reported a ticket as follows:

Dr. J. B. Burke, for President
Dr. W. W. St. John, for Vice President
Dr. C. J. Handron, for Secretary
Dr. O. F. Kinloch, for Treasurer
Dr. J. H. Bissell and
Dr. C. W. Hamm, for Censors
Dr. A. J. Hambrook, and
Dr. J. H. Reid, for Delegates to the House of Delegates
Dr. J. J. Quinlan and
Dr. F. W. F. Caird, for Alternates

Their report was approved and the meeting adjourned at 11 P. M.

W. B. D. VAN AUKEN, *Reporter.*

SENECA COUNTY

The regular annual meeting of the Seneca County Medical Society was held October 8, 1931, at the Willard State Hospital, Willard, N. Y. There were present fifteen members of the Society, and a number of visiting physicians who were members of the Willard State Hospital Staff.

A business meeting was held at ten o'clock, followed with a dinner given through the courtesy of Dr. R. M. Elliott, Superintendent of the Hospital.

Dr. Donald Guthrie, Sayre, Pa., gave a paper on "The Early Diagnosis and Treatment of Intestinal Obstruction," which was discussed by Dr. William W. Skinner, Geneva, N. Y. Dr. Guthrie divided the cases of acute intestinal obstruction into two types:

1. The simple obstruction, in which there is no interference with the circulation in the gut.

2. The strangulated type. In the treatment, he said, four things were necessary:

1. To relieve the obstruction.
2. To drain the distal intestine.
3. To relieve dehydration.
4. To prevent starvation.

He believes that mortality is considerably reduced by doing a jejeunostomy, in all cases where the condition is unfavorable for radical operation, and in all cases that had been infective ones at the start. In those patients whose condition warrants it, an attack on the obstruction itself was advised. Large quantities of salt solution intravenously, large amounts of 10 to 25 per cent glucose solution intravenously, and by hypodermoclysis, were to be used in the post-operative treatment.

Dr. Homer I. Rexford of Willard, N. Y., gave a mental and neurological clinical demonstration, using about fifteen to twenty patients to illustrate various interesting manifestations of mental derangement and disease. The discussion was well taken up by Dr. Ross E. Herold of Willard, N. Y.

The address of the retiring President was given by Dr. L. W. Bellows, Waterloo, N. Y., on the subject "Ancient and Modern Light Therapy."

F. W. LESTER, M.D., *Secretary.*

TOMPKINS COUNTY

The November meeting of the Tompkins County Medical Society was held on Tuesday evening, the 17th, in the lecture room of the Memorial Hospital, Ithaca, N. Y., with 26 members present, President R. H. Fisher in the Chair.

The Comitia Minora was appointed a committee to nominate officers of the Society for the coming year.

The President appointed the following committee to represent the Society on the Tompkins County Conference of Public Health and Welfare Agencies:

Drs. Homer Genung of Freeville, G. M. Gilchrist of Croton, and Keith Sears of Trumansburg.

The Committee on Public Health submitted its report with reference to the report of the Governor's Special Health Commission as follows:

"Your Committee of Public Health recommends that the Society go on record as favoring, in principle, the report of the Governor's Special Health Commission, as this report is constructive and in accord with the demand for improvement in public health administration

"It also recommends careful study of plans which will be proposed for enacting some of the recommendations of the Commission, and that no approval of the same be given until it can be demonstrated that there is a popular demand for them, and that they meet the approval of the medical profession."

The report was approved unanimously.

The Scientific Session consisted of a paper presented by Emily Dunning Barringer, M.D., of New York City, on the subject of "The Complement Fixation Test for Gonorrhea in Women."

Dr. Barringer is gynecologist in the Kingston Avenue Hospital, Department of Hospitals, of New York City. She presented the results of the work and investigations along these lines made by herself and others which have resulted in making this test more dependable. Several charts were shown. Much interest was shown in the subject as evidenced by the full and interesting discussion. A vote of thanks was given the Doctor and the meeting adjourned.

WILBER G. FISH, *Secretary.*

THE DAILY PRESS

A PSYCHOLOGICAL PROBLEM

Mr. and Mrs.— *One Man's Meat Is Another Man's Poison*



From the *New York Herald Tribune*, October 10, 1931.

HOBBIES AND HEALTH

The New York Times of October 31 extols hobbies and illustrates its thesis with the career of a book collection, as follows:

"One who has a hobby can never tire of life. He always has something of passionate interest. Sometimes the hobby is within the scope of one's vocation. But for the great mass of men it cannot be. In none of the three fundamental types of hobbies (the acquiring of knowledge, the acquiring of things, the creation of things) do the daily tasks give opportunity for self-development or for contributing to the happiness or welfare of others. Most fortunate are they whose vocation allows them the scope and fervor of an avocation.

"Mr. W. K. Bixby, whose obituary appeared in yesterday's *Times,* was one who, having done more than his share of the world's work, found zest in civic service and in cultivating his hobbies. He began with manuscripts, books and paintings. But he was not a bibliotaph—a collector of books and other things of highest human interest, who shuts them away as a miser. He was a lover of the choicest things of the human mind and human skill, and was ever sharing them with others. When the Bibliophile Society many years ago expressed the regard in which he was held by them, they spoke not only of his taste and learning but also of the unselfish generosity with which he placed his 'priceless collections' at the service of his friends.

"His privately printed books include letters of Lamb, a poem of Keats, Robert Burns's 'To Mary in Heaven,' verse and prose by Eugene Field, Andre's Journal and Benjamin Franklin's letter on 'Balloons' in facsimile. By what he did in various fields of letters and the arts, he illustrated 'the energy which cultivates itself.' Incidentally, he made a great circle of life about him, which he enriched by his ardent interest in the best that has come to be in any part of the world, in any age within his reach."

CHOOSING A WIFE

The following editorial in the New York *Herald Tribune* of October 28 discloses a new point of view regarding girls prominent in society affairs:

"The party wallflowers, the girls who are only perfunctorily asked by eligible young men to dance and are then discarded from the ballroom floors; the unhappy maidens who, like the sad clown, must smile while their hearts are breaking, are going to have their innings if Dr. Donald A. Laird, psychologist, has anything to say about it. Wise young men, according to Dr. Laird, will marry the 'dull debutante' and shun the 'peppy party girl' as they would the plague, for the vivacious personality type is due to excessive activity of the thyroid gland, and after five or ten years may become disordered and uninteresting, while her formerly unexciting sister blossoms into the full maturity and charm of an attractive personality.

"If the advice of Dr. Laird were heeded by marriage-conscious youths there would indeed be revolution in our midst. In the sacred white and gold precincts of the Somerset, at the Junior League assemblies, at Saint Cecilia's ball at Charleston and on a thousand less pretentious dance floors, what overturn of the dynasty of wit and charm would result! It would be almost as if the law of gravity were suspended and the prince had inclined a favoring nod not to Cinderella but to her ugly sisters, who will later bloom with all the beauties of Helen.

"Somehow, however, it is doubtful if all this will come to pass. Young love and romance have a way of ignoring the fixed tenets of psychology and eugenics with almost scandalous impunity, and the dread manifestation prophesied by Dr. Laird will induce but few to go on what would amount to a matrimonial diet. It may be hard on the theories of the learned doctor, but beauty and vivacity—ay, even the 'pep' of which he bids us beware—will probably continue to dance blissfully across the ballroom floors of life and toward the altar."

A NEW USE FOR LIP ROUGE

A new use for lipsticks is described in the *New York Times* of October 31, as follows:

"Not long ago restaurant managers were complaining that rosy-lipped ladies ruined napkins by leaving them marked with rouge. Now a lament comes from France that cups and glasses are also stained and spoiled by lipstick. Apparently the modern diner-out hasn't the dainty manners of Chaucer's nun, for when she dined at Southwerk,

Hire over-lippe wyped she so clene,
That in her coppe ther was no ferthyng sene
Of grece, whan she dronken hadde hir draughte.

"The Mayor of Nice has ordered that in all public eating places the table service must be washed after use in water containing a 50 per cent solution of a powerful disinfectant and then rinsed in pure water.

"Yet some hotel-keepers see a positive advantage in lipstick applied to tableware. They say that after a careful washing the rouge lends a high polish to glassware and china. Perhaps the modern cosmetic is, after all, not so very different from the red polishing stuff that always used to be kept in old-fashioned kitchens for scouring pots and pans."

AGE OF MECHANICS

When the French Revolution had freed men from virtual slavery and guaranteed to each person the enjoyment of the products of his own work, philosophers predicted an era of happiness and contentment, for then every person could readily obtain food, clothing, and shelter. But James J. Montague, writing in the New York *Herald Tribune* of October 28, shows the fulfillment of that expectation is still in the far distant future:

When our forefathers wanted to go anwhere
They hitched up the roan or the bay,
Or drove down the pike with a carriage or pair
And made fifty miles in a day.
Today we just back out the automobile,
Give a kick to its slumbering power,
Loll back in the seat with one hand on the wheel
And make the same trip in an hour.

When our ancestors garnered their wheat and their oats
And got in the barley and hay.
And sated with corn the importunate shoats
They toiled eighteen hours a day.

Today they are free from this grueling toil,
Performed in the sweat of the face,
For a small running stream or a few casks of oil
Will do most of the work on the place.

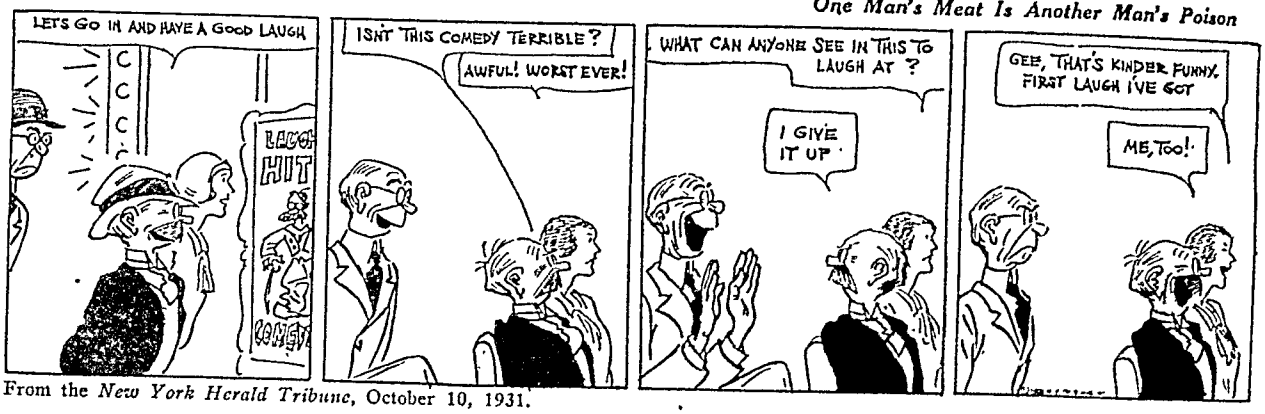
Yet, if our progenitors ever returned
To spend a few days on this sphere,
They would shortly discover how little we've learned
Since the days when they labored down here.
In spite of the wonders that science has done
We still are hard-driven and jaded;
We have no more time, and we have no more fun,
And we have no more pleasures than they did!

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"If the advice of Dr. Laird were heeded by marriage-conscious youths there would indeed be revolution in our midst. In the sacred white and gold precincts of the Somerset, at the Junior League assemblies, at Saint Cecilia's ball at Charleston and on a thousand less pretentious dance floors, what overturn of the dynasty of wit and charm would result! It would be almost as if the law of gravity were suspended and the prince had inclined a favoring nod not to Cinderella but to her ugly sisters, who will later bloom with all the beauties of Helen.

"Somehow, however, it is doubtful if all this will come to pass Young love and romance have a way of ignoring the fixed tenets of psychology and eugenics with almost scandalous impunity, and the dread manifestation prophesied by Dr. Laird will induce but few to go on what would amount to a matrimonial diet. It may be hard on the theories of the learned doctor, but beauty and vivacity—ay, even the 'pep' of which he bids us beware—will probably continue to dance blissfully across the ballroom floors of life and toward the altar."

A NEW USE FOR LIP ROUGE

A new use for lipsticks is described in the *New York Times* of October 31, as follows:

"Not long ago restaurant managers were complaining that rosy-lipped ladies ruined napkins by leaving them marked with rouge. Now a lament comes from France that cups and glasses are also stained and spoiled by lipstick. Apparently the modern diner-out hasn't the dainty manners of Chaucer's nun, for when she dined at Southwerk,

Hire over-lippe wyped she so clene,
That in her coppe ther was no ferthyng sene
Of grece, whan she dronken hadde hir draughte.

"The Mayor of Nice has ordered that in all public eating places the table service must be washed after use in water containing a 50 per cent solution of a powerful disinfectant and then rinsed in pure water.

"Yet some hotel-keepers see a positive advantage in lipstick applied to tableware. They say that after a careful washing the rouge lends a high polish to glassware and china. Perhaps the modern cosmetic is, after all, not so very different from the red polishing stuff that always used to be kept in old-fashioned kitchens for scouring pots and pans."

AGE OF MECHANICS

When the French Revolution had freed men from virtual slavery and guaranteed to each person the enjoyment of the products of his own work, philosophers predicted an era of happiness and contentment, for then every person could readily obtain food, clothing, and shelter. But James J. Montague, writing in the New York *Herald Tribune* of October 28, shows the fulfillment of that expectation is still in the far distant future:

When our forefathers wanted to go anwhere
They hitched up the roan or the bay,
Or drove down the pike with a carriage or pair
And made fifty miles in a day.
Today we just back out the automobile,
Give a kick to its slumbering power,
Loll back in the seat with one hand on the wheel
And make the same trip in an hour.

When our ancestors garnered their wheat and their oats
And got in the barley and hay,
And sated with corn the importunate shoats
They toiled eighteen hours a day.

Today they are free from this grueling toil,
Performed in the sweat of the face,
For a small running stream or a few casks of oil
Will do most of the work on the place.

Yet, if our progenitors ever returned
To spend a few days on this sphere,
They would shortly discover how little we've learned
Since the days when they labored down here.
In spite of the wonders that science has done
We still are hard-driven and jaded;
We have no more time, and we have no more fun,
And we have *no more* pleasures than they did!

BOOKS RECEIVED

Acknowledgment of all books received will be made in this column and this will be deemed by us a full equivalent to those sending them. A selection from this column will be made for review, as dictated by their merits, or in the interests of our readers.

PATHOLOGY, BACTERIOLOGY AND APPLIED IMMUNOLOGY FOR NURSES. By ROBERT A. KILDUFFE, A.B., A.M. Octavo of 324 pages, illustrated. Milwaukee, The Bruce Publishing Company, [c.1931]. Cloth, $2.50.

SURGICAL PATHOLOGY OF PROSTATIC OBSTRUCTIONS. By ALEXANDER RANDALL, M.A., M.D. Quarto of 267 pages, illustrated. Baltimore, Williams & Wilkins, 1931. Cloth, $7.00.

THE FOUNDATIONS OF MEDICAL HISTORY. By SIR D'ARCY POWER, K.B.E., F.R.C.S. 12mo of 182 pages, illustrated. Baltimore, Williams & Wilkins, 1931. Cloth, $3.00. (Johns Hopkins University Institute of the History of Medicine.)

MEDICAL CLINICS OF NORTH AMERICA. Vol. 15, No. 2. September, 1931. (Philadelphia Number.) Published every other month by the W. B. Saunders Company, Philadelphia and London. Per Clinic Year (6 issues): Cloth, $16.00 net; paper, $12.00 net.

THE COMMONER NERVOUS DISEASES for General Practitioners and Students. By FREDERICK J. NATTRASS, M.D., F.R.C.P. Octavo of 218 pages, illustrated. New York, Oxford University Press, 1931. Cloth, $4.00. (Oxford Medical Publications.)

MEDICAL ELECTRICITY FOR STUDENTS. By A. R. I. BROWNE. Third edition. 12mo of 245 pages, illustrated. New York, Oxford University Press, [c.1931]. Cloth, $4.00. (Oxford Medical Publications.)

A COMPENDIUM OF THE STATUTE LAW OF CORONERS AND MEDICAL EXAMINERS IN THE UNITED STATES. By GEORGE H. WEINMANN. Octavo of 240 pages. Washington, The National Research Council, 1931. Paper, $3.00. [Forms Bulletin of the National Research Council No. 83.]

SCHOOL VENTILATION Principles and Practices. Final Contribution of the New York Commission on Ventilation. By C.-E. A. WINSLOW, Chairman, and others. 12mo of 73 pages. New York City, Columbia University Teachers College, 1931. Cloth, $1.00.

A SYSTEM OF BACTERIOLOGY IN RELATION TO MEDICINE. By Various Authors. (Prepared under the direction of the Medical Research Council.) Volume IX. Quarto of 364 pages, illustrated. London, His Majesty's Stationery Office, 1931. Cloth, £8-8-0 a set; £1-1-0 each.

THE PENALTY. Must We Pay It? By DR. ABRAHAM STRACHSTEIN. 12mo of 136 pages, illustrated. New York, Good Health Publishing Co., [c.1931].

HEALTH FOR TRAVELERS. Hygiene and Health Preservation in the Tropics, Orient, and Abroad. By the Staff of the Pacific Institute of Tropical Medicine Within the George Williams Hooper Foundation for Medical Research of the University of California. Edited by ALFRED C. REED, M.D. 12mo of 239 pages. San Francisco, J. W. Stacy, Inc., 1931. Cloth, $3.00.

GYNECOLOGY AND UROLOGY FOR NURSES. By SAMUEL S. ROSENFELD, M.D., F.A.C.S. 12mo of 230 pages, illustrated. New York, William Wood and Company, 1931. Cloth, $2.00.

CANCER AND RACE. A Study of the Incidence of Cancer Among Jews. Conducted under the Auspices of the Jewish Health Organisation of Great Britain. By MAURICE SORSBY, M.D., F.R.C.S.E. Octavo of 120 pages. New York, William Wood and Company, 1931. Cloth, $3.00.

THE NURSE'S MEDICAL LEXICON. For the Use of Graduate and Student Nurses, of Premedical and Dental Students, and of the General Public. By THOMAS LATHROP STEDMAN, A.M., M.D. Octavo of 629 pages. New York, William Wood and Company, 1931. Cloth, $2.00.

A DESCRIPTION OF THE PLANES OF FASCIA OF THE HUMAN BODY with Special Reference to the Fascia of the Abdomen, Pelvis and Perineum. By B. B. GALLAUDET. 12mo of 75 pages, illustrated. New York, Columbia University Press, 1931. Paper, $2.00.

SIMPLIFIED DIABETIC MANAGEMENT. By JOSEPH T. BEARDWOOD, JR., A.B., M.D., and HERBERT T. KELLY, M.D., A.A.C.P. 12mo of 191 pages, illustrated. Philadelphia, J. B. Lippincott Company, [c.1931]. Cloth, $1.50.

SURGICAL PATHOLOGY OF THE DISEASES OF BONES. By ARTHUR E. HERTZLER, M.D. Octavo of 272 pages, illustrated. Philadelphia, J. B. Lippincott Company, [c.1931]. Cloth, $5.00. (Hertzler's Monographs on Surgical Pathology.)

SURGICAL PATHOLOGY OF THE SKIN, FASCIA, MUSCLES, TENDONS, BLOOD AND LYMPH VESSELS. By ARTHUR E. HERTZLER, M.D. Octavo of 301 pages, illustrated. Philadelphia, J. B. Lippincott Company, [c.1931]. Cloth, $5.00. (Hertzler's Monographs on Surgical Pathology.)

ON THE EDGE OF THE PRIMEVAL FOREST. Experiences and Observations of a Doctor in Equatorial Africa. By ALBERT SCHWEITZER, Dr. Med. Translated by C. T. CAMPION, M.A. 12mo of 180 pages, illustrated. New York, The Macmillan Company, 1931. Cloth, $2.00.

INFECTIONS OF THE KIDNEY. By MEREDITH F. CAMPBELL, M.D., F.A.C.S. 12mo of 343 pages, illustrated. New York, Harper & Brothers, 1931. Cloth, $3.00. (Harper's Medical Monographs.)

MIDWIFERY FOR NURSES. By DOUGLAS MILLER, M.D., F.R.C.S. 12mo of 256 pages, illustrated. London, Edward Arnold & Company: New York, Longmans, Green & Company, 1931. Cloth, $2.40.

BOOK REVIEWS

ANNUAL REPRINT OF THE REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION FOR 1930 Cloth Price, $1 00 Pp 91 Chicago American Medical Association, 1931

This book is essentially a record of the negative actions of that distinguished body, the Council on Pharmacy and Chemistry of the American Medical Association, that is, it sets forth the findings concerning medicinal preparations which the Council has voted to be unacceptable for recognition and use by the medical profession Many of the reports record outright rejection or the rescinding of previous acceptances, others report in a preliminary way on products which appear to have promise but are not yet sufficiently tested or controlled to be ready for general use by the profession

Among the reports recording outright rejection are those on Avesan (H), formerly Nuforal, a mixture stated to be composed of formic acid, sodium nucleinate, camphor, allyl sulphide and chlorophyll, with traces of salicin and sulphuric ether, marketed with unwarranted claims of usefulness in the treatment of tuberculosis, asthma, and other respiratory diseases, Ceanothyn once before rejected and still found to be marketed with unsupported therapeutic claims Collosol Calcium and Collosol Kaolin, so called colloidal preparations the former an unscientific mixture of unproved value, the latter a possibly dangerous preparation, and both marketed with unwarranted claims, Ephedrol with Ethylmorphine Hydrochloride, an unscientific ephedrine preparation marketed under an unacceptable proprietary name with unwarranted therapeutic claims, Farastan, an unscientific iodine cinchophen preparation proposed for routine use in 'arthritis and Rheumatoid conditions' Haley's M O Magnesia-Oil, a magnesia magma and liquid petrolatum mixture in fixed proportions marketed with emphasis on the "M O", Lydin a testicular extract, marketed with claims of value in the treatment of impotence, and Metatone, a shot gun tonic mixture marketed under a proprietary name with unwarranted therapeutic claims

THE MODERN HOSPITAL YEAR BOOK The Hospital Reference Book, 10th edition 1930 Quarto of 973 pages, illustrated Chicago, The Modern Hospital Publishing Co, Inc, 1930 Cloth, $2 50

This volume is a useful reference work for all who have to do with hospital construction and administration In addition to the practical and helpful descriptive matter in each section on various phases of hospital planning, management equipment and supplies the book will prove a valuable buyers' guide because of the large and varied lists which it contains of dealers and manufacturers of all types of hospital commodities

Every hospital superintendent and administrative officer will want to keep the annual issues of this hospital equipment encyclopedia within easy reach F

A MANUAL OF TUBERCULOSIS FOR NURSES By D Ashworth Underwood M A B Sc 12mo of 272 pages, illustrated New York, William Wood & Company, 1931 Cloth, $2 50

In this Manual of Tuberculosis for Nurses,' there has been gathered together a most excellent arrangement of information that will repay many a physician and medical student to peruse For its purpose, it could hardly be improved upon, and we most heartily recommend it to all students of tuberculosis whether nurses or not FOSTER MURRAY

THE HAIR, ITS CARE, DISEASES AND TREATMENT By W J O Donovan O B E, M D Octavo of 218 pages, illustrated Philadelphia, P Blakiston's Son & Co, Inc, 1930 Cloth, $3 50

In this book the author has collected all the various diseases affecting the hair ranging from the rarest to the most common He sets forth very interesting examples to illustrate the many conditions as they occur in families, individuals and institutions The book is plentifully illustrated with excellent dermatological photographs The author has simplified the terminology greatly by eliminating many of the synonymous terms and using the subject titles instead His treatment is simple, clear, short and very up to date He has interspersed many prescriptions throughout the book which greatly simplify his explanation of treatment It is a book which should be read with great benefit by the general practitioner and should be perused by the specialist as well G F PRICE

OPERATIVE OBSTETRICS ON THE MANIKIN for students and practitioners By CHARLES B REED M D, F A C S Octavo of 314 pages, illustrated Philadelphia, P Blakiston's Son & Co, Inc, 1931 Cloth, $4 00

The title is somewhat misleading as this book of 309 pages contains much that cannot be taught on or with the manikin

Again we are impressed with the fact that one of the functions of the manikin is to teach palpation, and this has for the most part been left out At the same time, leaving the title as it is, we are impressed with the amount of solid facts embodied in this small volume, and so we can readily subscribe to its value to the student, doctor and teacher

It does furnish many facts and details which in a larger book would have to be sought for, and at times these are carried to the finest minutia, but the various surgical operations that cannot be taught on the manikin we feel should be deleted

In spite of the adverse criticism that has been offered, it is a book that every student, doctor and teacher should have, as it does at all times furnish a very ready and handy authority on this particular subject as well as other obstetrical problems not secured from the manikin G W P

PRACTICAL METHODS IN THE DIAGNOSIS AND TREATMENT OF VENEREAL DISEASES, for Medical Practitioners and Students By DAVID LEES, D S O, M A. Second edition 12mo of 634 pages, illustrated New York, William Wood & Company, 1931. Cloth, $5 00

The book has been and still is in its second edition a compendium of matters pertaining to syphilis and gonorrhea It is written by a venereal logical practitioner for the general practitioner with the intent of guiding the latter as directly as possible Minute indexing, numerous chapter headings, and special treatment summaries allow the busy practitioner to look up some particular therapeutic problem without waste of time or of mental energy The advantages of this type of arrangement are to a certain extent upset by repetitiousness and by artificial splitting of clinical entities The author's counsel seems to be sane and sound throughout, he is conservative in methods of treatment and in standards of cure It is also apparent that his experience is wide and that he has been fairly selective in his recommendations

H L WEHRBEIN.

OUR NEIGHBORS

LAY MEDICAL SERVICE IN MICHIGAN

The Michigan State Medical Society is undertaking an extensive study of the lay organizations dealing with medical services in Michigan. The Council held a meeting on May 19 and listened to explanations of the work of the State Department of Health and four state-wide lay organizations given by representatives of those organizations. (See the New York State Journal of August 15, page 1056.)

The House of Delegates also considered the same subject at its annual meeting on September 22, and a full report of the proceedings are found in the November issue of the Journal of Michigan State Medical Society. The action was based on the following resolution introduced by Dr. A. H. Whitaker of Detroit:

"Inasmuch as there is evidence to show that for some time medical service to the public has not kept pace with medical knowledge, and as during this same period the role of practitioner of medicine has become increasingly difficult;

"And as there is evidence to show that in the United States the practice of medicine is regarded by legislative bodies, by taxation authorities, and by courts of justice, as a business organization with the same responsibilities as other professions, trades and business groups;

"And as also with this change in attitude toward the Medical Profession has come no change in the expectation on the part of the public that the profession will change in its attitude toward the indigent ill, that is, that the burden will be carried by the profession as a group, although there is no other civic responsibility that is not carried by the public in proportion to each individual's economic ability to contribute;

"And as two social and economic changes have recently contributed to the acuteness of the situation, namely,—first, the business depression, which has greatly increased the percentage of the population which is unable to pay for medical care, thus increasing the charity work of the physician, both in his office and in the hospitals and clinics, but at the same time, decreasing the practitioner's income; secondly,—the appearance of numerous organizations of both medical and lay control, which with increasing aggressiveness, are assuming the right to dictate the method of medical service in certain groups;

"And investigation in many counties of Michigan has shown it to be the opinion of the Profession that there is an immediate and critical need for constructive and aggressive leadership in the Profession, to relieve the economic chaos into which the Profession has been thrown, and to assume absolute control of all projects of a medical nature;

"Therefore, respectfully submitting that procedure, which has allowed the development of such economic inefficiency, the development of paternalistic measures almost without opposition; and which has allowed the interference of unqualified groups in the practice of medicine, should be replaced by members sympathetic to efforts at improvement, and willing to be represented by a group of practitioners with full and extraordinary power to study thoroughly these measures, and use executive power to enforce changes endorsed by this House of Delegates as represented by The Council of the Michigan State Medical Society, the following resolution is submitted:

"Whereas, the present economic depression has presented problems which demand immediate study and attention, and

"Whereas, the national government as represented by the President, under whose direction the Public Health Bureau operates, the Medical Corps of the U. S. Army and Navy, and the Veterans' Bureau function, under the control of whom the Narcotic Bureau and Child Health Bureau have been established; as represented by Congress, which by passage of health laws, by licensure laws and by the control of animal experimentation, and as represented by the Supreme Court and its many decisions in medical suits, has imposed certain obligations upon our profession in return for the right to practice medicine, some of which are not only irksome but impose an unfair burden. And as there is, however, no question as to the right of the government to impose reasonable requirements, and there is no tenable position but acquiescence, nevertheless the matter is simplified if the burden is properly distributed, and the reciprocal obligation of the public is established.

"Whereas, the same comments are applicable to local governmental units, which include the following organizations:

"1. The State Department of Health, which is subsidized by the Rockefeller Foundation, the president of which recently stated that food, clothing, posture, sleep, occupation, personnel adjustments, are becoming concerns of public health; which through its County Health Units, combined with other laws, have been given the right by the state to carry on full medical service to the public.

(Continued on page 1482—Adv. xiv)

Relative Values of Carbohydrates

New Findings Confirm Old Truths

Recent scientific investigations in rats (tabulated at the right) are in accord with many years of clinical observations on babies, as shown by the following excerpts from authoritative medical literature reflecting the consensus of three decades of pediatric experience

RELATIVE ASSIMILATION VALUES OF VARIOUS CARBOHYDRATES[1]

	Average per 100 gms body weight
1 MALTOSE	1 50
2 DEXTRIN + MALTOSE	1.32
3 Glucose + dextrin	1 32
4 Glucose + sucrose	1 32
5 Glucose	1 04
6 Sucrose + maltose	0 98
7 *Fructose + glucose*	0 98
8 Sucrose + dextrin	0 76
9 Sucrose	0 76
10 Fructose	0 5
11 Glucose + lactose	0 26
12 Lactose	0 16
13 Galactose	0 1

These authors have also stated Maltose fructose glucose starch and dextrin *lead* in nutritive value *followed by* galactose mannose arabinose xylose lactose sucrose and glycogen [2]

1929

[1] H Ariyama and K Takahasi *Biochem Z* 216 269 (1929) and [2] *J Agr Chem Soc* Japan 5, 674 (1929)

CHART OF CARBOHYDRATE HYDROLYSIS[3]

MILK SUGAR GROUP	MALT SUGAR GROUP
Lactose** (Milk Sugar)	Starch
	Amylodextrin***
Dextrose* Galactose*	Erythro dextrin*** Achro dextrin***
	Maltose**
CANE SUGAR GROUP	Dextrose* Dextrose*
Saccharose** (Cane Sugar)	Note—The end product of maltose is all dextrose which means quicker assimilation than end products from other carbohydrates
Dextrose* Levulose*	

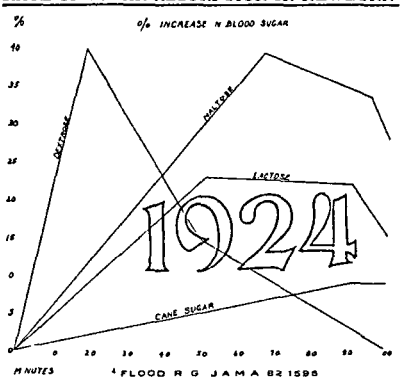
*Monosaccharide **Disaccharide ***Polysaccharide

1924

ecules of dextrose, may be absorbed with much less digestive energy than either lactose or saccharose

[3] Morse J L & Talbot, F B *Boston Med & Surg Jl*, 159 852

RATE OF SUGAR ABSORPTION IN NEWBORN[4]



[4] FLOOD R G JAMA 82 1598

MALTOSE OR LACTOSE IN INFANT FEEDING[5]

ical results are concerned The complaint that it is too sweet is not often encountered when the usual amounts are fed The dextrin maltose preparations possess certain advantages When they are added to cow's milk

dium in which they are fed For example when lactic

tion rates Because of the relatively slower conversion of dextrins to maltose and then to dextrose, fermentative processes are less likely to develop Those preparations containing relatively more maltose are more laxative than those containing a higher percentage of dextrin (unless alkali salts such as potassium salts are added) It is common experience clinically that larger amounts of dextrin maltose preparations may be fed as compared with the simple sugars Obviously, when there is a lessened sugar tolerance such as occurs in many digestive disturbances, dextrin maltose compounds may be used to advantage [5] *Queries and Minor Notes, J A M A*, 88 266

(*Continued from page* 1480)

"2. The State University, which with a 1,300-bed capacity, with an average bed occupancy of 1,100, is providing medical service to all economic groups of Michigan, and which has been advertised extensively.

"3. The State Tuberculosis Hospitals, which have been expanding rapidly and are assuming the care of hundreds of cases, which have formerly been taken care of by their own physician.

"4. The State Hospitals, which in addition to mental cases, are in many cases providing general medical and surgical care, often with inadequate medical personnel.

"5. The Crippled Children's work, which is gaining rapid headway, which is now being administered under a commission, appointed by the Governor, all medical work being done by the commission and being concentrated in the hands of a few individuals.

"6. The County Health Units, which are increasing in number steadily, and which have caused friction already in some counties, and which with their growth, will undoubtedly cause extensive interference with the practice of medicine.

"7. The County hospitals, which are assuming the care of an increasing number of all type medical cases,—and as in the state hospitals, o with inadequate medical personnel,—the atten physicians of which hospitals, receiving littl any, compensation.

"8. The Children's Hospitals which are ca for a large percentage of the children of the s the attending physician receiving no compensa for the medical work.

"9. The County Coroner's Office,—whic elective and which has considerable influenc the health and safety of the citizens of the v ous counties.

"10. The City Public Health Departm which are entirely under the control of the m and the council of the cities. In many cases, profession having very little to say regarding appointment of the health officers, the appr ation for the conduct of the office, or the pol pursued.

"11. The Health Department of the Schools, which is under the direction of Board of Education or the Board of Health which provides medical care for a large nu of children in the schools.

"12. The City Physician's office, which in s

(*Continued on page* 1484—*Adv. xvi*)

Whether it is Atrophic or Hypertrophic Arthritis

THE variety of the disease in rheumatic conditions matters little as far as the treatment is concerned. Pain, loss of function, fever are the manifestations that incapacitate the patient.

ATOPHAN relieves the pain, reduces the congestion and fever, and thereby makes the application of necessary physiotherapeutic measures, such as massage, passive motion, heat, possible.

Neuritis, often a forerunner of rheumatic affections, is promptly relieved by Atophan.

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Modern diets often lack minerals

To-day, authorities are stressing the importance of the essential mineral salts. In addition to building sturdy bones, and blood rich in hemoglobin, these mineral elements aid metabolism and contribute to nervous stability.

Yet many modern diets cannot be depended upon to furnish the proper quota of minerals, and therefore millions of people suffer from the effects of demineralization. Cooking destroys a variable amount of the mineral value of foods — in some instances as high as 76 per cent.

To correct this loss and to remedy demineralization — with its attendant symptoms of nerve fag, neurasthenia, lowered vitality and loss of energy—a tonic rich in mineral salts is needed.

Fellows' Syrup contains the mineral salts of sodium, calcium, potassium, manganese, iron and phosphorus, together with the added metabolic stimulants — strychnine and quinine. Sixty years of clinical experience the world over testify to its value as a tonic.

Suggested dosage: A teaspoonful in half a glassful of water three or four times daily.

FELLOWS' SYRUP

OF THE HYPOPHOSPHITES

CONTAINS THE ESSENTIAL MINERALS

SAMPLES ON REQUEST

Fellows Medical Manufacturing Co., Inc. 26 Christopher St., New York City

(*Continued from page* 1482—*Adv. xvi*)

instances, provides medical service to a considerable percentage of the population.

"13. The Tuberculosis Division of the Department of Health, which is assuming an increasing number of patients for complete physical examination and extensive *x*-ray examination.

"14. The Cancer Division of the Department of Health, which at the present time is doing no medical work.

"15. Supervision of Sanitation. A medical activity of extreme importance to the public, is entirely out of the hands of the medical profession.

"16. Medical colleges under the supervision of the Boards of Education, which through dispensaries, provide medical care for the public.

"17. The City Hospitals, such as the Receiving Hospital in Detroit, provide medical service for a large number of patients,—many of these cases, if only accident cases are considered, are cases which should be under the direct supervision of the Medical Profession.

"18. City Hospital beds in private hospitals, which provide hospitalization for a section of the public, and the Medical Staffs are providing medical care at no cost to the city, and with no remuneration for the doctors.

"19. The Welfare Departments, which, in many cases regard the group that receives an income which 89 per cent of the population receives as entitled to free medical care, are administering medical service to a large percentage of their communities, often without adequate medical supervision and often in a method destructive to personal initiative.

"Whereas, in addition to the above, the following organizations are encroaching upon the practice of medicine, and it is questionable in so doing if any improvement in medical service is obtained:

"1. Industrial corporations medical departments.

"2. Private Hospital Clinics.

"3. Privately endowed clinics, and Funds.

"4. Educational Institutions with which are affiliated Fresh Air Schools, Crippled Children's Schools, etc.

"5. Cancer and Heart Clinics.

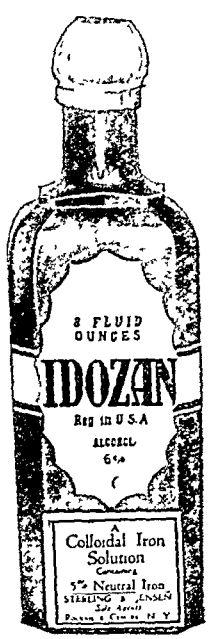
"6. Army Hospitals.

"7. Marine Hospitals, to which are admitted without cost, all who follow work about the lakes and waterfronts.

"8. U. S. Veterans' Bureau, the activities of which have been expanding rapidly, so they now include medical service for former service men, for conditions which have no connection with their military service.

(*Continued on page* 1486—*Adv. xviii*)

Nutritional reform



depends on colloid physico-chemical reaction. Colloidal iron increases "the intensity of chemical reaction." Modern, scientific and effective therapy now considers colloidal agents as an essential form of therapy.

Prescribed *in 8 oz.* **bottles**

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REG IN U.S.A.

Dose: *dr. i. t.i.d.* **p. c.**

is an active iron preparation which will produce a definite rise in the hemoglobin in cases of simple anemia, secondary anemia, and post-partum hemorrhage.

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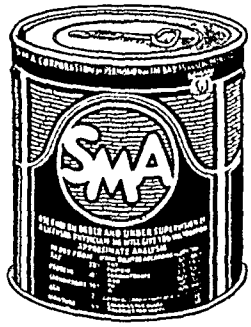
AGAROL is the original mineral oil and agar-agar emulsion with phenolphthalein. It softens the intestinal contents and gently stimulates peristalsis.

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New York and London

(*Continued from page* 1484—*Adv. xvi*)

"9. Orthopedic Clinics—usually under lay control.

"10. Pre-School medical activities, which are increasing in scope and in which physicians are expected to participate without financial return.

"11. Pre-Natal Clinics.

"12. Railroad Hospitals and medical departments.

"13. Insurance and Liability Company Medical Departments.

"14. Private Clinics, such as the Mayo and the Ford Hospital in Detroit.

"15. Pay Clinics.

"Therefore, be it resolved that this House of Delegates of the Michigan State Medical Society instruct the president that a committee of five members be appointed to study the problems here enumerated, and that this committee be instructed to report in 60 days to the House of Delegates at a special meeting, the results of their study with remedial recommendations; and furthermore that the Council of this Society be instructed to advance the sum of $5,000 to this committee to aid in the work of the committee."

After a lengthy discussion and much arguing, a committee was appointed to investigate the subjects of the resolution, and a formal call was issued in due form, to call a special meeting of the House of Delegates to consider the report of the committee on Dr. Whittaker's resolution.

MEDICAL ORGANIZATION PROBLEMS IN OHIO

The medical leaders of Ohio are considering their responsibilities of medical leadership, as is shown by the leading editorial in the November number of the *Ohio State Medical Journal,* which is as follows:

"During the past year an unusually large number of articles dealing with questions of medical economics have been published in the medical press, and considerable time has been devoted at meetings of medical societies, local, state and national, to a discussion of medical-social and economic problems.

"The fact that so much time and space have been given to discussions of these important questions is ample evidence that the medical profession generally is devoting thought to these issues and that it is not, as frequently charged, trying to dodge its responsibility in correcting whatever maladjustments may exist in present-day medical practice.

"A review of the ideas presented from the various viewpoints reveals that the medical profession realizes that some changes in the present system of medical practice are imminent.

"On the other hand, it is evident that physicians

(*Continued on page* 1487—*Adv. xix*)

(*Continued from page* 1486—*Adv. xviii*)

as individuals have varied and conflicting ideas as to what these changes should be and how they should be brought about.

"We find one group of physicians which believes that no changes whatsoever are necessary and that the present system of medical practice is quite capable of keeping pace with the social and economic evolution which is taking place.

"There is another group which advocates complete socialization of medical service under federal or state control as a panacea for the alleged flaws in the existing system.

"Another school of thought is of the opinion that complete state medicine will not solve the question but that a compromise system, comprising some of the insurance plans employed in Europe, should be worked out.

"Sandwiched in between these three groups are found physicians who have no clear-cut ideas on the matter, and are willing to be converted by the group that presents the most telling arguments.

"This conflict of views and opinions is significant in that it demonstrates the necessity for a better understanding among all physicians of the seriousness and complexity of present-day social-economic questions.

"Furthermore, it emphasizes the need for a stronger and more active medical organization which by the coordination of effort of its component units can bring about an agreement on a program which will preserve the rights of the practicing physician and at the same time adjust the practice of medicine in such a way that it can better meet changing economic and social conditions.

"It becomes clearly evident that the questions before the medical profession today cannot be successfully met by physicians as individuals or by individual effort.

"Through active and united medical organization much progress can be made and varied views and opinions correlated so as to be beneficial both to the medical profession and the public at large."

PELLAGRA STUDY IN SOUTH CAROLINA

The Journal of the South Carolina Medical Association for July contains a report by Dr. C. V. Akin, of the U. S. Public Health Service, on plans for an investigation of pellagra in South Carolina. The following abstract of a letter from

(*Continued on page* 1488—*Adv. xx*)

If You Have Lost Confidence

in "tonics," you have never tried Guiatonic.

If there is a case of intractable cough among your patients, you should try Guiatonic.

If there is a case of excessive susceptibility to colds among your patients, you should try Guiatonic.

If there is a case of slow convalescence among your patients, let us send you two bottles of Guiatonic.

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YOU will regain faith when you observe what creosote and guaiacol in a tonic base of the hypophosphites of iron, quinine, strychnine, manganese, calcium and potassium can accomplish at a season when winds howl and the mercury drops to zero outside.

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THE RECONSTRUCTIVE TONIC

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RELIEF

In functional dyspepsia and gastric neuroses, quick symptomatic relief is afforded by the digestant and sedative Pancreobismuth and Pepsin. And whenever there is insufficient or faulty digestion from any cause, Pancreobismuth will help to supply the needed digestive enzymes.

Pancreatin, pepsin and taka-diastase* provide for digestion of protein, fat and carbohydrate. Bismuth subnitrate allays gastric and intestinal irritation.

Sodium bicarbonate supplies antacid. And powdered ginger is stomachic and carminative.

This tried formula will serve you well for relieving sudden attacks of dyspepsia due to dietary indiscretion and also the more protracted types of gastric or intestinal disorder when the physiological secretions are deficient.

Prescribe ½ to 1 teaspoonful in a wineglassful of lukewarm water after meals.

*Uniform in composition and 2 to 6 times more potent than ordinary malt diastase.

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The Sedative and Digestant

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116 Free Street
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You may send me a complimentary 2 oz. bottle of Pancreobismuth and Pepsin available only to physicians.

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..... Street

..... City

(*Continued from page* 1487—*Adv. xix*)

Dr. Akin to the State Board of Health outlines the salient features of the program:

"The Public Health Service has taken the position that pellagra is a diet deficiency disease just as is beri beri.

"While there seems to be some difference of opinion or perhaps I had better say a frank agnosticism regarding the cause of pellagra, it is the general consensus of opinion among the physicians to whom I have talked that the prevention and cure of pellagra is strictly a matter of diet.

"It is my purpose to visit all counties in South Carolina wherein a whole-time health organization is now operating and I hope that it will be possible for you to continue to accompany me on these visits as you have been doing, as your presence serves to identify our study with the general health program of the South Carolina State Board of Health and insures full-hearted cooperation of the local physicians and local authorities.

"As a result of this rapidly undertaken county survey I expect to select, subject to the approval of the State Board of Health, two counties in east central South Carolina and west central South Carolina where an intensive study of pellagra will be undertaken. House to house surveys will be made through which approximately all cases of pellagra will be located. Full information regarding each case will be secured, and effort is being made to identify all factors which might contribute to the cause of the disease in each case. This work will be done in close cooperation with the practising physicians of each county, and no measures will be taken with reference to any case without the approval of the County Medical Association. Once we have established a factor or set of factors which appear to operate constantly in producing the condition we shall attempt through the cooperation of physicians, county health organizations, home demonstration departments and local welfare organizations, where these exist, to build up pellagra control movement which can be operated successfully not only in the counties selected for intensive study, but in any county. The Public Health Service hopes that through their work in South Carolina a course of procedure for controlling pellagra in rural areas will be worked out which can be recommended to any State where this disease is a major problem.

"If pellagra is a diet deficiency disease and if it may be prevented or cured by the regular consumption of such items of food as are suggested by those who sponsor the diet deficiency hypothesis, there seems to be no real reason why the people of this State may not rid themselves of a condition which annually affects some 20,000 to 30,000 persons, and annually kills several hun-

(*Continued on page* 1490—*Adv. xxii*)

ANALGESIC *and* ANTIPYRETIC ACTION *of the* CHEMICAL TOLYSIN

CASE REPORTS: Acute Rheumatic Fever (III)

IN the avoidance of toxic effects or substantially diminishing such effects, frequently noted where the salicylates are used, the chemical, ethyl ester of para-methylphenylcinchoninic acid (*Tolysin*) holds attractive possibilities for the physician.

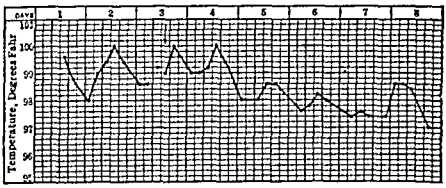
Relatively non-toxic and tasteless, it rarely produces nausea or vomiting. With a far greater therapeutic range (1-150 in dogs) than aspirin and cinchophen (1-25 and 1-63 respectively in dogs) it may be administered in larger doses with optimum analgesic and antipyretic effect.

This is a decided advantage in routine practice, well illustrated by the clinical report below (one of a group of thirteen from Am. Jour. M. S. Vol. CLXV, pp. 708–717—reprint on request).



CASE III S. M., male, 49 years, admitted to hospital complaining of pain and swelling in joints. History of recurring attacks of acute rheumatic fever. Present attack began nine weeks previous. Pain first felt in right foot which became swollen, red and tender and remained so for four or five weeks. The joints next involved were right knee, right hip, left wrist, left knee and right wrist.

For first two days in hospital patient was on a sugar tolerance test and received no medication. On third day 2 gm. of Tolysin every two hours, 3 doses, then every four hours; complete relief with subsidence of temperature after receiving 16 gm.; total administered, 38 gm. in five days—no signs of toxicity. Discharged on eighteenth day.



Temperature record of this patient is shown above. Tolysin started at the arrow. Relief from the symptoms coincident with the fall in temperature.

Attention is drawn to the dosage administered and to the *total quantity given in five days, without evidence of* untoward by-effects.

Tolysin's notable analgesic and antipyretic efficiency is attained by proper dosage, as follows: 2 to 3 five-grain tablets as an initial dose *with a glass of water,* repeating in such quantities as to produce a daily dosage of 12 to 20 tablets. After 60 tablets, allow a rest period of several days to one week. For chronic arthritic cases and use in children, suitable reductions may be made.

The chemical Tolysin (ethyl ester of paramethylphenylcinchoninic acid) is one of a group developed by The Calco Chemical Company, Inc. (subsidiary of American Cyanamid Company). Complete chemical literature, including clinical reports, with a generous sample, available to physicians on request.

Calco

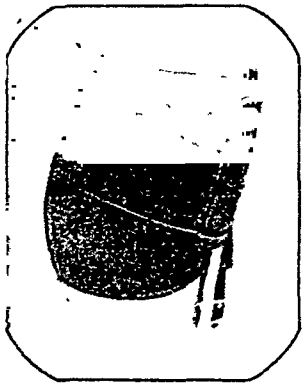
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(ethyl ester of paramethylphenylcinchoninic acid)
ANTIPYRETIC *and* ANALGESIC

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(*Continued from page* 1488—*Adv. xx*)

dred. It is certain that the soil of South Carolina will grow every food which has been suggested as of value in preventing and curing pellagra. The real difficulty, therefore, will be in getting the people who are the most apt to be affected by pellagra, to raise and to eat the foods which are rich in protective elements.

"Occasion will also be taken to study the efficacy of the administration of yeast as is now practised in South Carolina. From the standpoint of administrative efficiency one could scarcely suggest an improvement on the method now employed by the State Board of Health, but the question to be answered is whether or not the yeast as now distributed is actually producing the results which may be expected of it. From my own observations I am certain that not all of the yeast actually purchased by pellagra sufferers is consumed by the case for which it is bought. As the product is not highly appetizing to a great many people, many pellagrains stop taking it before enough has been consumed to benefit the patient even if the yeast had a specific value. It is likewise true that a considerable amount of yeast is ordered by people who do not suffer from pellagra and the product is being taken for a variety of ailments.

"It is expected that the remainder of this year will be spent in studying conditions and it is hoped that before next spring some simple procedure will be developed which can be generally applied and which if followed out will tend to control a disease which is costing South Carolina so much in money and human suffering."

PELLAGRA CLINIC IN SOUTH CAROLINA

The October number of the Journal of the South Carolina Medical Association has the following account of a pellagra clinic held in Oconee County with the cooperation of the doctors of the County:

"The problem of pellagra in Oconee County, South Carolina, is one of considerable magnitude. A Pellagra Clinic was held in the County Health Department on August 12th by Dr. James A. Hayne of the South Carolina Board of Health, and Dr. C. V. Akin of the United States Public Health Service.

"Oconee County is the westernmost tip of the state. A portion of it is mountainous. The land area is 650 square miles, with an altitude ranging from 500 to 2,000 feet, and a population of 33,000 people. The streams are rocky and shallow but furnish a small amount of fish and there is abundant water power. Five cotton mills are operated in the county. The soil is rich and the crops are varied. It produces some of the finest

(*Continued on page* 1491—*Adv. xxiii*)

Fills the need for a dependable antacid mineral water

VICHY CÉLESTINS

This long renowned naturally alkaline mineral water assists in neutralizing excess acid and in regularizing functions of the digestive tract.

Bottled at the Spring in Vichy, France, under Government supervision, it meets the great need of the physician for constancy of composition.

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503 Fifth Avenue, Rooms 200-212, New York, N. Y.

(*Continued from page* 1490— *Idv* VIII)

apples in the state The Nantahala National Forest takes in a part of the mountainous section

"Sixty-five pellagrins attended this Clinic, all white except two who were negroes Farm tenants and textile workers made up the larger portion of this number. Pellagra is a countywide disease Grouping these cases according to age, the highest per cent was between the age of thirty and forty years or at the peak of their earning power. The youngest was a child of five years while the oldest was a woman sixty-five

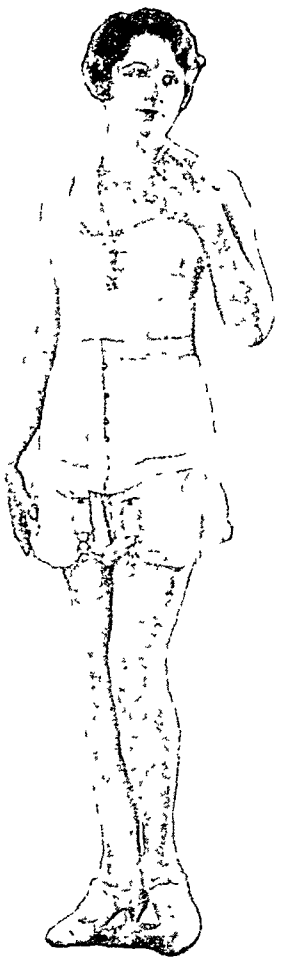
"Among the clinic findings it was ascertained that many of these patients were subject to recurring flare-ups, and the lives of children and adults jeopardized as a direct result of neglect The disease affects one's earning capacity, and economic barriers prevent continuous medical care and supervision time passes and patients expect a little treatment now and then to control the tendency of their disease to grow worse All of these cases had suffered from a few months to several years Some were receiving no treatment whatever, with others treatment was so irregular that it was almost ineffective Those treated by local physicians obtained desirable results for the period of time that they were being treated, but in many cases the doctor was unable to affect a cure because of long intervals between when they slipped away from his care without further treatment or observation, drifting into a state of chronic neglect since they were unable to provide a proper diet or medical treatment, consequently failing to see the results for which they had hoped

"Without this Clinic many patients would not have come under medical supervision and advice at least for a time, nor would they have been followed up and the trend of their disease noted, with the urge that they keep under the observation of their physician until a complete recovery was brought about, neither would they have received educational literature on pellagra nor advice on diet and hygienic living

"Brewster's yeast is sold through our Health Department The increased amount of this yeast advised by local physicians to pellagrins has increased the number of office contacts Most cases take yeast many take it spasmodically or as they can afford it More cases would come to our office if it were not that a grocery store in the county handles brewer's yeast also It is given free through our Health Department to extreme cases of poverty, and sold to all who can pay for it A careful record of every name and ad-

(*Continued on page* 1492— *Idv* VIII)

Pomeroy Girdles and Supports



WHETHER of elastic (Hand-woven) or fabric, or elastic and fabric, there is a Pomeroy to meet your requirements. Made to measure and designed for the individual, you are certain to obtain the desired results.

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(*Continued from page* 1491—*Adv. xxiii*)

dress of pellagrins contacted is kept in the County Health Department. New and old cases were reached for the Clinic through posters, press publicity, personal interviews, letters, physicians and surveys.

"The cooperative endeavor of the local physicians of the county with this Clinic was manifested through the number of cases that they sent to it.

"Pellagra offers a tremendous field in preventive medicine. It is a problem of economic significance. Serious steps are being taken to prevent its inroads upon the health and efficiency of the people. This is accomplished through education which includes instruction in diet and urging cases to put themselves under the immediate care of their physician, intensive case-finding, and follow-up work.

"The good results of pellagra clinics are sufficiently definite to emphasize an added obligation on the part of the United States Public Health Service in the matter of examining and advising pellagrins. The favorable reaction and response of the people to a Pellagra Clinic have been interestingly demonstrated."

PUBLIC HEALTH LAWS IN NEW JERSEY

The September number of the Journal of the *Medical Society of New Jersey* has the following editorial comment on the public health laws proposed by the doctors of the State:

"The preceding editorial brought to mind an excellent example of a missed opportunity to praise publicly the good deeds of one of our members, and to instruct the laity further regarding such matters.

"About 3 years ago, Dr. Costill, after a period of most praiseworthy service to the state as Director of Public Health, was incontinently thrown out of office; we not only made no protest against using that office as a political football but neglected to express publicly our professional approval and appreciation of his fine work.

"Just recently, another change has been made in the State Department of Health; despite the fact that Director Bowen has proved himself a very capable and efficient officer, he has been disposed of as was his predecessor. In so far as we are aware, no public announcement has been made in either instance by way of explaining these changes. We have no complaint to make regarding the recently appointed Director; for all we know at this moment, he may be an ideal man for the place. But, we dislike the procedure, or method, employed in the making and break-

(*Continued on page* 1493—*Adv. xxv*)

(*Continued from page 1492—Adv. xxiv*)

ing of such an important official as the Director of Public Health in New Jersey.

"During his incumbency of the office, Dr. Costill frequently recommended changes in the existing health laws, and Mr. Bowen, in an address to the State Medical Society at the Annual Meeting in 1930, also set forth the desirability of a fairly complete revision and asked whether the medical profession would join in an effort to procure it Unfortunately, there was no discussion of the symposium of which Bowen's address was a part, and no authoritative answer was ever given to his question. However, at the recent Annual Meeting, provision was made for a special Committee 'to confer with the State Board of Health, and other public health authorities, on Revision of the State's Health Laws.' President Hagerty has named an excellent Committee—chosen with great care—under the chairmanship of Dr William G. Schauffler, of Princeton; and the following additional members: Dr. Joseph C Schapiro, of Union City; Stanley H. Nichols, of Long Branch; Frank C. Johnson, of New Brunswick; and Julius Levy, of Newark. It is hoped that this group will endeavor to bring about several greatly needed improvements.

"The first essential is, of course, to effect such alterations as will best safeguard the health of all residents of the state; i. e., public welfare must be the committee's prime consideration This society long ago constituted itself guardian of the people in all health matters, and it fully intends to maintain that position. In order to meet its obligations it must, however, be given a larger part in the control of health affairs. So, for our committee, that becomes the second important factor in the developments of the proposed conference. At present we have nothing like adequate representation on the Board and, further, we respectfully suggest that it should be a legal requirement that the Director, or Commissioner, must be a physician. We recognize the fact that on occasion the office has been well conducted by a layman, and realize also that some of the best City Health Officers in this state are not doctors of medicine, but such facts have been too greatly dependent upon chance In general, it would probably prove wiser to require that a physician be chosen for head of a state department whose work is so preeminently medical.

REFERENDUM ON MEDICAL CONTROL IN MAINE

The first article in the September number of the *Maine Medical Journal* is an editorial on a referendum to be taken at the general election on sweeping revisions of the several departments of State government. The editorial says:

"By a special referendum on the 9th of Novem-

(*Continued on page 1494—Adv. xxvi*)



The cardiologist is assured of dependability in digitalis administration

EACH PILL CONTAINS
0.1 GRAM (1½ GRAINS)
OF DIGITALIS

PHYSIOLOGICALLY
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Send for sample and literature

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(*Continued from page* 1493—*Adv. xxv*)

ber the citizens of Maine are to be given the opportunity of expressing approval or disapproval of the Code Bill recently passed by the State Legislature. This is an important event, and more than that, an interesting and exciting one, for it is history in the making. It is to be hoped that the members of the medical profession will come solidly to the fore and take their rightful place as leaders in endorsing a change which has so direct a bearing on the conduct of health and welfare activities in this state.

"To place responsibility where it belongs in the hands of the man trained to assume that particular responsibility, to avoid waste of resources, time, and energy by centralized control of institutions and departments which from their very nature are united in a single purpose—these are the chief objectives of the code, and let it be said they are the objectives of common sense and all good government.

"During the past year more than one plea has been voiced in more than one state for *'MEDICAL CONTROL OF MEDICAL AFFAIRS.'* The wonder is that the cry has not been louder and more insistent. The long-established practice of constituting lay boards as trustees of public and private institutions with the sole authority to 'hire and fire' hospital directors and employees, and, in like manner, to control the policy and management of these institutions, has proved to be inconsistent with the highest aims of the profession and incapable of rendering the greatest good to the public. By abolishing lay boards of trustees and substituting trained hospital heads appointed by and responsible to a Commissioner of Health and Welfare, the Code Bill takes a long step in the direction of medical control and opens the way for a more harmonious and effective management of state health institutions. In a word, it offers a logical, direct, and dignified means of cooperation between the medical profession of Maine and the state in promoting the health and welfare of her citizens.

"It is clearly stated in the bill just which offices and departments will be abolished and the new appointments that must necessarily be made . . . . . Let every medical man be glad of the opportunity to take a positive stand and prove that doctors are likewise responsible citizens who can and will act in the best interests of their profession, the health and welfare of the public."

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FINANCES, INDIANA STATE MEDICAL ASSOCIATION

The annual report of the treasurer of the Indiana State Medical Association, as given in the Journal of September, lists the principal items of receipts and expenses as follows:

RECEIPTS

Membership dues from 2,734 members	$19,418.00
(Number of physicians in Indiana, 4,164.)	
Income from exhibits at annual meeting	3,022.50
Interest on investments	1,083.76
Total income	$23,778.70

No mention is made of the income from advertisements.

EXPENSES

Executive Secretary's office	$11,802.64
Journal	5,548.00
Annual Session	2,342.20
Publicity Committee	595.18
Public Policy Committee	347.17
Council	235.00
Attorney's fees	400.00
Medical defense	450.00
Total expenses	$23,123.15

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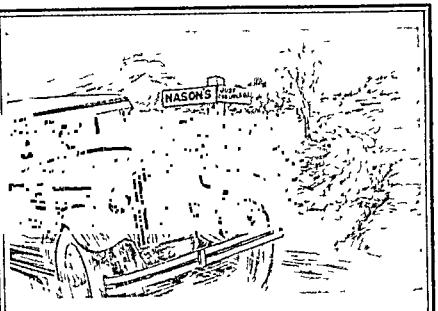
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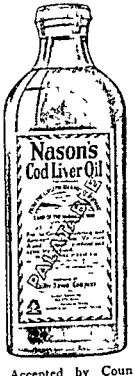
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Accepted by Council on Pharmacy and Chemistry A. M. A.

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CONSULTATION BUREAU IN MINNESOTA

Minnesota Medicine, the organ of the Minnesota State Medical Association, has a page entitled "Consultation Bureau," on which medical questions are answered by a special committee. The September issue of the Journal contains the committee's report for 1930, as follows:

"Number of Inquiries Received According to Month

"January	7
"February	5
"March	3
"April	20
"May	22
"June	12
"July	5
"August	8
"September	10
"October	10
"November	3
"December	5
"Total	110

"TYPE OF INQUIRIES RECEIVED"

"Case Reports Requesting: General Information; Diagnosis; Prognosis; Treatment of Diseases; Reading of Dental Films, and Reading X-ray Pictures.

"Other letters for general information requesting: Information Regarding Schools; Book Patent Medicine; Blood Test to Prove Paternity Drugs; Analysis of Food Products; Teeth, ar Immunization. Medico-legal Matters; Apparati and Appliances; Locum Tenens and Location and Placement in State Institutions."

The September Journal answered three questions on the subjects:

1. Generalized hemorrhages in a girl of eleve years.

2. Parkinson's disease, treatment.

3. Paget's disease of the nipple, treatment.

"INTERPINES"

GOSHEN, N. Y.

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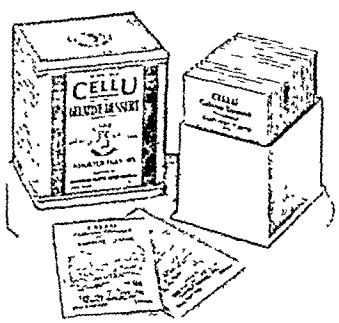
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FREDERICK W. SEWARD, *M.D., Dir.* FREDERICK T. SEWARD, *M.D., Res. Phy.*

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HOW THE OREGON MEETING WAS RUN

The leading editorial in the November issue of *Northwest Medicine* comments on the Annual meeting of the Oregon State Medical Association as follows:

"An advantage of holding a state medical meeting in a small city is observed in the large attendance at the various sessions, owing to the lack of extraneous attractions. This condition was emphasized at the Eugene meeting last month, October 22-24, as noted in the good attendance during the three days of this meeting.

There were sections on medicine and surgery morning and afternoon for three days, the last period of each morning and afternoon session being devoted to a paper by guests from other states. Thus a total of forty papers was presented at this meeting, making an unusually full program for a state society meeting.

"The reading of papers was not interfered with by the all-absorbing game of golf. The afternoon of the first day was assigned to this sport, the scientific program being held at the same time. Probably the continuous rain interferred to some extent with the activities of the golf enthusiasts.

"The business of the society was transacted with expedition and completeness. The program for each of the three days was initiated by a seven o'clock breakfast, attended by members of the House of Delegates averaging a minimum of fifty members at each sitting. Consideration of business began promptly and occupied every moment until nine o'clock, the time for adjournment to the scientific sessions. This plan afforded abundant time for the full presentation of reports and consideration of all problems which were presented. This program for transacting business of the organization is to be commended to other state organizations.

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WEE MODERNS

By BERTON BRALEY

The babies of these present days are raised upon a system,
You count their calories of food and on a card you list 'em;
They're spanked upon a schedule and petted by the clock
And you mustn't ever jounce 'em and you mustn't ever rock;
Physicians choose their style of dress and fix their hours of sleep
And tell you when they ought to laugh and when they ought to weep,
Their every eccentricity is catalogued and filed
For the modern type of baby is a scientific child!

Time was that mother raised them in a rather casual way,
With a bit of help from grandma—but that isn't done today;
The bringing up of babies is a far from simple art
And you need a dozen volumes and a blueprint and a chart,
A clinical thermometer, a stethoscope, a scale,
Some test tubes and a dictaphone that registers each wail,
The modern mother's regimen is very far from mild,
For the baby of the present is a scientific child!

Oh yes, I am describing the *modern* baby now!

Oh, the old folks sniff about it and the jesters jest a lot
But the modern type of baby is a healthy little tot,
He may be robbed of baby-talk, of many pats and kisses,
But there's a heap of colic and other ills he misses;
And in spite of all the sentiment that in our cosmos lurks
There isn't any question that the modern method works—
For the scientific baby is a husky little tad,

A CREDIT TO THE DOCTOR, AND THE MOTHER, AND THE DAD!

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See page xviii.—*Adv.*

FIRST NEED IN DYSMENORRHEA

If one is to have even a fair chance of finding the underlying cause of the trouble, if one is to gain the confidence of the patient, the first need in treating dysmenorrheic women is to relieve the pain. Obviously, if this can be accomplished without the use of narcotics so much the better. For this purpose, one may well turn to Apioline in preference to many of the emenogogic mixtures of uncertain contents and dosage so frequently used. Apioline is a single drug principle derived from apium petroselinum and should not be confused with apiol, the greenish so-called oil of parsley. The dosage of Apioline is definite. One is dealing here with a stable standard product, the effect of which has been demonstrated on uterine muscles and is also evidenced in the increased blood flow to the pelvic region following its administration which makes for equalization of circulation and normalization of flow. It has also been claimed (Laborde and others) that Apioline has a selective action on uterine innervation. Be this as it may, the pain relief which follows its use is often most striking. Samples and literature may be obtained from Laboratoire de Pharmacologie, 92 Beekman Street, New York City. See page xxii.—*Adv.*

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NEW YORK STATE JOURNAL of MEDICINE

PUBLISHED BY THE MEDICAL SOCIETY OF THE STATE OF NEW YORK

VOL. 31, No. 24 NEW YORK, N. Y. DECEMBER 15, 1931

A CASE OF TULARÆMIA CONTRACTED IN THE CITY OF NEW YORK

By SAMUEL M. KAUFMAN, M.D., NEW YORK, N. Y.

From the Vanderbilt Clinic and the Department of Dermatology, College of Physicians and Surgeons, Columbia University, New York

SINCE the discovery of the etiology of tularæmia by Francis in 1919,[1] this disease has been recognized and reported from every state except Delaware, Washington and the New England group. Simpson[2] was recently able to collect 800 cases from the United States. Ohara has described the disease in Japan and over 1,000 cases have been reported from Russia. Dr. G. W. McCoy, Director of the Hygienic Laboratory in Washington, to whom serum from the case here reported was sent for diagnosis, informed the writer that this was only the fourth case reported from New York State. For this reason an account of it might be of interest.

Report of Case

M. G., German housewife, was admitted to the Department of Dermatology of the Vanderbilt Clinic, January 26, 1931, with a history of a sore on the left little finger of three weeks' duration. The patient stated that the first week in December, 1930, she procured dressed rabbits from the Washington Market of this city. A few days before the rabbits were prepared she had wounded her left little finger. The woman, however, denied handling either the rabbits or the utensils in which they were cooked, since a friend soaked the rabbits in salt water and cooked them. The friend is entirely well.

About the third week in December the patient developed pains in the elbow joints after finishing a heavy washing. A few days later she developed what she described as a "heavy head cold," complaining of headache, chills and fever. The "head cold" and the pain in the joints persisted for about two weeks and then disappeared. About this time, which was four or five weeks after purchase of the rabbit, the patient noted a small area of soreness about the tip of the left little finger. As the woman had injured this finger while manicuring a few days previously, she felt that she might have "infected it." About the same time the patient noticed a small pimple on the right index finger which she attributed to injury. She thought that a small piece of enamel from her gas range was imbedded in the skin.

After about a week of home medication the condition became worse and the patient then applied to the clinic for treatment. She showed the following lesions:

1. On the volar surface of the tip of the right index finger there was a red infiltrated mass 2x3 cm in area, in the center of which was a sharply circumscribed ulceration about 1 cm in diameter and ½ cm deep. The base showed granulation tissue, the edges were slightly undermined and exuded a greenish gray thick odorless pus.

2. On the dorsal surface of the left little finger, circumscribing the dorsal and lateral half of the nail, was a jagged ulceration of the paronychium about 1.0x0.5 cm surrounded by slight erythema. Except in outline this was similar to the first. Almost no tenderness was present.

3. The epitrochlear lymph glands were markedly swollen, the right measuring 5x2 cm and the left 3x2 cm. The glands were matted hard and slightly tender. The temperature was 99.4.

The axillary nodes were just palpable, the inguinal nodes not enlarged, and physical examination of the chest and abdomen showed no abnormality. The appearance of the lesions corresponded so well to the published descriptions of cases of tularæmia that this seemed the most probable diagnosis. The other possibilities considered were chancre and sporotrichosis. The former seemed unlikely on account of the presence of two lesions, the marked suppuration, the moderate induration and the enormous enlargement of the lymph nodes. The lymph node involvement and the absence of secondary cutaneous lesions made the diagnosis of sporotrichosis unlikely.

Laboratory Findings

The following examinations were made in the laboratory of the Department of Dermatology.

Dark field examination of the ulcers was negative. The blood Wassermann reaction was negative; culture from the ulcers for sporotrichum was negative.

Animal inoculations: A guinea pig was injected January 26 intraperitoneally with 2 cc of defribinated blood from patient mixed with equal volume of salt solution. The animal survived.

Two rabbits and two guinea pigs were injected subcutaneously with ground tissue excised from the border of the ulcer of the little finger. A third guinea pig was inoculated with pus washed from the ulcer. All the animals died in seven to nine days. Upon postmortem examination they showed ulceration of the skin overlying the site of inoculation. The livers and spleens showed innumerable small white flecks. On section sharply bordered foci of necrosis were found scattered through the parenchyma of the involved organs. These areas contained nuclear fragments and scattered lymphocytes; but there was surprisingly little reaction about them; only an occasional epitheloid cell was seen and no giant cells. In smaller and apparently less advanced lesions in the liver, groups of liver cells were found stuffed with basic staining rods and granules. These granules were probably bacteria. Similar invasion of bacteria in epithelial cells in mice has been described by Francis.

An additional rabbit was inoculated subcutaneously with two cc of pus aspirated from the epitrochlear node in the fifth week of the disease. No infection resulted.

The results indicated that the virus was not present at this time in the blood, but was abundant in the tissue and the discharge from the finger ulcer and that the suppurating lymph node became sterile. Cultures made from pus and excised tissue showed only staphylococci. Cultures on Dorset egg and Petroff egg medium from the organs of the infected animals showed some staphylococci and also minute pearly colonies which on smear showed a very small coccobacillus which was Gram negative, as shown in the accompanying photograph.

A culture from an area of subcutaneous infiltration on one rabbit taken by aspiration before death, showed an organism of this same character in pure culture. One strain isolated from a rabbit was tested against the patient's blood serum by Dr. Morales Otero and was agglutinated in a dilution of 1-640.

Agglutination Reactions: Two specimens of patient's blood serum were sent to Dr. G. W. McCoy at the Hygienic Laboratory in Washington and complete agglutination was obtained in the following titres:

	B. Tullarense	B. Abortus
Specimen Jan. 26 (3rd week of disease)....	1-640	1-20
Specimen Feb. 4 (4th week of disease)....	1-1280	1-10

The cross agglutination with B. Abortus is commonly observed. These findings confirmed the diagnosis of tularaemia.

Course of Disease

Wet dressings of 1-10,000 potassium permanganate were applied to the finger ulcers and wet dressings of 1% aluminum acetate to the swollen lymph nodes. Recovery was slow, but uneventful. In three weeks the finger ulcers had healed, but swelling of the lymph nodes persisted. Six weeks after the first observation 2 cc of pus were aspirated from the right epitrochlear node and the swelling subsided somewhat. The nodes have, however, remained enlarged two months after the patient's admission to the clinic.

The accompanying photographs show the condition of patient on February 13 about six weeks after first soreness was noted in finger. The patient's temperature was normal except on the day of admission and she complained of no systemic disturbance.

Source of Infection

The source of infection was difficult to establish. The rabbit purchased in the market might well have been sent from a locality where tularæmia is endemic. The patient, however, denied actually handling the animal. No symptoms were noted for about two weeks later and it is doubtful whether these were due to tularæmia. The sore on the finger, which was probably the primary lesion, was noted after a month. It is doubtful if this history can be relied upon in detail, as the patient became apprehensive after repeated questioning and may well have withheld some essential fact. The virus is known to resist drying for a long period and the hypothesis which seems best to fit the known facts is that she infected herself shortly before the appearance of the ulcer on the finger with some object in her kitchen which had been contaminated by the rabbit several weeks previously. At least this rabbit, purchased in the market, seems the most likely source of her disease.

Description of Disease

The disease now called tularæmia was described by McCoy in 1911[4] as a "plague-like disease of rodents" which he observed in California in ground squirrels in the course of a plague survey. The following year McCoy and Chapin[4] isolated the causative organism, B. Tularense. This organism was first isolated from a human case by Vail, Wherry and Lamb in 1914.[5] A comprehensive description of the disease and understanding of its mode of transmission was first obtained by

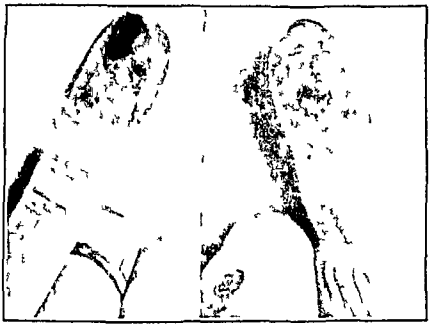


FIGURE 1
Tularæmic chancres on fingers Picture taken about six weeks after the first soreness appeared

Edward Francis in 1919 and 1921 [1] He demonstrated that the disease known in Utah as Deer fly Fever, and previously described by Pearse [6] was due to Bacterium tularense, was endemic in rodents and was transmitted to man either by direct contamination from dead rodents or indirectly through insect bites

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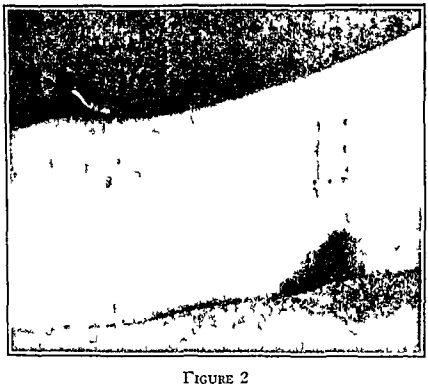


FIGURE 2
Forearm showing enormous enlargement of the epitrochlear node

action persisted for a long time after recovery By testing the serum of former cases he was able to show that a case described by Johnson in California in 1904, several cases described by Martin in Arizona in 1907 and subsequent cases appearing in the literature as infections of unknown etiology, were in reality tularemia He has also shown that cases reported from Japan [8] and Russia [9] were due to the same infection The following description of the disease is based largely on the reports of Francis [1, 3, 9]

Tularemia is a disease caused specifically by Bacterium tularense The infection occurs as a bacteremia among ground squirrels wild rabbits, wild rats and wild mice and the water rat or water vole of Russia The disease may be transmitted secondarily to man in various ways

1 By the bite of the horse fly Chrysops discalis This species is found chiefly in Utah and

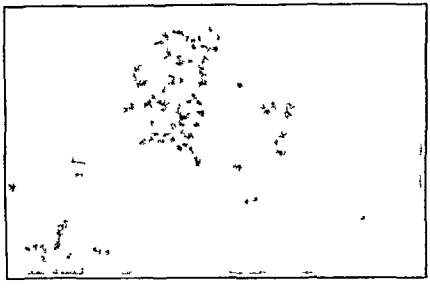


FIGURE 3
B Tularense culture from infected rabbit

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2 By the bite of the wood tick, Dermacentor Andersoni This form is found chiefly in Montana Its extreme importance lies in the fact that it harbors the organisms in its body throughout

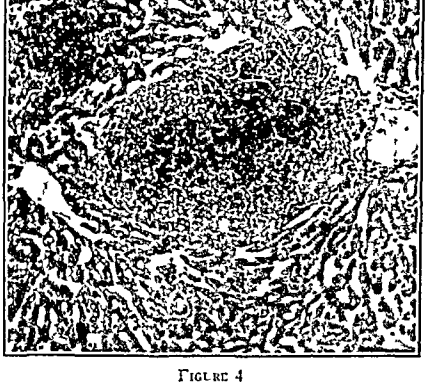


FIGURE 4
Focal necrosis in liver of infected rabbit x 80 diameters

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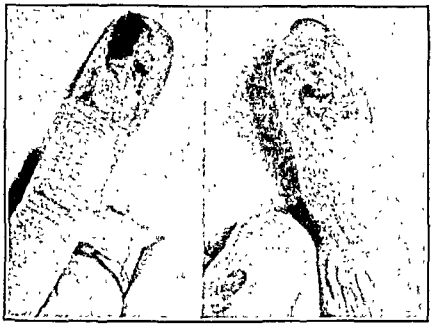


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Forearm showing enormous enlargement of the epitrochlear node.

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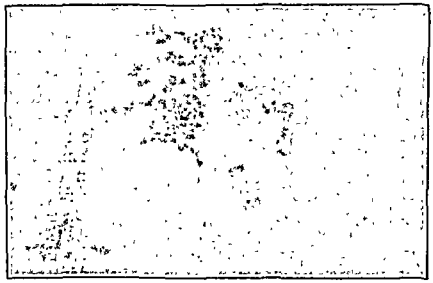


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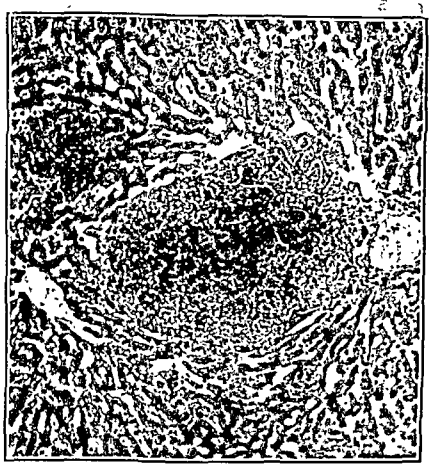


FIGURE 4
Focal necrosis in liver of infected rabbit. x 80 diameters.

Treatment

No preventative vaccine has as yet been developed. The treatment is rest and incision of suppurative glands when necessary. In the particular case recorded above a wet dressing of potassium permanganate seemed satisfactory for the ulcerative lesions. Under no condition is the excision of glands advised.

In conclusion, I wish to express my deep appreciation to Prof. J. Gardner Hopkins for his valuable aid and permission to present this case before you. I also appreciate the assistance received from Drs. Beatrice M. Kesten, Gerald F. Machacek and Miss Rhoda Benham.

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POSITION IN PHYSICAL THERAPY*

By K. G. HANSSON, M.D., NEW YORK, N. Y.

PAPERS on physical therapy by very able men often suffer from the attempt of crowding more into them than the average listener can follow and appreciate. This paper will confine itself to a definite, small aspect of the subject and intends to discuss the most favorable position of the part under treatment by physical measures.

Having had most of my experience in orthopedic and traumatic hospitals, I am just trying to pass on what I have learned from bitter experience. It is nothing new but it has not been emphasized in its relation to physical therapeutics. For practical purposes our problem is narrowed down to the question: In what position should we treat a drop wrist, pathology of the deltoid m., the posterior trunk m., the glutteus max. or medius, the extensors of the knee or extensors of the foot, etc., and the reason for these most favorable positions. If the question of position is disregarded in these pathologies, we get deformities induced by either the contraction of the antagonists or by gravity. When we visualize a patient showing all these deformities we will have a body in nearly the same position as that of the fetus, i.e., flexion of the fingers, wrists and elbows; adduction and flexion of the shoulders and the lower extremities show adduction-flexion of the hips; flexion of the knees and feet. Head and trunk show a segment of a circle. This fetal position is approached in many pathologies and we must be on guard to prevent them. It is easier to prevent them than to correct them—once they have developed.

Let us first divide our neuro-muscular system in a concentric group, including all m. producing movements toward the center of the body and an excentric group which includes the m. performing movements away from the body. In general, we may say that the concentric group is antagonistic to the excentric group. This antagonistic action is maintained by a very delicate neuromuscular action that has a practical expression in the m. tonus. This m. tonus maintains a muscular tension which is necessary for the smooth working of our movements. In addition to this antagonistic action we have a synergistic action, i.e., a contraction impulse to a flexor m. is always preceded by a relaxing impulse to its extensor. The workings of this delicate function are not completely understood. A German anatomist in 1910 published his findings of both medullated and non-medullated nerves which ended in different ways among the m. fibers. Modern physiology teaches us that the

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striated m have two kinds of fibers the red rich in sarkoplasm and the white ones—rich in fibers The former contract more slowly and prevent too rapid relaxation after contraction Mosso had already in 1904 differentiated between the rapid m twitchings and the more leisurely m tonus This instinsic pattern of a muscle is controlled by both the C N S and the sympathetic nervous system Continuous N impulses are necessary to maintain a normal physiology in a m , both directly on the m fibers and indirectly on the blood supply These N impulses will produce what we call m tonus From experience these impulses produce their optimum effect when the muscle is in mid state, i e , when there is equal muscular tension between flexors and extensors This m tonus is the first thing lost when a muscle is paralyzed and the smooth workings of the unaffected muscles are upset Secondary contractures of these unaffected muscles will produce a shortening of all the soft tissue about the joint involving the connective tissue, the ligaments and the capsule This is what happens on the contracted side On the opposite side we will have overstretching of the muscles and elongation of connective tissue, ligaments and capsule

Von Tilman and Kremer called attention to the fact that over-stretching can produce atrophy Each m has a certain elasticity and Mosso has shown that, after a muscle has been stretched, it will retract but does not return to its original length Till man proved that a muscle can be damaged if by stretching it is prevented from returning to its normal resting position over a certain length of time Such a muscle will soon show deterioration There is a diminution of the primitive striae with gradual disappearance of the striation and, finally, gradual complete disintegration of the m fibers The change of muscle tissue into connective tissue is a consequence of failing functional stimulation and less differentiated tissue takes the place of more highly specialized structures

Even the passing stretching that takes place at rest or when a muscle is spared will produce the same deteriorating effect on the muscle tissue In bedfast patients in late stages the contractures are in positions beyond the rest position It is a well-known fact that such muscles as the extensors of the wrist and fingers, the deltoid m , the gluteı m , the quadriceps and the extensors of the foot and toes atrophy much more rapidly than their antagonists Several reasons for this have been advanced

Comparative physiology will teach us that excentric muscles are relatively younger in their function Concentric movements are older in their function, they have been developed earlier and their structure is therefore stronger and more resistant in every respect We only have to compare the flexors and extensors in the forearm and the adductors and abductors in the shoulder and hip This, we call phylogenesis It is not confined only to the muscular tissues It is undoubtedly true—even of the nerve supply Extensors and abductors are supplied by the nerves from the posterior nerve roots which are branches from the main nerve trunks that seem to continue into the ventral branch supplying the flexors and adductors If this is the reason for the difference in electrical irritability I am not aware of it I have, however, proved to my own satisfaction that less current is necessary to produce a contraction in flexors and adductors than in corresponding extensors and abductors This can easily be done by the Jones condenser set

Mark Jansen suggested that the stronger fascia found in excentric muscles will interfere with the circulation to the muscles when over-stretched It is rational to believe that a continued stretching will diminish the lumen of the blood vessels and produce circulatory changes

Furthermore, the maximum and minimum length of the concentric and excentric muscles indicates that the excentric muscles undergo more physiological stretching than their antagonists

Thus

SUBJECT I	LENGTH IN INCHES			
Muscle	*Normal*	*Min*	*Max*	*Diff*
Deltoid m	6	4	6,25	2,25
Ext fingers	18,25	17,25	19,75	2,50
Triceps m	12	11 50	13,50	2
Erector spines	19,50	18	23	5
Glut max	10 25	9,75	15	5,25
Quadriceps	18	17,50	19 50	2
Ext toes	21,25	19,25	22,75	3,50
SUBJECT II				
	5,50	4	5,75	1,75
	18	17	20	3
	12	11 75	13,75	2
	18 25	16	20,50	4,50
	10 25	9,50	14,75	5,25
	18	17 50	19,25	1 75
	21 25	19 25	22	2,75
SUBJECT III				
	5 75	4,25	6	1,75
	17,50	16 25	17,75	1,50
	11 75	10 25	12,75	2,50
	20	18 50	22	3 50
	9	8,75	11 75	3
	13 50	12,25	15,50	3,25
	22	21,50	23	1,50

Gravity

It is true that gravity exerts most of its effort on the excentric group of muscles Thus,

Treatment

No preventative vaccine has as yet been developed. The treatment is rest and incision of suppurative glands when necessary. In the particular case recorded above a wet dressing of potassium permanganate seemed satisfactory for the ulcerative lesions. Under no condition is the excision of glands advised.

In conclusion, I wish to express my deep appreciation to Prof. J. Gardner Hopkins for his valuable aid and permission to present this case before you. I also appreciate the assistance received from Drs. Beatrice M. Kesten, Gerald F. Machacek and Miss Rhoda Benham.

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SUBJECT III				
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	11,75	10,25	12,75	2,50
	20	18,50	22	3,50
	9	8,75	11,75	3
	13,50	12,25	15,50	3
	22	21,50	23	1

Gravity

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we have in addition to all the previous disadvantages of this group of muscles the constant pull of gravitation. Therefore, whatever the anatomy and physiology may be of concentric and excentric muscles, the always-present gravity must be considered. A beautiful example of this is in the treatment of facial paralysis. The application of heat, electrical contraction, massage and mirror exercises I believe is only secondary to the support of the muscles innervated by the middle and lower branch of the facial nerve. This can be done by adhesive tape from the corner of the mouth to the ear. Better yet is a padded fishhook which is held by a pincenez holder on the ear.

When we realize that the physical therapy treatment takes less than an hour out of 24 or 48 hours the importance of the position of the relaxed tissue between treatment assumes greater significance.

Drop Wrist

The drop wrist and drop foot are two rather common deformities which we are called on to treat. It is of interest to speculate as to the predisposed nature of the structures involved, especially the musculo-spiral N. and the peroneal N. in particular, the superficial branch of the latter. The toxic properties of alcohol, lead and arsenic seem to select these nerves and the drop wrist often helps in the diagnosis of these poisons. I have been unable to find out any reason for this specific selection and, to say that the phylogenetic age is responsible, is only of academic interest.

In addition to such drop wrist from toxins, we have the paralytic drop wrist, anterior poliomyelitis being the most common pathological cause.

The traumatic peripheral nerve lesion of the musculo-spiral nerve producing a drop wrist is familiar to us all. In this connection I should like to ask you if anyone has had a similar experience as the following: In 1929 I was called in consultation to see a college boy who had received a fracture of his right humerus—middle third. It had been produced during training in hammer throwing. The weight had slipped and landed on this patient's arm fracturing the humerus. He showed clinically complete paralysis of musculo-spiral N. and, three weeks after the accident, he showed a reaction of degeneration. The surgeon, therefore, wanted to do an open reduction and, at the same time inspect the nerve. The consulting neurologist found no disturbance of sensation of the upper extremity and took the responsibility for a closed reduction. This was done and I saw the patient six months afterward with no signs of paralysis and with the fracture healed. It goes to show that we do not know much about the nerve lesions as yet, and it taught me to be more humble in electro diagnosis. This patient had his arm and hand placed in the proper position with wrist and fingers in extension. This position is absolutely necessary when we treat any weakness of extensors of wrist and fingers. The splint should place both the wrist and the fingers in extension while treatment is instituted. The flexors of the wrist and the fingers are very strong compared to the extensors and undergo contraction early.

Epicondylitis

In 1929 I brought out the importance of treating this pathological entity in such a position that the extensors coming off ext. condyle were relaxed for three to four weeks, while undergoing the proper physical therapeutic treatment. Before using the cocked up splint my results were poor; they have been uniformly good since I combined my treatment with the most favorable position.

Shoulder

Of all the muscles in the body the deltoid muscle probably is at the greatest disadvantage, both as to the mechanics, phylogenesis and gravity.

This disadvantage is shown early in life. In Erbs' palsy, it is most important to place the baby's upper extremity in the 90-90 position with the forearm supinated and fingers extended.

To prevent deformities in poliomyelitis, an early abduction splint is necessary to give maximum result in the muscle-reeducation treatment.

In all adult traumatism or disease about the shoulder, we must guard against the loss of abduction. I had once the opportunity of seeing two parallel cases of dislocation of the head of the humerus. One was treated in an abduction splint and was well in six weeks. The other one I treated without a splint and it took him six months—on exactly the same treatment. One fact that I have not seen emphasized in textbooks is the common occurrence of temporary paralysis of the circumflex nerve complicating shoulder dislocations. The abduction of the shoulder in treating fractures about this joint is generally recognized. I believe that it ought to be made a rule in the physical therapy treatment of the shoulder wherever there is the slightest danger of losing the abduction.

Neck

The posterior neck muscle is often the site of occupational or static myositis. This can-

not be treated successfully unless we realize the mechanics of the head and neck

In quadruped animals, the head is held up by the strong ligamentum nuchae and powerful neck muscles In the human biped position, the head is balanced on the cervical spine and the neck muscles act like guy ropes, the ligamentum nuchae being insignificant If we hold our head like a quadruped, as we so often do, in many occupations and also in reading and writing, a great load is carried by the posterior neck muscles giving us the proverbial pain in the neck Such a myositis may be temporarily relieved by heat, massage, static wave current, etc, but the permanent relief will only come with correction of the faulty mechanics We must teach the patient to carry the weight of the head on the spine The spine is for weight-bearing and the muscles are for balance and motion

Shoulder Girdle Brace

The wing scapula is most often part of general poor body mechanics, although we do find it as a single symptom Whether the etiology is anterior poliomyelitis or an expression of pseudo-hypertrophic muscular dystrophy, I do not know The pathology is either a paralysis of the long, thoracic N, or the respiratory N of Bell, or muscular degeneration of the serratus magnus m, the trapezius or rhomboid m The resulting deformity consists in the flaring out of the scapula and a displacement of the scapula laterally away from the posterior spinous processes The conservative treatment of this deformity should include a brace releasing the tension of the above muscles Such a brace consists of a figure eight strap around the shoulders, crossed in the back and connected with a small abdominal strap

Back

No other part of the body suffers so much from treatment and so much from lack of diagnosis as the back and especially the lower back I am not going to burden you with a description of possible pathologies which may produce low back pain Any of the structures of this part of the body may be at fault The skeleton, muscles, nerves, ligaments, abdominal or pelvic organs may be the cause producing symptoms of low back pain I shall, however, emphasize two things that should form the background in our dealings with this complex problem

The first one concerns the evolutionary changes in anatomy and physiology of the lumbo-sacral region In assuming the erect position a 90 degree extension took place between the lower extremities and the trunk Some of this change occurred in the hip joint and some in the lumbar region This anatomical change was not confined to the skeleton but involved all the structures and organs to be found about the pelvis and the abdominal and lumbar region Thereby, a weak structure was prepared for the increased activity that the lumbar spine had to take over A mechanically weakened structure was exposed to an increase in motion Such is the anatomical and physiological background for low back pain

The second point I would like to bring out is the logical sequence of the first one The importance of pain must be realized I believe that pain has a physiological part to play Pain, therefore, although only a symptom, must be respected The sensation of pain is probably the most important help a doctor has in his diagnosis I also believe it is safe to make the following general statement that any pain brought on by overactivity, either qualitatively or quantitatively, should be treated with rest The only complete rest for the back is the recumbent position in the quadruped attitude of spine, hips and knees This can only be accomplished on a hard bed This prevents the sagging under the heaviest part of the body—which is the pelvis and hips The hips are flexed to prevent the pulling of the ilio psoas on the lumbar spine and to relax the quadriceps muscles This position cannot be assumed without flexing the knees If this advice were taken literally, half the population would be spending their time in bed This is not always practical and therefore we must do the next best thing—which is incomplete rest or support For the whole back we use a spinal brace consisting of two steel uprights running parallel to the spine and resting on scapula above and on the pelvis below These steels are the skeletal support of a corset The supporting elastic bands should run parallel to the different muscle layers making up the abdominal wall

The pelvic support consists of a canvas belt placed just below the crest of the ilium, extending from the pubis to just below the umbilicus in front and laced in the back over the sacrum

With such support we will register better result with our physical therapy treatments in these most difficult cases of back pathology —which are probably the most trying patients we have to treat, with the possible exception of our arthritis patients

The Quadriceps

The two muscles in the body which are the most susceptible ones to the atrophy of non

use are the quadriceps and the deltoid muscles. In any pathology of the thigh or about the knee joint, the quadriceps muscle must always be watched because atrophy may set in after a week to ten days. Extension is the most important position in the knee and it therefore becomes necessary to start very early the treatment of the quadriceps to maintain its tone. It is the vastus medius which is responsible for the last few degrees of extension. This muscle is often neglected in the treatment resulting in a wabbly knee and necessitating the locking of the knee in walking. A support is rarely needed because overstretching of the quadriceps seldom occurs and full extension of the knee in standing, walking, sitting or lying is easy to assume.

Drop Foot

As mentioned before, we have in the superficial peroneal nerve or external popliteal nerve a site of predilection for such poisons as alcohol, lead, arsenic, etc.. This produces the well-known drop foot.

I have had the unpleasant task of treating several cases of drop foot due to stretching for sciatic neuritis. This is an example of how paralysis really can result from overstretching of a nerve.

Continuous stretching of the extensor muscles of the ankle and the toes in bedridden patients due to gravity and the weight of the bedclothes is an example of atrophy produced by stretching of the muscles.

In hemiplegia we have a different type of a drop foot. Due to cerebral irritation we have a muscle tonus changed into a muscle spasticity; the flexors getting the better of the pull producing a drop foot. In this connection it is of interest to note how much sooner and how much oftener the lower extremity returns to useful function in a hemiplegia patient compared to the upper extremity. If the demand for function which is forced on the lower extremity in walking is responsible for this recuperation, I do not know. I like to believe so, however, for the sake of those spastic children which we try so hard to save for a useless, joyless and burdensome, longer life.

This drop foot problem always includes a stretching of the extensors of the ankle and toes with accompanying contraction of the flexors of the ankle and toes. When treating these cases, the foot should always be held in 90 degrees to the leg by a brace that relaxes the extensors and stretches or, at least, prevents contraction of the opponents. The application of heat for the nutrition of such atrophying extensors or the contractions of such muscles by means of electrical currents or the muscle reeducation of these same muscles will give better results when the principle of the most favorite position is applied.

The same principle holds in the treatment of a ruptured plantaris muscle. This is not a rare occurrence and is seen in tennis and baseball players. The proper position here is with the foot in flexion—which is accomplished by raising the heel, thereby shortening the plantaris muscle.

Weak Feet

In dealing with the weak abducted foot we have an example of concentric muscles, the tibialis posticus and the tibialis anticus being overstretched and probably undergoing the same changes of atrophy and deterioration. I am speaking of the abducted foot with lowered longitudinal arch. It is only rational to believe that such a change in foot structure as the abduction of the foot, must lengthen or stretch the tibialis posticus and the lowering of the longitudinal arch will do the same thing to the tibialis anticus. The Whitman plate recognizes and therefore corrects both these deformities. The lateral heel spur corrects the abduction and the raised medial part of the plate raises the arch. If we recognize the flat, abducted foot from this point of view and return the tibial muscles to their original normal length, we will be more successful in our physical therapy treatments when they are directed toward improving the circulation or relieving the pain or strengthening the deficient muscles or correcting the body-mechanics.

Conclusions

It is evident that it is easier to prevent deformities than to correct them. In order to prevent deformities, the various parts of the body have a definite, most favored position in which they must be placed. In a general way we must support or prevent overstretching of the muscles performing movements away from the body. We must place an extremity in such a position that the weaker extensors are favored over the stronger flexors, etc.

The effect of gravity on muscle weakness also determines to a certain extent the deformity and must be reckoned with. I believe that many of us have not got the maximum result in our physical therapy treatment because we have had our attention too much centered on the actual treatment and not enough attention has been paid to the physiological pathology underlying our problems.

HUMAN RABIES*

Report of Two Cases

By GUY F CLEGHORN, M D, MINEOLA L I

THE opportunity to examine and observe the uncontrollable symptoms of Human Rabies is indeed slight within the scope of the physician's life journey and I assure you that there is no recompense for the privilege, if it indeed be one, the cases being terrible to the sufferers and horrible to the witness

Rabies is a very old disease, dating back for centuries, occurring in practically all parts of the world but very prevalent in Europe and Asia, with the exceptions of Germany and England where strict muzzling laws are rigidly enforced Outbreaks are constantly occurring in the United States and I would here note that my own County, Nassau, has been under quarantine for three years, on account of its prevalence

Man acquires the disease solely through the bite of an animal, usually a dog but sometimes a wolf, fox, cat, cow, goat or horse Only about 15 per cent of the persons bitten by rabid animals, however, become infected Bites about the face and hands are much more dangerous than bites through the clothing The exact nature of the causative agent has not been determined The Virus is contained chiefly in the nervous system and salivary glands and is conveyed by the saliva, the virus reaching the salivary glands by way of the nervous system and not by the blood stream

The pathology shows that there are marked changes found in cases of rabies in and around the ganglion cells of the cerebro spinal and sympathetic ganglia The ganglion cells are encircled or completely replaced by a collection of round cells The ganglion cells show swelling eccentrically of the nucleus and undergo degeneration This phenomenon of perivascular and perighanglionic cell in filtration gives rise to the so-called Negri bodies or Rabies nodes, the presence of such bodies being generally accepted as characteristic of Rabies

The period of incubation is usually from two weeks to three months, dependent on age, being shorter in children, also the proximity of the part infected to the brain center, the extent and severity of the wound, chances of infection increasing with the number of teeth marks, deep puncture bites being five times as dangerous as superficial ones, open wounds seemingly less apt to admit the Virus

Three stages of the disease are noted in the syndrome (1st) The premonitory stage in which the tissue about the bite becomes irritated, painful and numb, melancholia and depression follow with severe headaches, anorexia, insomnia, irritability, increased sensitivity to light, fear, increase of pulse rates and difficulty in swallowing

(2nd) The stage of great excitement and restlessness with extreme hyperaesthesia develops The slightest stimulus causes violent reflex spasms, particularly to the larynx and mouth These spasms are painful and are accompanied by extreme dyspnoea Attempts to drink water cause insensely painful spasms, so that patient dreads the very sight of water Hence the name of the malady Maniacal symptoms at times accompany the spasms but *the mania is rarely dangerous in form* Temperature usually varies from 100 to 103 and occasionally is normal This stage lasts from one and a half to three days In the interval between spasms, patient may be quiet and the mind unimpaired

The paralytic stage follows that of excitement, the spasms no longer occur, the patient becomes quiet and gradually unconscious, heart action weak and death from syncope results in from four to sixteen hours

Diagnosis in man is usually simple Acute bulbar paralysis may resemble it Tetanus may be confused but in Tetanus the trismus is the initial symptom, the spasms are tonic rather than clonic in character and do not involve especially the muscles of deglutition and respiration and the mental peculiarities of hydrophobia are lacking Pseudohydrophobia develops similar symptoms and the imitation of a barking dog or biting, together with the lack of true respiratory spasm differentiate it

The prognosis, when once the disease is established, is hopeless, palliative treatment is all that can be offered such as chloroform or morphine

Prevention consists of enforcement of muzzling regulations, destruction of strays and quarantining of all dogs imported or transported from localities where rabies is known to exist These methods would stamp out the disease if well enforced

All dog or animal bites should be thoroughly cauterized with fuming Nitric Acid, as cauterization, if properly done, will reduce liability to rabies at least 75 per cent and even if delayed 24 or 48 hours, it has definite value

The Pasteur treatment introduced over forty years ago by Louis Pasteur should be

* Read at the Annual Meeting of the Medical Society of the State of New York, at Syracuse N Y June 2 1931

given to every person known or suspected of having been bitten by a rabid dog. The Semple method is the treatment now most popular in use and is the carbolized antigen diluted with Saline solution given in daily doses for a period of 21 days.

Two cases came under my observation in May, 1930. Six people, four small children and two adults were attacked by a rabid dog. The children were severly bitten on the face and arms and hands. The wounds were cauterized after a short period with carbolic acid and mercurochrome in four cases, one with Nitrate of Silver and one with fuming Nitric Acid. All received anti-rabic Virus within 48 hours. Two children developed rabies and died.

One, E. S., a boy seven years of age was bitten on the face. He likewise received four slight puncture wounds and three deep puncture wounds on right forearm. The wounds were said to have been cauterized within one-half hour with carbolic acid and mercurochrome. Anti-rabic serum, Semple method, was supplied by the New York City Health Department and given 48 hours after the injury and daily doses for thirteen days. Death occurred on the fourteenth day after the institution of the treatment. Patient was a well built, rugged and healthy boy, and bore the inoculations well until about the tenth when he appeared to be listless, whining and complained of pain in his right forearm over the site of the injury and headache. Examination showed wounds reddened and puffy. Upon inquiry it was found that he had refused food from the night previous. These symptoms became more intense on the next day when patient developed a temperature of 103, very restless, generally refusing food and whining continuously. Bowels obstinately constipated, urine decreased, heart action and respiration accelerated.

Spasms of the muscles of deglutition appeared on the following day and were of short duration but it was impossible to approach him with any sort of food or liquids without forcing them. Irritability and restlessness were very pronounced alternating with periods of quietness and apparent sleep. Extreme dyspepsia at times. A lumbar puncture was performed at this time and was attended by a tremendous amount of physical effort on the part of the patient following which the child gradually became quiet, exhausted with apparent paralytic condition in which he remained until death eighteen hours later.

The second case was typical of the first with the exception that the disease did not manifest itself until twenty inoculations had been administered or the twenty-second day after being bitten and ran a shorter course of only forty-eight hours duration, due probably to the fact that she was a child four years of age, weak and undersized. The spinal taps in these cases were negative.

In conclusion I would strongly advise thorough cauterization of all dog bites with fuming Nitric Acid, anti-rabic Virus in all known or suspected cases and particularly no relaxation of any police or sanitary regulations which tend to localize, control or prevent outbreaks of this disease.

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For list of officers of County Medical Societies, see this issue, advertising page xxx.

Annual meeting, Hotel Statler, Buffalo, May 23-25, 1932

SPECIAL MEETING OF THE HOUSE OF DELEGATES

The Council of the Medical Society of the State of New York, assembled on December 10, 1931, decided to call a special meeting of the House of Delegates on Thursday, January 14, 1932, in Albany, to consider the report of the Joint Committee on the Governor's Health Commission, and to express the attitude of the State Society toward the legislative recommendations of the Commission. This action of the Council was taken in accordance with a vote of the House of Delegates at its annual meeting on June 1, 1931, as recorded in the Minutes of the House on pages 826 to 828 of the NEW YORK STATE JOURNAL OF MEDICINE of July 1, 1931.

The report of the Joint Committee will be made available to every County Society before the meeting. The full text of the report of the Governor's Health Committee issued last Spring was printed in this Journal of October 1, 1931, page 1208.

MEDICAL SERVICE TO THE UNEMPLOYED

Relief to the unemployed is receiving the attention of official and civic bodies, from the United States Government to the townships and local churches; and organizations and committees are being formed everywhere to distribute the relief to the satisfaction of both those donating and those receiving the relief.

Sickness is first on the list of conditions for which relief is needed. Sickness always arouses sympathy even though it be among criminals and other enemies of society. The physician is therefore the first citizen who is expected to give relief,—and he is always ready to respond to every call of real need. But in estimating the service to be demanded of a physician, two fundamental principles must be considered:

1. The duty of making contributions for relief purposes falls on the doctor as a citizen to exactly the same extent that it falls on all other citizens. In these modern days, the general form of relief is that of financial donations. A doctor is ready to subscribe his proper quota of money for the support of relief agencies, such as the Red Cross, hospitals, church funds, and welfare associations.

2. A doctor is also under an obligation to donate the special service in which he is peculiarly skilled,—that is, his medical service. To treat the poor and the helpless has always been recognized as a commonplace duty by every doctor; and he does not deserve the special credit for offering to treat the needy in these times of unemployment and financial depression. He has been donating medical services every day of his professional life, and he will continue to do so in times of prosperity as well as depression.

The obligation of a doctor to contribute his medical service in addition to his general financial donations is the same as that resting on any other skilled person. The music dealer, for example, is ready to loan a piano for a Red Cross meeting, and to transport it to and from the hall, or to tune the piano that happens to be in the meeting room. At first thought, these might be considered to be personal services only, but actually they cost the music dealer money which he could not afford to give if the calls upon him were frequent.

A doctor, too, is under expense when he makes a professional call upon a poor person. His expense is at a minimum when he calls upon the sick person in a well-equipped hospital,—but he at least pays out money for his travelling expenses. His expense of money and time is often considerable when he gives the treatment in the home of the patient. He must then see that arrangements are made for nursing, for medical supplies, for the care of the children, and for informing the friends. If the patient is in a rural town, the doctor will probably have to call up the drug store, the public health nurse, the welfare commissioner, the priest, and possibly half a dozen other persons. He is the relief agent for the whole community, especially at the outset of a sickness; and he does not lose a minute's time in building up the machinery for the relief and setting it in motion. Moreover, he does the same thing over again with his next needy patient.

Acting as the agent for other relief organizations is a very large burden on the doctor even in large cities; and it is almost intolerable in the smaller communities. Yet all this service is classed as medical relief, when a large part of it belongs in the class of charity, or nursing, or social service.

Suppose a village of five thousand people organizes a service for aiding the unemployed. The doctor, the grocer, the jeweller, the music dealer, and every other citizen offers his own peculiar service to the committee. When that committee is confronted with the problem of deciding what personal service to expect from each individual in addition to his financial subscription to the general fund, the members will begin to realize the variety of the contributions rendered by the physician. The particular activity of the committee will be to act as a clearing station for all forms of relief,—charitable, social, and medical. It will maintain a list of the doctors who are willing to give their services free; and it will assign the doctors in accordance with a plan which they may suggest. After the doctor makes his call, he will report the further needs of the patient to the committee, which shall at once give the service which otherwise would be the burden of the doctor alone.

The committee would also be prepared to ask other business men to donate their personal services as needed. If, for example, the doctor prescribes a dressing to be changed every three hours, the committee might have to ask the jeweller to donate his personal services in fixing the clock. Why should not the jeweller donate his expert services just as the doctor donates his? The doctor will be entirely satisfied if each citizen donates his personal service on the same basis that the physician donates his medical service.

Just a word in regard to paying a doctor for his services. Economic and social conditions in a large city are such that the word "Free" means something very different from that in a village. The Bronx County Medical Society.

for example, has developed a plan by which a relief agency shall pay a doctor at the rate of one dollar for a call. It is an accepted fact that a city doctor spends at least one-third of his income on necessary overhead expenses; and so if his fee is ordinarily three dollars, one dollar of that goes for overhead expenses, and two dollars for his personal service. That one dollar paid to a Bronx doctor represents the cash outlay which the doctor spends when he makes the call; and he gives his personal service free. This plan is entirely satisfactory in a large city where relations are impersonal. This form of payment would probably be impractical in a village where the relief agencies have no extension system of book-keeping.

The response of the doctors to the call for relief is creditable to the profession; and the cooperation of the relief agencies is commendable.

THE ANNUAL INDEX

The special object of the New York State Journal of Medicine is to record the essential activities of the Medical Society of the State of New York and its component District Branches and County Societies, in a permanent form which will be available to the members and also to the medical profession and public health workers generally, not only in New York but also in other states.

The Journal recognizes the fact that the medical societies of other states are also taking an active part in all forms of service relating to the curing of sickness and the promotion of health. The Journal, therefore, abtracts the reports of the activities of the medical societies of other states as recorded in their official state journals. The space which the New York State Journal has given to the records of the activities of medical societies of the counties and states is nearly as great as that devoted to scientific articles. These records are the only comprehensive descriptions of these activities.

The Editors and members of the Publication Committee of the New York State Journal of Medicine have put forth special efforts to make the records of medical society activities available by indexing and cross-indexing them in detail in a special index which has covered an average of six pages during the last three years. The special index this year fills seven pages, and is more extensive and complete than ever before, largely because the activities themselves have included an ever-widening field. The index affords a means by which a worker in any department of medical society activities may ascertain what the societies in other places have done, and may therefore profit by the experience of others working in similar lines.

LOOKING BACKWARD

This Journal Twenty-five Years Ago

Medical Examining Boards: The leading editorial in this Journal of December, 1906, is on the subject "A Single Medical Examining Board," to take the place of a triple board which gave examinations in homeopathy and eclecticism. The editor says:

"The homeopath and the eclectic are not peculiar in the essentials of medicine, and, so far as therapeutics is concerned, they differ no more in their actual practice from the regular practitioner than do the regular practitioners among themselves. Homeopathic and eclectic medicine have practically disappeared; still the laws of New York keep alive the delusion that they exist.

"Now we are confronted by the harm of the law which created three separate medical examining boards. Other 'schools' of peculiar therapeutics are demanding the same special privileges which already have been accorded to the two 'schools' now recognized by the State. The same laws, it is insisted, which apply to homeopathy, should apply to osteopathy, provided each complies with the same requirements; and the State can not much longer be made to see it in any other light. When the State recognized one peculiar sect it opened the way to recognize all.

"Before this absurdity has gone any further it should be stopped. There should be a single examining board, whose business it should be to examine into the qualifications to practice the healing art of candidates applying for a license in this State.

"A doctor whom the State recognizes should be simply a doctor. The State should know no eclectics, osteopaths or hydropaths. Therapeutics is but a small part of the science of medicine. It should be the privilege of the licensed doctor to use small doses or large doses, massage or hydrotherapy or whatever he please, provided he be well grounded in the fundamentals of medicine.

"The medical profession must earnestly take hold of the matter, and of its own initiative demand the abolition of the present three-examining boards system and its replacement by a single board of impartial judges of the qualifications to practice the healing art."

MEDICAL PROGRESS

Cancer Metabolism and Inflammation.—The difficulty of influencing malignant tumors, says Ruth Lohmann, writing in the *Klinische Wochenschrift* of September 26, 1931, lies in the fact that if it were possible to withdraw the oxygen from tumor cells within the body they could live by splitting sugar, and if they could be deprived of sugar, they could live by their oxidation of fat and protein. Serum and tissues apparently offer optimal conditions for the metabolism and growth of tumors. The task lying before those who would treat tumors on the basis of cell physiology consists in producing conditions in the body which so far as possible hinder the respiration and splitting of the tumor cells, that is, in providing a milieu in which oxygen, sugar, and bicarbonate are lacking, with a high content in carbonic acid. In order to learn whether the healthy organism has at its disposal any reactions tending to prevent or destroy tumors, or whether such can be started into activity by any kind of treatment, Lohmann undertook to measure the influence exerted by inflammation upon tumor cells, by placing sections of rat sarcoma and human carcinoma in serum and also in inflammatory exudates derived from cantharides vesicles and pleural inflammations in human beings. Comparing the results in these two media, she found that the cells placed in the inflammatory exudates were uniformly destroyed after 6-14 hours, while control cells in normal serum remained unaffected. She thus demonstrated that cancer cells in an inflammatory environment are not capable of living by the oxidation of their fat and protein content, and that they die even when 3 per cent oxygen is added to the exudate for the purpose of reproducing the conditions found in vivo in the milieu of an inflammation. A capacity for inflammation is accordingly a requisite in the organism that is to cope successfully with cancer. Such capacity is to be understood not only with reference to the degree of an inflammation, but also to the sensitivity necessary for the setting up of an inflammatory condition. This sensitivity is a defensive reaction of the entire organism regarded as a unit, and it becomes less with increasing age. In this may be seen a reason why the body is able to restrain a tendency to proliferate in the years when it is most acutely subject to inflammations, and why proliferation meets with less opposition in the later years of life when inflammatory attacks occur with less violence or not at all. The ideal of prevention would thus be to maintain the capacity for inflammation, so that every degenerating cell will as soon as it is formed be destroyed.

Pruritus Ani.—In discussing the variety of pruritus in adults caused by *Enterobius vermicularis,* W. P. Macarthur states that this nematode has been removed from the genus *Oxyuris* for the reason that its characteristics do not conform to those of the genotype *Oxyuris equi.* The ova of Enterobius practically always gain access to the human digestive tract by way of the mouth, and hatch in the duodenum. The larvae migrate to the cecum, where the majority of the worms exist. The gravid females make their way to the rectum and anus to oviposit, and it is their wriggling movement which cause the irritation loosely called pruritus. There is no multiplication of the parasites within the body. Patients often suffer nightly torments from enterobiasis without the cause being suspected. In every case of nocturnal pruritus ani, the presence of this parasite should be suspected, and further examination should be carried out. The most thorough diagnostic measure is a rectal wash-out with three or four ounces of saline, *which must be administered when pruritus is active.* After a few minutes this is returned and examined for worms. As the itching usually ceases before morning, such remission constitutes strong evidence of enterobiasis. The most efficacious treatment consists in the removal by lavage of the adult female worms which have migrated to the rectum. For this purpose nothing is superior to salt water in a strength of two tablespoonfuls of salt to the pint, 4 ounces of the solution being sufficient for the injection. It is useless to give the injection at any time when pruritus is not felt. There is no drug so effective as to make rectal irrigation unnecessary, though 2 grains of santonin, combined with ½ grain of calomel, is distinctly helpful. To avoid autoinfection, which occurs most readily, the patient should wash his hands thoroughly every time after touching the surface of the body or an undergarment, since there is no certainty that eggs have not been picked up.—*British Medical Journal,* August 22, 1931, ii, 3685.

Determination of Blood Bilirubin by Splenic Contracture as a Functional Test in Tuberculous Subjects.—Giovanni de Flora, writing in the *Riforma medica* of August 3, 1931, reports that he examined the blood of 30 tuberculous patients before and after injection of adrenalin, and found an increase of blood sugar after the injection. Next, in order to eliminate the adrenalin factor, and to exert a stimulation as directly as possible upon the spleen, he froze the region around the spleen by spraying it for one minute

with ethyl chloride, in 3 individuals, and then likewise made tests for blood sugar. As is generally known, the blood sugar is very sensitive to the influence of adrenalin; hence the author made simultantous records of the blood sugar and the blood bilirubin, both after adrenalin and after freezing. He found that after freezing the splenic region there was no increase but a definite decrease of blood sugar. He could therefore conclude that the behavior of the blood bilirubin depends not on the adrenalin but on the contraction of the spleen. This conclusion was reinforced by the fact that in two of the cases in which he had performed perfrigeration in corresponding opposite metameres (splenic and hepatic areas), he found in the former very conspicuous modifications of the blood bilirubin curve, and in the latter scarcely any variations. In view of the importance of the spleen as a station of the reticuloendothelial system, and regarding it as an index of the properties of the rest of the system, it is possible to say that these tests may be regarded with approximate accuracy as a functional sounding of this important system. This was confirmed by the clinical behavior of the patients examined, for in all the tuberculous persons in whom the process was benign the bilirubin curve took an ascending course, whereas in those where the disease was grave the reaction was slight or altogether absent. This demonstrates the importance of the reticuloendothelial system for the defense of the body against chronic processes, such as syphilis, leprosy, and especially tuberculosis. From this observation we may deduce that the hypovegetative type is the one most predisposed to tuberculosis, because its mesenchyma is poor and exhibits little activity. As is known, the reticulo-endothelial system is the principal representative of the mesenchymal tissue, hence it is the first to feel the inroads of Koch's bacillus. Its functional sounding is therefore of great importance both for prognosis and for treatment.

Restoration of Thumb Action by the Graft of a Functionally Injured Finger from the Same Hand.—P. Bonnet and F. Carcassonne point out that if an injury has destroyed a thumb and has at the same time rendered a finger of the same hand useless, the transplantation of the latter to replace the thumb is sometimes quite feasible and is greatly to be recommended, in view of the importance of the thumb. The authors have recently succeeded in making such a graft in a workman whose hand was caught in a machine, which cut off the thumb below the second phalanx, and injured the next three fingers seriously. It was possible to utilize the index finger to create a new thumb, and the procedure was accordingly carried out in a 4-stage operation, as follows: (1) Preparation of stump of thumb. (2) Preparation and oblique section of bone of the index finger. (3) Transference of the finger, with retention of a wide internal pedicle. (4) Section of pedicle. Eleven months after operation the result was complete and the condition perfect, except for rigidity. A tendinous graft will be attempted at a later time. Sensitivity is completely restored, and the patient has a useful hand. In such an operation the chief precautions to be observed are: (1) To make sure of perfect viability of the tissues. (2) To avoid making too long a graft, which would be awkward for use as a thumb. Not the entire finger, but the first or first two phalanges should be utilized, according to the length needed. (3) To make sure of rotation of the finger into the plane of the thumb, so that the palmar surface of the index will meet that of the remaining fingers, and thus make a grasp possible. One should also bear in mind the danger of necrosis from too early liberation of the pedicle, or from compression of vessels by a badly applied dressing or too accentuated an angle of the nutritive flap. In the case under consideration, the patient has the use of his natural metacarpo-phalangeal joint, but not of the grafted phalango-phalangeal joint. In rare cases it is possible to restore the usefulness of the latter, but not unless the finger is in perfect condition. A grafted thumb of this kind is not suited for very heavy labor, since it is more fragile than the thicker lever of the first metacarpal, but for ordinary purposes it meets all needs. The operation is especially appropriate in that it conserves for useful ends an injured finger that would otherwise have to be amputated, and makes unnecessary the mutilation involved in the sacrifice of a sound finger for this purpose, such as is often practised.—*Lyon Chirurgical*, September-October, 1931.

Extraordinary Development of the Lower Lobes of the Lungs, without Morbid Involvement, in a Patient Treated by Right Artificial Pneumothorax.—G. Rossel makes a report in the *Schweizerische medizinische Wochenschrift* of August 22, 1931, of what he believes to be a unique case of its kind. In a young man of 24 in whom it was possible to obtain an ideal elective collapse limited to the right upper lobe, by means of pneumothorax continued at intervals of 8-10 days over a period of 2½ years, the two lower lobes, which at first retained their normal dimensions, began, at the end of 21 months, to exhibit an extraordinary progressive development upward in the shape of a cone. Little by little they began to "swell," and, as the months went on, to "hypertrophy" more and more, until finally their upper margin reached the clavicle. When this point was reached, it became very difficult to make the insufflations, as the needle encountered the lung. Since it was evident that they were try-

ing to assume the size of the entire lung and had almost completely filled the pleural cavity, the pneumothorax was stopped, after a total of 98 insufflations. Ten months have elapsed since then, and the patient's restoration to health is complete. The development of the lung is still more accentuated, and as seen in the radiogram, the two lower lobes appear to have taken on the size of the entire lung. The upper lobe is completely retracted against the mediastinum. One who did not know the patient's history would think it was an azygous lobe. Upon auscultation respiration is heard over the entire right hemithorax; it is ample, vesicular, without adventitious bruits, and differs in no way from that of the left lung. Only at the extreme apex is it weak (in the supraclavicular fossa). It is possible that a small pocket of gas still remains there. The possibility of an *elective pneumothorax,* which is relatively little known, is based on the tendency of the pulmonary tissue infiltrated by tuberculosis to retract, while the sound tissue is unaffected. Assuming that there are no pleural adhesions, the result of small and frequent doses of pneumothorax is not to compress, but to promote retraction; the aim of the insufflations will be to follow the retraction, and support it. It is impossible to say whether the astonishing development of the two lower right lobes is due to a simple compensatory emphysema or to a veritable hypertrophy with new growth, for nobody knows whether there is such a thing as new growth of pulmonary tissue, be it hypertrophic or reparative.

Epidemic Meningitis Minor.—During the period from February 21st to April 8th of this year J. V. C. Braithwaite and W. Mitchell Innes observed 13 children suffering with symptoms of meningitis at the Leicester Royal Infirmary. They presented a clinical picture similar to that described by Quincke, in 1893, under the name "serous meningitis," but with some important differences. Eight of the cases in the series were secondary to bronchopneumonia, usually of a mild type. The onset was sudden in seven, insidious in six. Vomiting, headache, and drowsiness were the most constant symptoms. Nuchal rigidity was present in all of the patients, while 11 of them had a positive Kernig sign. The cerebrospinal fluid was under pressure, clear and sterile. The protein tended to increase slightly, but usually there was no other abnormality. Lumbar or cisternal puncture caused rapid and complete disappearance of the symptoms, usually after one operation, and there were no fatalities. At the same time as the occurrence of these cases there was a mild epidemic of cerebrospinal fever and also an influenza epidemic. The condition might, therefore, have been an abortive form of either influenzal or cerebrospinal meningitis, probably the former. The disease differed from Quincke's serous meningitis in that the age of the patients ranged from nine months to six years, while Quincke states that serous meningitis is mainly a disease of young adults. Other points of difference were: the shortness of the course in the cases under consideration, while Quincke's cases lasted from four weeks to five months; otitis media was absent in the authors' cases, while in Quincke's cases it was frequently a point of origin; fatal cases were common, according to Quincke, and he found an occasional growth of microorganisms from the cerebrospinal fluid. He also noted tetany as a complication. The authors suggest that, in view of the benign course of the disease in their series of cases, the name "meningitis minor" is preferable to "serous meningitis."—*British Medical Journal,* September 26, 1931, ii, 3690.

The Mechanism and Pathogenesis of Alternation of the Pulse.—On the basis of a case personally observed, a new explanation of the mechanism of alternation of the pulse is put forward by N. Kisthenios and M. Gomex in the *Archives des maladies du coeur et des vaisseaux* of July, 1931. In the normal state the left ventricle, before driving into the aorta the mass of blood it contains, increases the intraventricular pressure in the first phase of its contraction until it is greater than that in the aorta at the moment. This may be called the presphygmic phase, because it produces no sphygmographic phenomenon. During this phase the heart expends only a portion of the energy at its disposal, reserving the remainder for the second phase, that of evacuation of the blood into the arterial system. But when necessary, the normal heart may produce a complete systole, stronger by reason of the reserve force which it does not ordinarily utilize, but which enables it to produce a greater amount of energy when this is demanded. It is quite evident that the duration of the two successive phases of the cardiac contraction, and the energy that the heart must employ in the course of each, will be a function of the peripheral resistance and of the pressure which dominates the arterial system during diastole; if these are augmented, the heart, compelled to expend an inordinate amount of energy while it is making tension of the ventricle, will have to call upon its reserve forces to assure complete evacuation of the blood. If these forces are exhausted, evacuation will be incomplete. The authors believe that in cases of alternation, elevation of diastolic pressure and exhaustion of the heart are present at the same time. The increase of diastolic pressure, because of peripheral resistance, has the effect of prolonging the phase of ventricular tension, and of exacting of the heart a great expenditure of energy during this period, so that the organ is incapable of calling on its reserve forces owing

to exhaustion. It follows that the ventricle will evacuate the blood only incompletely into the vessels; hence the pulse will be feeble. The next time, however, in view of the small amount of blood which has entered the arterial system, the peripheral resistance will be less, the first phase of systole brief, the effort to open the sigmoid valves less, the evacuation of blood complete; hence there will be a strong pulsation which will in its turn increase diastolic tension, and so on.

The Diagnostic Program in Food Allergy.—Warren T. Vaughn states that a realization of the deficiencies of the skin test, which is only 50 per cent accurate in the detection of food allergy, has led to the diagnostic use of the food diary and the trial diet. The skin tests make the best point of departure at the beginning of the study, for when positive they afford a definite starting point in the formulation of the diet. Any allergic diet must be followed rigorously for at least two weeks before one can be certain of results. If, after this, symptoms persist one may have recourse to the food diary, where symptoms are intermittent, or to the trial or elimination diet where they are more constant, or indeed to a combination of both. In keeping a food diary the patient tabulates all the substances which pass the lips. Each day he adds a new food at the bottom of the list. He notes methods of cooking and food combinations. It is not sufficient, for example to record "eggs." Scrambled eggs and omelet are reported as entirely different foods. Roast beef and steak are separated. Salads are classified according to their constituents. Days on which symptoms are manifested are checked. Not infrequently certain foods stand out as being often or constantly present on those days or on the preceding day. If the food diary does not solve the problem elimination diets may be tried. If the eliminative diet fails it may be because of crossed reactions within a biological group of foods. Vaughn has, therefore classified vegetable foods biologically, as, for example, under *Graminae* he places wheat, rye, barley, oat, rice, and corn. He has found that where one member of a biological food group has proved to be allergic to an individual, other members of the same group may cause allergic symptoms, even though the skin reaction has been negative. Sensitivity to one member of a group, however, does not necessarily imply sensitivity to all other members of the same group. On the basis of his observations, Vaughn has arranged a foundation list of foods consisting of those which are infrequently allergenic and of foods such as are not closely related genetically to others. After eliminating any food to which the patient gives a positive skin reaction and any which experience has caused him to suspect, a diet is built up upon the remaining apparently innocuous foods. As a rule new foods are added singly and not more than one every third day. Vaughn emphasizes that it is not sacrilege for the allergist to employ other therapeutic measures than purely allergic, directed against other related nonspecific factors such as intestinal stasis, bile tract infection, ulcer, diabetes, tuberculosis, etc.—*American Journal of the Medical Sciences*, October, 1931, clxxxii, 4.

The Antagonistic Action of Leucemia and Tuberculosis in the Human Organism.—In the course of the last 10 years, says Gottfried Holler, in the *Klinische Wochenschrift* of September 5, 1931, there have come under his notice a dozen cases of leucemia combined with tuberculosis, which revealed a very characteristic antagonistic influence of the two morbid processes upon one another, and in which the majority of the patients finally died of miliary tuberculosis. He observed that for a long time only benign deposits of the tuberculous process appeared in these leucemic patients (fibrous apical inflammation, pleurisy that was soon healed, and glandular processes, especially in the abdomen and mediastinum), until at last the tuberculosis appeared in the form of a universal miliary dissemination. All these cases were characterized by a striking leucopenia, expressed chiefly in a loss of granulocytes and a marked increase, for a time, of monocytes and lymphocytes. Of no little importance was the histologic finding in the spleen, which exhibited an increase of the reticulum and the sinus endothelium. In the cases with myeloid leucemia there were a striking number of myelocytes and other immature granulocyte forms, while the cases of lymphatic leucemia abounded in lymphoblasts. Thus there was the picture of aleucemic leucemia, one cause of which was the inflammatory changes in the spleen induced by the tuberculosis. These, taken in connection with the blood picture, suggested the existence of a reticuloendotheliosis. Three case histories are outlined, in one of which a lymphatic leucemia was removed by a lymphogranuloma of each lung—a morbid process which, in the most modern view, is etiologically related to tuberculosis. The two stages were clearly marked by the change of the blood picture from a high grade leucocytosis into a leucopenia, and by a change in the type of cells flushed into the blood from a relative hyperlymphocytosis to a hypermonocytosis. Conversely the author has observed leucemia supervening in cases of tuberculosis, which then assumed a very long, slow course. There existed for example in a lymphatic blood picture an enlargement of liver and spleen, but for a long time there was no participation of the peripheral glands, or else the leucemic process was confined for a long time to a single group of glands. Frequently the diagnosis could be made only by excision and examination of a lymph gland.

LEGAL

A SURGEON RECOVERS FOR DISABLING INJURIES

By LORENZ J. BROSNAN, ESQ.

Counsel Medical Society of the State of New York

A case of great interest to the medical profession was the subject of a recent decision by the Circuit Court of Appeals in one of our mid-Western States. We feel, because of the importance of the case, that it merits a very detailed review in these columns.

The plaintiff was a physician, the defendant an insurance company. The action was brought on a policy of accident insurance which the physician had taken out with the company prior to the incident which formed the subject-matter of the action. The yearly premium on this policy was $750. One of the provisions included in the policy was a weekly indemnity of $250 for total disability which would prevent the assured from performing the duties pertaining to his occupation. The plaintiff had, for about twenty-seven years prior to the commencement of the action, devoted himself entirely to the practice of surgery in a large mid-Western city. During the policy period the doctor accidentally fell on the sidewalk in front of his house. At the time he was carrying a glass jar, and the fall broke the jar, lacerating his right hand and wrist. The median nerve was severed and clearly the result was a serious impairment in the use of the hand and wrist.

The doctor claimed that the injury so sustained constituted a total disability within the meaning of the policy. The insurance company resisted this contention, whereupon about two years after the injury the doctor instituted suit against the company and recovered payment for total disability over the period of time that he had been incapacitated subsequent to the injury. Sometime later he instituted the present action to recover for permanent disability.

On its face the policy showed that it provided compensation for accidental injuries to the plaintiff, a surgeon engaged in his occupation of surgical practice. The answer of the defendant insurance company included allegations that the doctor was not in fact wholly disabled, and that he could still engage in the practice of his profession even though he could not perform manual operations. This allegation was based on the theory that the profession of the plaintiff was "surgical practice" and that term included, in addition to the actual operating of cases, at least three other types of work. They were described as, first, the diagnosis of the mental, physical and nervous condition of the patient; second, the care of the patient preparatory to or subsequent to an actual operation; and, third, duties as a consulting surgeon who does not actually operate. The company contended that the plaintiff was able to perform duties of this sort and, therefore, was not prevented wholly from engaging in surgical practice.

On the trial, it seems to have been established beyond doubt that the doctor's hand was still seriously injured. He testified that as a direct result of the accident he had lost the faculty of sensation in the major part of his right hand and, except for the little finger and part of the palm of the hand, it was really useless. He swore that he was no longer able to diagnose properly by two-handed palpation and that he could not properly handle the instruments necessary to do surgical work. He also testified that he had submitted to five operations and an extended course of treatments in an attempt to regain the usefulness of the hand, but that these operations and treatments had not been successful and the hand had in fact become worse. The doctor also told the Court that he had made no attempt to resume his practice, as he well understood the responsibilities of a surgeon and knew that to do so would throw him open to charges of malpractice on the part of the patient.

The defendant introduced medical testimony to show that with injuries similar to those sustained by the plaintiff it was still possible to engage in surgical work. By agreement between the parties, the doctor called five witnesses besides himself and so did the company. All of the company's witnesses were crippled, some worse than the doctor, and all professed to be successfully engaged in some phase of surgical practice, and all of them agreed that surgical practice could be carried on by one unable to use instruments. These witnesses contradicted the plaintiff's witnesses as to what the description "surgical practice" covered, implying that it did not necessarily include the ability to use surgical instruments or to operate with them on human beings.

The crux of the case depended upon the interpretation given to the term "surgical practice" in the policy. When the Court charged the jury upon this point, he defined "surgery" as follows:

"Surgery is a branch of medical science. It is limited to manual operations usually performed by surgical instruments or appliances."

Counsel for the insurance company requested the Court to charge upon this point as follows:

"The occupation covered by the policy and for which the plaintiff was insured, is surgical practice. Surgical practice means the general practice of surgery by one authorized by law to engage in such occupation, under the ordinary circumstances in which a surgeon follows such occupation, and applies to one skilled in the knowledge of medicine and surgery. The occupation of surgical practice is not limited solely to the performing of manual operations, but includes all material duties, as disclosed by the evidence, involved in the occupation of surgical practice."

The Court, however, declined to so charge. Apparently it did not agree with the defendant's contention that the term "surgical practice" is somewhat broader than the word "surgery," and of course under the Court's charge "surgical practice" within the meaning of the policy implied of necessity the ability to perform manual operation.

The jury returned a verdict in favor of the physician and from the judgment entered thereon the insurance company appealed to the Circuit Court of Appeals. That Court, with one Judge dissenting, affirmed the judgment below. One of the principal points raised by the insurance company on this appeal was that the theory of their defense had not been fairly submitted to the jury by the Trial Court. Upon this point the Circuit Court of Appeals said:

"Admittedly it had to be boiled down for submission to a jury. So analyzing the mass to define the theory we find that it proceeds from the obvious fact that the performance of the duties of every professional occupation includes and presupposes in the professional the exercise of many trained and developed powers. Conspicuously every such occupation includes the duties skillfully to observe, to estimate, to apprehend and to prepare for conditions and to consult with others about them and to resolve upon them preceding, accompanying and following professional action. And in all the professions there are specialists There are theologians who do not preach, lawyers who try no cases, doctors who administer no potions and surgeons who never incise. Observing that surgical practice in no wise differs from all professional occupations in this general aspect, defendant centered upon a certain number of such incidents of the surgical practice, like diagnosis, consultation, preoperating and post-operating attention and so forth, and developed that cripples could do those things and some other things and make a living at it, and it contended that the doctor could likewise. * * * It was a fair defense and no impropriety is charged in the conduct of it. But, however elaborated the defense remained as succinctly epitomized in defendants' answer, 'that by reason of the ability of the plaintiff to do and perform many of the duties hereinabove detailed and many other duties hereinabove detailed and many other duties pertaining to the occupation of surgical practice, the plaintiff is not entitled to recover.'"

The Court then went on to discuss generally the provisions of accident policies, with special reference to the policy before the Court, and said:

"Such accident policy provisions have been before the courts time out of mind. It has always been obvious that an absurdly literal construction could be put upon such words as 'any and every duty pertaining to my occupation' which would reduce the coverage for total disability to the states of coma or absolute mental and physical helplessness. But the fact that money is paid and accepted for accident insurance under these policies compels attributing good faith to the parties and a construction of the words used in the policy conformable to an honest intention to indemnify against total inability to practically carry on the occupation specified. * * * It appears * * * that the doctor's injuries were to his hand only and that the doctor's health was good save for the lost eye and the crippled right hand. Accordingly it must be deemed well and firmly settled that such total disability provisions of any accident policy as here presented do not limit recovery to cases of coma or complete helplessness, nor is recovery precluded because the insured gets well enough to follow some other occupation than the one covered by the policy. * * *

"Obviously the words of this clause, 'prevent the insured from performing one or more material duties,' like the words of the other clause, 'prevent the insured from performing any and every duty,' could be absurdly construed to describe a state of helplessness. In a strained sense one flat on his back unable to move is merely 'prevented from performing' more duties pertaining to his occupation than the lone duty of thinking about it. But the same assumption of good faith in the parties prohibits the construction, and the courts con-

strue the clause as consistent with honest intention to indemnify against partial disability."

In holding that the case had been fairly tried and the issue resolved in favor of the doctor by the jury and, hence, no legal reason was found in the record to disturb the verdict of the jury, the Court said:

"Whether the doctor was malingering or actually disabled was before the jury every moment of the trial. The jury must have believed that the doctor could not practice surgery if he tried. The word 'disabled' carries that implication clearly and unequivocally. To couch the same thought in the terms of duty adds words but no substance. * * *

"On the whole case it is evident that reasonable minds may well differ as to whether a man of Doctor M's physical and mental vigor has been totally disabled for surgical practice. But it has been settled by the jury upon a fair trial most ably contested by counsel on both sides."

RECURRENT HERNIA

In this case a young woman of heavy build consulted the defendant, a physician and surgeon specializing in surgery, complaining that she was suffering from a rupture. Upon examining her the doctor found that she had a bilateral indirect hernia, and he suggested an operation to which the proper consent was given.

The doctor performed a modified Bassini operation, under a general anesthesia, which operation was roughly described as opening the skin and the sac; then isolating and tying off the sac and the conjoined tendon being sewed over to Poupart's ligament; and the facia of the oblique external muscle being closed and sutured with chromic catgut, and the skin being sutured likewise with catgut. Bandages and dressings were applied and the patient remained in the hospital for about nine days, at the end of which time she was discharged, her progress up to that point having been extremely satisfactory.

During her hospitalization the doctor daily changed the dressings himself and after her discharge the patent returned to him in order that he might change the dressings weekly for the next several weeks. At the date of the last of such treatments the wound was entirely healed and the doctor discharged her as no longer needing medical care.

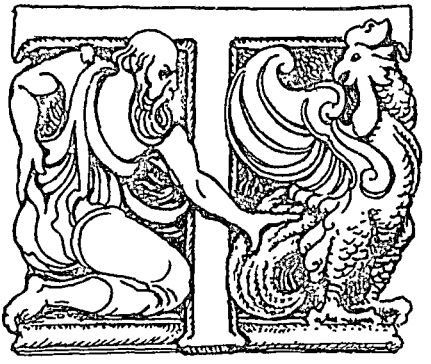
Some months later a suit was instituted against the defendant doctor based upon a claim that the hernia had recurred and that the plaintiff had been obliged to undergo a subsequent operation for the treatment of double oblique inguinal hernia. The plaintiff charged the defendant with being negligent in that he failed to perform a "process of grafting" knowing that the plaintiff was a stout woman at the time of the operation, and further that the defendant was negligent "in that he allowed and permitted large fatty deposits of tissue at the site of said rupture or hernia to remain therein; in that he negligently caused the incisions of and around said rupture to open; in that he failed to perform sufficient sutures, in consequence of which said sutures could not hold together and opened immediately after the performance of said operation." The case regularly came on for trial and the defendant and his attorney appeared in court ready to proceed with the defence of the action, but the plaintiff failed to appear. The court, therefore, on motion of the defendant's attorney, dismissed the case, finally terminating the matter in favor of the doctor.



NEWS NOTES

MEDICAL INITIAL LETTERS

THE use of ornamental first or initial letters of chapters and paragraphs, done in symbolic designs, was a familiar device for illustrating or illuminating ancient manuscripts. The NEW YORK STATE JOURNAL OF MEDICINE, throughout its thirty-one years of existence, has used a boldfaced initial letter three lines deep to begin each article in its scientific department. This particular article begins with the initial letter "T," five lines deep, drawn by Dr. Robert L. Dickinson. The design is based on a stone carving over the window of the large assembly hall of the building of the New York Academy of Medicine. It represents Hippocrates, the Father of Medicine, about to grasp a cock, the symbol of vigilance and the appropriate sacrifice to Æsculapius, the God of Healing.



The Academy of Medicine building is ornamented with symbolic carvings of men and animals appearing over the lintels of doorways and windows. The importance and appropriateness of these symbolic figures are indicated by their inclusion in stone in the Academy building.

Dr. Dickinson considers these designs to be worthy of display at the beginning of every scientific article. He therefore offers a specimen of the initial letter "T" as a demonstration of illumination appropriate for a medical journal, such as THE NEW YORK STATE JOURNAL OF MEDICINE, or the Bulletin of the Academy of Medicine.

SUFFOLK COUNTY

The 125th Annual Meeting of the Suffolk County Medical Society was held on Thursday, October 29, in the Henry Perkins Hotel, Riverhead, with the President, Dr. W. J. Tiffany, in the Chair. A business meeting was opened at 12 o'clock noon, and was followed by a luncheon. A scientific session was held in the afternoon. There were present 39 doctors of the Society, and 30 guests, including public health nurses and wives of the members.

The Secretary reported that the Comitia Minora had held three meetings during the six months since the last meeting of the Society, and that one of the meetings was for the purpose of formulating plans to the cooperation of the physicians of the County with the County Health Department in combating the epidemic of poliomyelitis. (See this Journal, September 1, 1931, page 1103.)

The Secretary, Dr. E. P. Kolb, reported on the routine work of the Secretary's office, and said that all matters of general interest had been published in the Monthly News Letter of the Society.

The Treasurer reported in detail on the finances of the Society.

Dr. A. T. Davis, for the Publication Committee, reported "that the News Letter had been issued regularly and that about 250 new names had been added to the mailing list, the additional cost being taken care of by the County Health Dept."

Dr. Frank Overton, Chairman of the Public Health Committee, reported on the satisfactory cooperation of the physicians with the County Department of Health, and on the questionnaire sent to doctors to ascertain the prevalence of venereal diseases as a preliminary step to an active campaign against those diseases at the expense of the County Health Department, according to a State law passed last Winter, requiring counties having county health departments to provide treatment for venereal patients who otherwise could not obtain treatment This law is similar to the welfare law which is working well in the County.

Dr. Arthur T. Davis, County Health Commissioner, gave a detailed report on the recent poliomyelitis epidemic. This report covered the distribution, age incidence, sex, percentage of deaths and paralysis, etc. He reported that about 8000 c.c. of immune serum had been secured from 25 donors. Dr. Davis expressed his appreciation of the hearty cooperation given the Department of Health by the practicing physicians of the County.

Dr. W. H. Ross, Chairman of the Economic Committee, gave a detailed report of agreements made with the County Welfare Commissioner in regard to the care of patients under the Welfare Law. The report was unanimously adopted, and was as follows:

"The Committee on Economics of the Suffolk County Medical Society held three meetings with Welfare Commissioner Ernest Van Hise, and Hospital Superintendents, and agreed upon the following standards for the administration of that part of the State Welfare Law relating to medical services to those persons who are unable to secure necessary medical care:

"1. The family physician of the patient shall be employed as in private practice.

"2. The employment of a doctor shall be authorized by the Commissioner of Welfare, or one of his fifteen local deputies

"3. When a doctor is called to attend a patient under the Welfare Law, he shall at once notify the Commissioner or his deputy, and get a written authorization for his attendance. This authorization must be renewed every two weeks for continued attendance.

"4. In an emergency case the physician shall give the proper treatment at once; and within forty-eight hours he shall obtain the proper authorization for his treatment.

"5. Additional authorization shall be obtained for unusual procedures, such as *x*-rays, laboratory analyses, consultations, and surgical operations.

"6. The following principles shall be considered as standard in regard to medical fees:

"Office call $2.00
"Visit to the house 3.00
"Visits at a hospital, two dollars per day regardless of the number of visits.
"Obstetrical case 25.00
"Prenatal office visits during a period of four months previous to confinement, each 2.00
"Surgery fee, to the surgeon... $5.00 to 50.00
"Surgery fee, to the medical assistant, 5.00 to 10.00
"Surgery fee, to the anesthetist $5.00 to 10.00
"Hospital charge, including basic laboratory examinations, per day..... 3.50
"One necessary *x*-ray plate shall be taken free and additional ones shall be authorized by the Commissioner or his deputy.

"7. The Committee on Economics of the Suffolk County Medical Society offers its services in arbitrating disputes regarding medical bills or services."

The Society voted its confidence in the County Health Department, in the following resolution:

"RESOLVED, That the Suffolk County Medical Society hereby reaffirms its opinion first expressed in 1926 that public health administration can only be efficiently done by county organization (to replace township part-time organization); that after three years of experience the local profession more strongly than ever believes that the efficiency of public health practice is greatly improved by county organization; and that the physicians of the County have found that a County Health Department is an asset in their professional work and an asset to their economic welfare."

The following officers were elected for the year 1932:

"President, Charles C. Murphy, Amityville; Vice-President, Joseph H. Marshall, Southold; Secretary, Edwin P. Kolb, Holtsville; Treasurer, Grover A. Silliman, Sayville; Censors, Wm. J. Tiffany, Wm. N. Barnhart and Louis A. Garben; Delegates to State Society, Albert E. Payne and Chas. C. Murphy; Alternates, Edwin P. Kolb and Arthur T. Davis; Delegate to Second District Branch, Wm. H. Ross."

The following new members were elected:

"Drs. Abraham I. Goldschlager, Islip; Victor K. Young, Riverhead; Morris W. Molinoff, Brentwood; Vincent A. Doroszka, Patchogue; Ethel H. Trygstad, Brightwaters; Arthur E. Corwith, Bridgehampton; Roland G. Vaughn, Amityville; and Cathryn V. Riley, Patchogue. By transfer from the Ontario County Medical Society, Dr. Hiram R. Barringer, Bay Shore; and from the Kings County Medical Society, Dr. Morris R. Keen, Patchogue."

The program of the Scientific Session consisted of two papers, as follows:

1. President's Address, on "Modern Ideals in Medicine," by Dr. William J. Tiffany, Kings Park.

2. "Treatment and After-Care of Poliomyelitis," by Dr. Walter Truslaw, Brooklyn.

EDWIN P. KOLB, *Secretary.*

BRONX COUNTY

A regular meeting of the Bronx County Medical Society was held at Elsmere Hall on November 18, 1931, at 9 p.m. with the President, Dr. Irving Smiley, in the Chair.

The following doctors were elected to membership: Drs. Nathan Block, Emil G. Conason, Arnold A. Constabile, Julius Dankberg, David Diamondstone, Louis Richard Ferraro, Benjamin Fleissig, Joseph Harkavy, Max B. Kampf, Joseph Melton, Israel Pine, Angelo Procaro, I. Jerome Silverman, Nathaniel Sipilesko, S. Sydney Tausend, Felix P. S. Vogel, and Lionel Charles Rubin (Associate Member).

Dr. H. L. Frosch, who with Dr. Samuel Gitlow represented the Bronx County Medical Society on the Subcommittee on Pathological Laboratories of the Coordinating Committee of the Five County Medical Societies, reported relative to proposed modifications of the sanitary code affecting clinical laboratories. These modifications were referred to the county societies for their approval. Dr. Frosch explained the modifications recommended and asked for the approval of our society as recommended at the last meeting of the comitia minora. The report was accepted and the recommendations were approved.

Dr. E. N. Lefcourt, Chairman of the Social Committee, reported relative to the proposed beefsteak dinner and show to be held on December first, and appealed for the cooperation of the doctors.

Dr. B. H. Archer, for the Committee on Medical Economics, reported on the special economic meeting being arranged by the committee, to be held at Elsmere Hall, on Monday evening, December 7, 1931, at which the topic for discussion will be "A plan to prevent the wholesale, indiscriminate practice of medicine and surgery by the City of New York," presented by Dr. C. J. O'Connor, of the committee. Dr. Archer urged the members to attend the meeting and to give the committee their earnest support.

The President called attention to the joint meeting of the organized medical and dental professions, which will take place at the Hotel Pennsylvania, on Monday, November 30, and asked for a large representation from our society.

The Scientific Program then proceeded as follows:

Paper: Benign and Malignant Tumors of the Breast: Early Diagnosis, Treatment and Prognosis (Lantern Demonstration), Joseph C. Bloodgood.

The paper was discussed by Drs. Burton J. Lee, Henry Roth, Abraham O. Wilensky, Bradley L. Coley, William Klein and Charles S. Rogers. The discussion was closed by Dr. Bloodgood.

I. J. LANDSMAN, *Secretary.*

FRANKLIN COUNTY

The annual meeting of the Medical Society of the County of Franklin was held in the lecture room of the Alice Hyde Memorial Hospital, October 28, 1931.

The following members were present: Dr. P. E. Stamatiades, President, in the chair; Dr. H. Beattie Brown, Vice-President; Dr. G. F. Zimmerman, Secretary-Treasurer; Dr. G. C. de Grandpre, Censor; Drs. D. M. Brumfiel, E. N. Packard, J. W. Price, S. F. Blanchet, A. G. Wilding, C. E. Stickney, A. L. Rust, R. H. Mayhew, P. F. Dalphin, J. W. Blackett, W. H. Kingston, F. F. Finney, D. C. H. Van Dyke, E. E. Thurber, E. M. Austin, and J. E. White. Visitors, Dr. S. W. Sayer, District State Health Officer, Gouverneur, N. Y., and Dr. A. H. Hyman, Faust, N. Y.

The Secretary's report showed fifty-three members in good standing, while two were dropped in 1931 for non-payment of dues.

The following officers were elected for 1932:

President: H. Beattie Brown, Saranac Lake.

Vice-President: J. W. Kissane, Malone.

Censor for three years: E. M. Jameson, Saranac Lake.

Delegate to State Society meeting 1932: C. C. Trembley, Saranac Lake.

Dr. Anthony B. Gedroiz, of Saranac Lake, was admitted to membership.

The Committee on Medical Economics reported that an agreement had been reached with the supervisors of Franklin County providing remuneration to physicians for the hospital care of indigent patients, and a schedule of fees had been agreed upon. This agreement dates from July 1, 1931.

Dr. Jameson on behalf of the Saranac Lake Medical Society extended a cordial invitation to all members of the County Society to attend their meetings, these meetings to be held every two weeks from November to March, beginning November 4th.

Dr. White addressed the meeting on the subject of auto accidents where settlements of hospital and physicians' bills are made by the carriers directly to the injured, instead of to the hospitals and physicians themselves. In many cases the injured refuse to pay their hospital and physician's bills after receiving money for that purpose from

the carriers. It was moved, seconded and carried that a petition be forwarded to the State Medical Society and to the Legislative Committee asking that legislation be fostered to correct that condition.

The following petition was framed and mailed to the Legislative Committee of the State Medical Society.

"The Medical Society of the County of Franklin petitions the Medical Society of the State of New York and its Legislative Committee to foster such legislation as is necessary to compel insurance companies to assume the payment of hospitals and physicians for attendance on victims of automobile accidents, such bills to be paid directly by them to the hospitals and physicians concerned."

SCIENTIFIC SESSION

The following papers were presented:

1. Poliomyelitis: Dr. S. W. Sayer, Gouverneur.
2. The Use of Some of the Newer Drugs in Heart Disease: Dr. D. M. Brumfiel, Saranac Lake.
3. Home Treatment versus Sanatorium Treatment in Pulmonary Tuberculosis: Dr. R. H. Mayhew, Malone, N. Y.

G. F. ZIMMERMAN, *Secretary.*

BROOME COUNTY

The Broome County Medical Society held its regular monthly meeting in the Art Gallery of the Arlington Hotel in Binghamton, November 10, 1931.

The usual business session, which included at this time the nomination of officers of the Society for the ensuing year, preceded the educational program which was given over to Dr. B. H. Nichols, Director X-ray Department, Crile Clinic, Cleveland, Ohio. Dr. Nichols's subject was "Role of the Roentgenologist in Pain of the Upper Right Abdominal Quadrant," and was profusely illustrated with picture demonstrations. The address covered the subject in a very painstaking and detailed way and exemplified the keen observations and vast experience of this high authority.

There was a full attendance, including guests from adjoining Counties.

HENRY D. WATSON, *Secretary.*

FIRST DISTRICT BRANCH

The twenty-fifth annual meeting of the First District Branch of the Medical Society of the State of New York was held on Wednesday, October 7, 1931, in the Hotel Palatine, Newburgh. The President, Dr. Charles D. Kline of Nyack, Rockland County, presided.

The First District Branch is composed of three county societies of Greater New York—Richmond, New York, and Bronx; and four Hudson Valley societies—Westchester, Dutchess-Putnam, Rockland, and Orange. Seventy-five members from these seven county societies were present.

The meeting began with a social gathering as the members began to assemble at noon. A luncheon was served at one o'clock followed by after-dinner speaking.

Dr. W. D. Johnson, President of the Medical Society of the State of New York, outlined some of the ideals of a family doctor, illustrating his remarks with apt quotations of poetry.

Dr. Charles G. Heyd, President-Elect of the State Society, gave a brief description of a visit to France as one of a group of official medical visitors to the French government.

Dr. John A. Card, Speaker of the House of Delegates and Chairman of a special committee on indemnity insurance, made a plea that every doctor should take advantage of the reduced rates offered for indemnity insurance by the Etna Insurance Company under on agreement with the State Society.

The scientific session was of unusual interest and value, and the program included four speakers as follows:

I. "Medical Nomenclature," H. P. Logie, M.D., New York Academy of Medicine.

II. "Compensation and the Doctor," V. A. Zimmer, Director of Compensation Division of the State Labor Department.

III. "Some Phases of Circulatory Failures and Their Treatment," Marcus A. Rothschild, M.D., New York.

IV. "Lung Abscess—Newer Phases of Treatment," Harry Wessler, M.D., New York.

THE DAILY PRESS

DARWINISM IN VERSE

Modern animals may be survivals of the fittest amid changing swamps and mountains and plains; or they may be the result of an orderly development like that which takes place in the mind of man as his childish notions blossom into the creations of reason. James J. Montague inclines to the older idea of Darwinism in the following verses in the New York *Herald Tribune* of November 9:

"The pterodactyl was a fowl
Much larger than a hawk or owl,

And furthermore, as you will find,
He was a bird and brute combined.

Combine an eagle and a bat
And it will help you to get at

What pterodactyls really were—
Great flying beasts that had no fur,

As well as brutes which had no growls
Because they partially were fowls.

No members of this curious race
Abide today in any place.

They merely show how Nature tried,
With small experience for a guide,

To fashion things which might survive,
And eat and drink and fight and thrive

Upon this rolling mundane sphere,
And prove that they belonged down here.

This proof remained quite unsupplied
And so the simple creatures died.

So you and I should both be glad
That later on our chance we had,

When Nature found, by 'cut and try,'
That we'd be able to get by,

And prove at last that we were worth
Preserving long upon the earth."

NECESSITIES OF LIFE

Cigarettes are not necessities of life in Chicago, according to the following item in the New York *Herald Tribune* of November 6:

"Two packages of cigarettes, J. L. Jacobs, county efficiency expert, estimated today, cost the county $246. He stood with a stop watch in his hand yesterday while the county Board of Commissioners debated the question of whether they should pay 30 cents for the two packages, the cost of which was listed on a bill for meals for a jury. Mrs. Glenn Plumb, one of the commissioners, protested, contending that cigarettes are not lunch.

"The debate which followed lasted for fifteen minutes, but in the end the commissioners decided they could not be expected to furnish smokes for jurors.

"'I've been doing some figuring,' Mr. Jacobs said. 'At the rate you commissioners and the stenographers and other employees are paid, it cost the county $246. And that doesn't count the cost of heating this room.'"

On the other hand the New York *Times* of November 30 predicts that cosmetics may be necessities in Philadelphia:

"Society leaders and business women insist cosmetics are necessities, although a bill has been introduced at the special session of the Legislature to tax sales of cosmetics 10 per cent on the ground that such preparations are luxuries.

"'Cosmetics are as much a necessity as toothpaste,' says Mrs. Pauline B. Peters, president of the Philadelphia Club of Advertising Women. 'They are a necessity because a good appearance is a necessity—a business necessity.'

"'Rouge, powder and lipstick are psychological necessities,' asserts Mrs. H. Maurice Snyder, former chairman of juniors for the State Federation of Pennsylvania Women.

"'I think the importance of a woman's looking well lies in her looking well to herself. Her morale is boosted 100 per cent when she does.'

"Mrs. William L. Van Leer of the Junior League calls cosmetics an essential 'part of a woman's physical hygiene.'"

TRUTH vs. FICTION

The most serious truth-teller may seem to be a liar, or a vaudeville entertainer, when he explains natural phenomena to an ignorant audience. Thus did an Englishman to an audience of Hindus when he told of water becoming hard so that men walked on its surface; and thus did Dr. Roy Chapman Andrews seem to an audience of prisoners on Welfare Island, New York City, when he told them of dinosaur eggs found in the Gobi Desert when he was leading a research expedition of the American Museum of Natural History. The *Tribune* of November 23 says:

"Dr. Roy Chapman Andrews gained the incredulous applause of the workhouse gathering on Welfare Island yesterday afternoon with his strange tale of the Chinese dinosaur eggs that were 95,000,000 years old. Some of the inmates of the place seemed to think it was the funniest story they had ever heard; they roared with laughter when he assured them that the eggs really were that old and after he had finished the lecture, they had him return again 'to the egg part' and tell it again.

"His audience listened indifferently as Dr. Andrews began. He was the man who had been to Asia looking for Adam. He talked about the windstorms, the wild asses which roamed the desert, they were mildly interested when he told them that an antelope wrapped in a man's fur-lined vest had escaped one cold night. They listened to him tell about fish in lakes a thousand miles from the ocean. However, as he came to the dinosaur eggs, they became interested.

"Some sat with a rapt expression; some opened their mouths, stared and listened; they looked at one another, half smiled and when Dr. Andrews said 'You may think I am an awful liar,' they shouted with laughter.

"They wanted to know why anyone should go so far for eggs that were so old; they wanted to know how much it had cost to get the eggs and to bring them here; they wanted to know where the eggs were now.

"'Professor,' inquired a Negro woman, 'how come if you say an animal as big as a dinosaur laid those eggs, how come the eggs aren't bigger? Seems like they ought to be big as a grand piano.' Dr. Andrews explained that the animal which had laid the eggs was nine feet long and that the eggs were nine inches long. 'So,' he said, 'we have one inch of egg for one foot of dinosaur so that shouldn't be so bad for a record.'

"One negro boy wanted to know how long it would take eggs 95,000,000 years old to hatch. They told him as soon as they got off the island they were going straight to the American Museum of Natural History and see the thing for themselves."

COCKROACHES

Physicians who are sanitarians are compelled to take an interest in the cockroach from a human point of view; and those doctors who are biologists study it because it has survived almost unchanged from early geological ages. An editorial writer in the New York *Times* of November 9 has hit upon information which doctors' wives may cherish when he says:

"Cockroaches, the American Association for the Advancement of Science informs an eager world, lose about 9 per cent of their body weight daily in dry air at 86 degrees Fahrenheit; in four days they die.

"This will be gratifying news to housewives, especially in New York. They will have merely to maintain for four days an even temperature of 86 degrees Fahrenheit in the proverbially dry air of their apartments and the cockroaches will vanish. Thereby will be created more technological unemployment as science drives the exterminators out of business.

"Too little attention, aside from applications of various pastes, powders and what not, has been given to the cockroach. Few of us, for example, have taken time to learn that it is 'a blattid orthopterous insect especially abundant in hot countries,' although most of us knew that it is 'chiefly nocturnal.' Furthermore the Croton bug, or, in more recent years, water bug, which in our ignorance we fancied was native to this city and its environs, is in truth an alien—the German cockroach, *Phyllodromia germanica,* to be exact?"

BOOK REVIEWS

QUANTITATIVE CLINICAL CHEMISTRY. By JOHN P. PETERS, M.D., M.A., and DONALD D. VAN SLYKE, Ph.D., Sc.D. Volume 1, Interpretations. Octavo of 1264 pages, illustrated. Baltimore, The Williams & Wilkins Company, 1931. Cloth, $12.00.

The authors have enriched American medical literature with an extremely valuable textbook. The volume represents the product of the labors of two leading authorities in their respective fields. Although the book is entitled a Clinical Chemistry, it essentially treats with the chemical aspects of clinical medicine. There are exhaustive chapters on the chemistry and metabolism of the foodstuffs, an extensive discussion of the clinical syndromes associated with deranged metabolic functions, and an accumulation of the literature of every subject discussed. Thus diabetes mellitus becomes the subject of an extensive elaboration in these chapters. The chapters on Protein and Non-protein Nitrogen lead up to a complete dissertation on the nephritides. Uric acid and gout make up the material of another chapter. There are many valuable therapeutic suggestions presented and discussed on a profoundly scientific, physiologic basis. It contains a chapter on hemoglobin and oxygen with their direct clinical applications to cardiac disease, pneumonia, carbon monoxide poisoning, anemia, and the chronic respiratory diseases. Other subjects presented of extreme clinical value are those of body fluids and edema; acidosis; alkalosis; the role of the inorganic constituents of the blood and tissues, including calcium magnesium, sodium, potassium, phosphorus, sulphur and chlorides. The book contains a fine chapter on the acid-base balance of the blood with a description of the diseases which affect the balance. This book thus represents the accumulation of the most recent knowledge of the chemical basis of diseased states.

It is a step in a new direction, and takes a place with structural pathology as a factor in the elucidation of the pathogenesis of internal diseases. No physician can practise modern medicine without a thorough acquaintance with the information presented in this monumental text-book. It will undoubtedly become an invaluable adjunct to the medical student for his training in biological chemistry, physiology, medicine and therapeutics. It is recommended by the reviewer as the best text-book of its kind in English literature.

WILLIAM S. COLLENS.

NUTRITION AND DIET IN HEALTH AND DISEASE. By JAMES S. MCLESTER, M.D. Second edition. Octavo of 891 pages, illustrated. Philadelphia and London, W. B. Saunders Company, 1931. Cloth, $8.50.

The author has issued a second edition and has brought up to date a very valuable book. The introductory chapter is concerned with the metabolism of foodstuff and energy requirements of the body. Dr. McLester presents a very logical dissertation on the protein requirements of the body with recent observation on the physical effects of high protein diets among Eskimos and Arctic explorers. The author also quotes the interesting work of McCoy who pointed out the poor physical state of the Bengali, living on a low protein ration compared with the fine physique of the Sikhs, a high protein-consuming race. That together with Whipple's studies on the value of meats in blood building seem to dissipate the fear of the production of renal damage by liberal protein diets. The author also gives a concise but clear presentation of the vitamin, mineral and water metabolism of the body.

There is an interesting chapter on Satiety value of foods, normal menus, and the economics of the normal dietary. Then follows a chapter on Food Products, with a description of the chemical composition, preservation, canning and cost of the common foods. Among them are included dairy products, meat, fish, eggs, cereals, and vegetables. An important statement found in this chapter is concerned with the general misconception among physicians that there are chemical differences between red and white meats, particularly regarding salt content.

There follow chapters on the normal diet, and the diet during reproduction. The author has added a chapter on toxemia of pregnancy to the new edition. The book also contains a chapter on Infant Feeding by McKim Marriott. The second part of the book is concerned with nutrition in disease. The author presents the dietetic requirements together with practical methods of dietetic management of the following groups of diseases: deficiency diseases, diabetes mellitus, gout, obesity, anaphylaxis, disorders of the genito-urinary and gastro-intestinal systems, febrile conditions, vascular disease, skin diseases, and the feeding of surgical patients. The book closes with a valuable section on methods of feeding, cooking, and numerous important tables of use in nutritional work.

WILLIAM S. COLLENS.

FOOD ALLERGY: Its Manifestations, Diagnosis and Treatment with a General Discussion of Bronchial Asthma. By ALBERT H. ROWE, M.S., M.D. Octavo of 442 pages. Philadelphia, Lea & Febiger, 1931. Cloth, $5.00.

It is with much interest and pleasure that we have reviewed Dr. Rowe's book on "Food Allergy."

Of recent years the internist and the allergist have become discouraged with the results of skin tests using the foods, especially in adults. Repeated negative results have made it seem almost useless to do this kind of testing in many cases. In his book Dr. Rowe has offered a very reasonable explanation of this and has shown us a way out of the dilemma. His "elimination diets" will mark a real advance in the diagnosis and treatment of allergy. His chapters on allergic migraine, canker sores, urticaria and the intestinal types of allergy are very valuable. He has reached the conclusion that in many cases these conditions may be attributed to food very careful medical investigation to rule out other disallergy but he has reached this conclusion only after eases or conditions as etiological factors.

The reader gains the distinct impression that the work is sound and that the conclusions drawn are not over enthusiastic. Because of the complicated nature of the diseases due to allergy and the painstaking care required to arrive at a diagnosis, it becomes more and more apparent that the complicated and obscure cases can best be handled by internists who are devoting themselves to allergy.

Dr. Rowe's book marks a real contribution to this field of study and should be invaluable as a reference book for internists as well as allergists.

E. P. MAYNARD, JR.

OUR NEIGHBORS

CHIROPRACTORS IN CALIFORNIA

The October number of *California and Western Medicine* contains the following interesting news notes regarding chiropractors in California:

"The minimum standards as to equivalent quantity and quality in training as laid down by Class A Medical schools are not excessive and, being reasonable and proper, should be the basic minimums which would be demanded of all persons who sought the legal sanction of the State to go before the public, as being competent to treat the diseases and injuries of human beings.

"However, and unfortunately, California adopted the course of not applying basic standards of minimum preliminary and professional education in healing art matters. As a consequence, each year sees the licensure, not only of a considerable number of medical graduates from institutions demanding proper basic minimum standards, but also witnesses the advent into the fold of licensed practitioners of an unusually large number of graduates of sectarian or cultist schools, the standards of which schools in some cases are considerably below those of the majority of medical schools of even some twenty or thirty years ago!

"The inspection of the registration figures of Los Angeles County which were printed in the September *California and Western Medicine* of last month, page 238, reveals how such a double or multiple board system works out in actual practice. The sectarian school known as the chiropractic, for instance, which secured its legal recognition in California about the year 1923, has since that time turned out many graduates, and the California Chiropractic Board of Examiners has granted legal recognition to a large number of such. For figures on these points see the item above referred to, and also *California and Western Medicine* of July, 1930, page 517, and December, 1930, page 915.

"From the statistics available it would appear that within less than ten years a total of about three thousand graduates in chiropractic have been granted licenses to practice the healing art in California. It is probably a safe assumption to affirm that the majority of these graduates probably did not have a complete high school education in the way of preliminary training, and that the professional curricula of their respective schools were far, far below those which would be construed as equivalent to the curricula of Class A medical schools of America.

"In California and some other states—even though such sectarian or cultist graduates possess educational and training qualifications far below the minimum standards laid down by the best American and foreign schools of medicine—their graduates are none the less granted licensure privileges which permit them to go before the people of California on equal basis with graduates of Class A schools. Such a state of affairs, of course, is dreadful inconsistency. However, at this late day little or nothing can be done in the above premises because the citizens of California through initiative vote have granted these sectarian groups legal rights which not even the legislature can change.

"What is of importance to the people of California, however, is the attempt now seemingly being started in California which, if it goes on to fulfillment, will give a certain number of chiropractor licentiates the right to obtain from their board an extension of their fields of practice in that they would be given chiropractor physicians and surgeons' certificates, probably equal in scope and powers to physicians and surgeons' certificates as granted by the Board of Medical Examiners of the State of California.

"For some time now, in the Sunday magazine section of the *Los Angeles Times*, the '—— College of Chiropractic' of Los Angeles, and latterly its presumable successor, the '—— College of Chiropractic,' have printed advertisements which read as follows: 'Become a Doctor of Chiropractic. Learn a dignified profession. Students receive a thorough training at this institution. Our course is complete in every detail and includes: dissection, chemistry, *x*-ray, electrotherapy and obstetrics. There is an abundance of clinic work. We have added an extra 1,000 hours of medicine and surgery which is optional to the student. Day and evening classes. Enroll now. Write for literature. State board quiz classes.'

"We have been informed that the last named school now has about sixty students to whom it has been stated it is giving a physicians and surgeons' course, with the implied understanding that such students probably later on may be able to obtain physicians and surgeons' licenses.

"If the above information be not in error, California may add to its list of physician and surgeon licentiates a new group, so that it would then have the following ensemble:

"1. As at present, graduates of nonsectarian medical schools holding 'physicians and surgeons'

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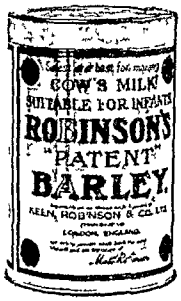
The addition of Barley Water makes the mixture curdle in a manner similar to human milk—in small clots, rather than large clots as in the case of cow's milk. It is thus made more digestible.

As a diluent, it not only replaces plain water, but, since it contains a small amount of starch, Robinson's "Patent" Barley gradually adapts the infant to starchy foods which will later form the major part of his diet.

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(*Continued from page* 1528)

certificates granted by the Board of Medical Examiners of the State of California.

"2. As at present, graduates of sectarian osteopathic schools, holding 'osteopathic physicians and surgeons' certificates granted by the California Osteopathic Board of Examiners.

"3. Perhaps in the near future, graduates of sectarian chiropractic schools who would hold 'chiropractic physicians and surgeons' certificates, granted by the California Chiropractic Board of Examiners.

"From the news items in the California Board of Medical Examiners' column in this issue is taken an item which in turn was previously printed in the San Francisco *Call-Bulletin* of August 14, 1931. Readers of *California and Western Medicine* can draw their own conclusions therefrom. The excerpt reads thus:

" 'Move to obtain legislative action which would revoke a surgeon's license in event it could be shown the surgeon performed an unnecessary operation was launched in San Francisco today by the California Chiropractors' Association. Chiropractors are not allowed to practice surgery. According to Dr. Harry C. Bond, president of the organization, seventy-five members voted to draft a measure on the subject for submission to the next legislature.'—San Francisco *Call-Bulletin*, August 14, 1931.

"All the above is here printed in the hope that the component county societies of the California Medical Association will give attention to a subject which is seemingly somewhat important. Let it be remembered that if such legal sanction is once obtained by chiropractic or other sectarian and cultist groups, whereby 'physicians and surgeons' certificates could be granted by their respective boards, that it would then be practically impossible to take away such rights.

"Wherefore it would appear that the time to think and do, is beforehand and not afterward."

CRIPPLED CHILDREN IN NEW JERSEY

The October number of the Journal of the Medical Society of New Jersey contains the following editorial on the care of crippled children:

"The General Assembly of New Jersey, in 1929, passed an Act providing for a Special Commission to make a census of all the crippled children in the state, and in due time all physicians were asked to aid in that task. The profession responded, of course, and as one result of several conferences between the Chairman of the Commission and the Chairman of our Welfare Commission, with the Executive Secretary acting at times as an intermediary, and the State Board of Health coöperating when necessary, a plan was

(*Continued on page* 1547—*Adv. xiv*)

Ways to Compensate for the "DON'TS" ON THE DIABETIC DIET

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WINTER SALAD *(Six Servings)*

	Grams	Prot.	Fat	Carb.	Cal.
2 teaspoons Knox Sparkling Gelatine	4.5	4	..	..	..
¼ cup cold water	..	..	..	..	..
½ cup hot water	..	..	..	..	..
½ teaspoon salt	..	..	..	..	..
¼ cup vinegar	..	..	..	..	..
1½ cups grated cheese	150	43	54	..	..
½ cup chopped stuffed olives	70	1	19	8	..
½ cup chopped celery	60	1	..	2	..
¼ cup chopped green pepper	25	..	..	1	..
½ cup cream, whipped	75	2	30	2	..
Total		51	103	13	1183
One serving		8.5	17	2	197

Soak gelatine in cold water. Bring hot water and salt to boil and dissolve gelatine in it. Add vinegar and set aside to chill. When nearly set, beat until frothy, fold in cheese, olives, celery, pepper and whipped cream. Turn into molds and chill until firm. Unmold on lettuce leaf and serve.

SPANISH CREAM *(Six Servings)*

	Grams	Prot.	Fat	Carb.	Cal.
1 tablespoon Knox Sparkling Gelatine	7	6	..	..	..
¼ cup cold water	..	..	..	..	..
1 cup milk	240	7	10	12	..
¾ cup boiling water	..	..	..	..	..
2 eggs	100	13	10.5	..	..
1½ teaspoons vanilla	..	..	..	..	..
Few grains salt	..	..	..	..	..
Total		26	20.5	12	336.5
One serving		4	3	2	56

Soak gelatine in cold water five minutes. Heat water and milk [illegible] firm.

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TRAINING OFFICE SECRETARIES IN MISSOURI

The Journal of the Missouri State Medical Association for November has the following note on a school for office secretaries:—

"A school for training young women to be efficient office secretaries to physicians has been started in St. Louis. The school is conducted by Miss Mary E. Holliway at 3720 Washington Boulevard. Miss Holliway is eminently fitted to impart this kind of information. She was secretary to Dr. George H. Jones during his eight years of service as secretary of the Missouri State Board of Health. After leaving the State Board of Health Miss Holliway was secretary to Dr. Hanna W. Loeb and is now secretary to Dr. S. B. Westlake. The course offered by Miss Holliway includes, conduct of the waiting room; greeting of patients and types of patients; telephone service to both doctor and patient; economy of the physician's time; clinical instruction in simple conditions; assistance to the physician during examination; care of office equipment; first-aid suggestions; medical terms and dictation of complete case histories in the various specialties; files, accounts, and collections."

GRADUATE EDUCATION IN KENTUCKY

The July issue of the *Kentucky Medical Journal* has the following editorial comment on the Graduate courses in Kentucky:

"The Post-Graduate course, held under the auspices of the Kentucky State Medical Association from June 1st to the 12th, had the largest attendance and was one of the most successful of the summer school that has been conducted by this Association. A faculty of sixty physicians of Louisville gave unstintedly of their time and energy for its success. So appreciative were the doctors attending the school, of the splendid work that was given them, that many requested that they hold night sessions, especially in the laboratory department. Dr. H. V. Noland and fifteen assistants from the laboratory of the State Board of Health during the second week conducted the evening demonstrations at the request of the 28 members registered.

"Dr. P. F. Barbour, Chairman, the Medical Department of the University of Louisville, and the other physicians who gave so generously of their time, are to be congratulated upon the success of this summer school."

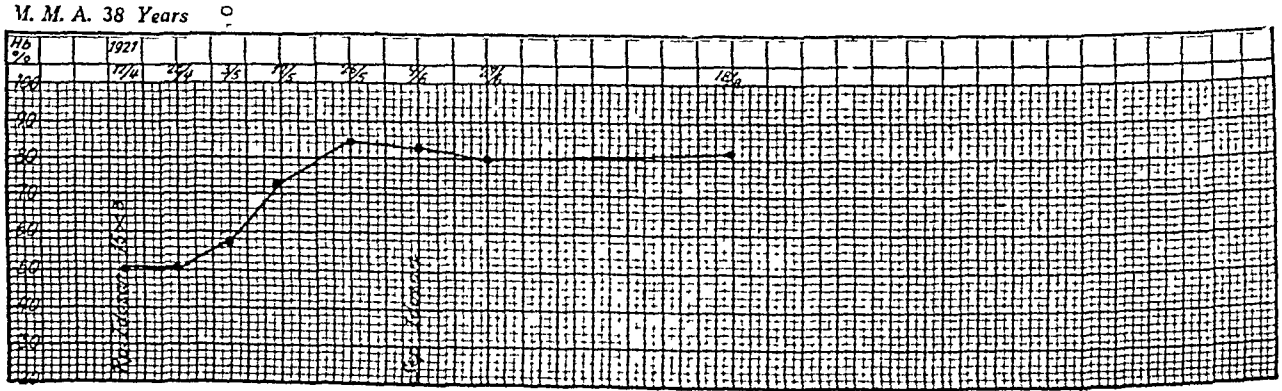
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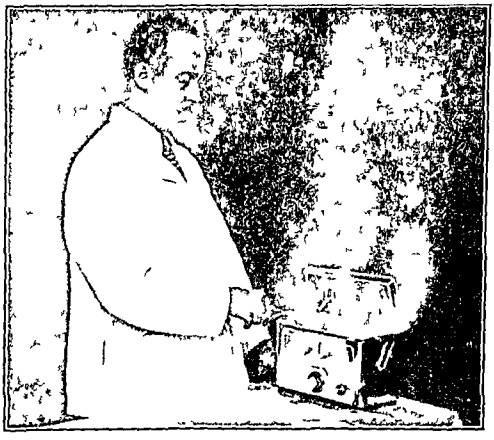
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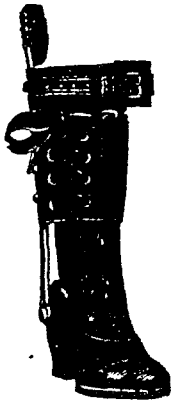
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VITAL STATISTICS IN TEXAS

The United States Registration area consist those states whose statistics on births and de are ninety-five per cent reliable. The August i of the *Texas State Journal of Medicine* has an torial headed, "Texas Vital Statistics Recogniz which says:

"We are pleased to announce to the mec profession of Texas that the United States reau of Census has begun the compilation of birth and death rates for Texas cities. The Te records are now being transcribed. A large f is at work in the health department at Austin it is due to be made much larger in weeks to c This is a development that has been devoutly sired by all who are interested in public he matters. . . . The recognition, while pleasing, ries with it a responsibility that the medical fession of Texas cannot overlook or sidestep."

The reasons for refusing the recognition of vital statistics of Texas is indicated by the clo paragraphs, as follows:

"In the preliminary work that has been d we are informed that 1,176 letters were ma in connection with the reports for the month June. On more than three hundred birth reco the reporting physicians failed to state whe the child was alive or still born. On more t fifty of the reports, there was nothing said al the legitimacy or illegitimacy of the child, as quired, and on other reports such essential in mation as the sex, and date of birth, were omit Of course, statistics of this character are dependable. The reporting physician has sir been careless.

"When the check-up begins on the cause death, it is quite likely that even greater disc ancies than these will be found, in view of uncertainty and the differences of opinion an practicing physicians, as to the proper designa of many diseases or conditions which cause d On one of these reports a doctor stated tha saw his patient June 13, and the patient June 6. Another report has it that a patient from ether narcosis, complicated with ur coupled with the statement that there had be surgical operation. Nothing was said as to character of the operation or the condition re ing it. The inference possible in such a would make the information previously useless.

"It is not the purpose of our editorial to di the problem. We merely desire to broadcas information and urge upon our readers that give special and close attention to the prepar of the data called for by the Bureau of Statistics of the State Department of Health that the reports and the correspondence thereto be expedited."

ANNUAL REGISTRATION IN TEXAS

n editorial in the November number of the *us State Journal of Medicine* contains the lowing comment on Annual Registration.

'or years the State Medical Association has erated closely with the State Board of Medi- Examiners in an effort to see that this very ssary and certainly very fair law is used for purpose for which it was intended, namely, protection of the unsuspecting and credulous ic from imposition by inadequately prepared litioners. The State Board of Medical Ex- ers has been, for the most part, without s, and the State Medical Association has to furnish them money. We have been glad o this. It is simply one channel through h we have passed our money in the protec- of the public health.

'he annual registration law becomes effective ary 1. At that time, each practing physician exas will be expected to register with the Board of Medical Examiners, giving much ed data to that governmental agency and ig $2.00 for the privilege of registering and continuing practice throughout the calendar year. The State Board will compile a list of the legalized practitioners of medicine in this state as it stands each year, and will use the registration fee in paying the expenses incident to the adminstration of the law and bringing into account those who are practicing medicine and who steadfastly refuse to obey the law. If the State Board is to be successful in its endeavors, it must know who is practicing medicine in Texas, both legally and without sanction of the law. Last month we editorially asked our readers to help the State Board in locating all such. County Societies have been asked to furnish the State Board with complete lists of the practitioners in their respective jurisdictions. Quite a bit of information has been secured, but far from enough. We are repeating the appeal.

"Incidentally, the members of the State Medical Association who are required to pay the fee will be out nothing, in view of the fact that the annual dues of the State Medical Association have been reduced in the amount of the fee."

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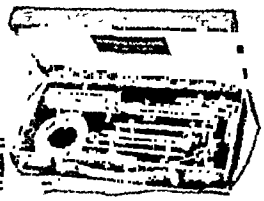
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PUBLIC RELATIONS IN CALIFORN

The November number of *California and We rn Medicine* records the establishment of a D partment of Public Relations as follows:

"At this year's annual session of the Californ Medical Association of San Francisco, the Hou of Delegates, at its meeting of April 30, 19 instructed the Council to take steps to create 'Department of Public Relations.'

"The special committee's report as adopt provided that 'An Advisory Committee of Publ Relations be established, composed of the chai men of the component committees or commi sions on,—*Public Policy and Legislation:* Med cal Economics: Hospitals and Clinics: Healt and Instruction: and the Cancer Commission,'- with the president, secretary, and, general coun sel of the California Medical Association, ex officio.

"It was further voted that an effort be mad to secure the services of a competent colleagu either from California or some other state, wh would be the executive secretary of the depar ment, and who would also act as director of th Department of Public Relations.

"It was further voted 'that the work and re sponsibilities of the present standing committee or commission shall be in no way curtailed, bu that their grouping into the department shall b considered to be for the purpose of increasin their activity and efficiency.'

"It was also voted that the members of th Committee on Public Relations should be calle together at an early day for the purpose of o ganization and of development of the work o this department.

"As soon as this is done, further informati will be given members of the California Medic Association through a Public Relations Depar ment column in the official journal, which colum will probably find a place in the California Med cal Association department of California an Western Medicine."

CHIROPRACTORS IN RHODE ISLAN

The Rhode Island Medical Journal for Nove ber contains the following editorial comment the new chiropractic law:—

"Such chiropractic-physicians shall be entit to the same services of the laboratories of State Public Health Commission as are availa to physicians qualified to practice medicine section 3 of chapter 159 of the general laws, a they shall be subject to the same duties and l bilities and entitled to the same rights in t practice of their profession as may be imposed

(*Continued on page* 1555—*Adv. xxi*)

(*Continued from page* 1554—*Adv* ix)

n by law or regulation upon or to physicians
ther schools, except that they shall not write
criptions for drugs for internal medication
practice major surgery

This is an excerpt from the Public Laws
nding the chiropractic Act and passed in
January Session of 1931 It permits chiro-
tors the same privilege as those granted phy-
ns except the prescribing of drugs for internal
ication and major surgery What constitutes
or surgery is not defined

As the law now stands a candidate for exam-
on for a chiropractic license must have at-
ed an approved school of chiropractic for
2 years of nine months each as a resident
ent The preliminary educational require-
t for entering a chiropractic school is a high
ol or its equivalent The candidate must be
ears of age at the time he applies for exam-
on

The examining Board consists of two physi-
s and a chiropractor The subjects examined
re anatomy, physiology, histology, embry-
y, chemistry, laboratory diagnosis, hygiene
sanitation, philosophy of chiropractic, spinal
analysis, pathology, physical diagnosis, *X*-ray,
first-aid, gynecology and dietetics The law re-
quires that the Public Health Commission must
approve of and sign the license of all candidates
certified as successful by the Board of Examiners
in Chiropractic

"Obviously the examination of candidates in
medical subjects cannot be as rigid as those re-
quired of physicians, for they could not pass them
because of the limited education which they re-
ceive And yet, they are permitted to treat any
kind of illness, to sign death returns and are given
most of the privileges granted physicians From
time to time they will come to the State Legisla-
ture for further privileges as they have already
done

"Even the best trained physicians know little
enough about the diagnosis and treatment of dis-
ease and injury And yet the State sees fit to put
the stamp of approval on those who, because of
the lack of education, know little about disease
and its manifestations This certainly shows
little appreciation on the part of the public offi-
cials of their responsibility for the safeguarding
the health of the individual, and public health in
general"

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NOVEMBER



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PLAN FOR RURAL MEDICAL SERVICE IN KENTUCKY

The November number of the *Kentucky Medical Journal* contains the following news item regarding the action taken by the county societies on rural medical service:

"The Carlisle and Ballard County Medical Societies, believing that adequate medical service in Kentucky should be made available to all of her people, and

"Believing that it is the duty of the State, County and Community to co-operate in providing such needs, and

"Believing that faulty distribution, rather than insufficient numbers of Physicians in the State, constitutes the heart of the problem;

"The Carlisle County Medical Society, and, The Ballard County Medical Society, declares that it is their judgment that:

"(1) Doctors should not be expected to practice Medicine where facilities are such that they cannot render efficient service.

"(2) That Community Hospitals and Group Practice would attract young graduates to locate in rural districts.

"(3) That our Legislature should raise its appropriation to 50 per cent of the cost of Rur Hospitals.

"(4) That County Fiscal Courts can ma appropriations to build and maintain Hospit as well as Court Houses or Public Schools. T health of a County is as vital to the happiness its people as is education or legal processes.

"(5) That Rural Doctors realize the handic under which they work, and should assume t leadership in uncovering the cause, and discov ing the remedy for its relief."

The Journal also prints a leading article on t plan, written by Dr. R. C. Burrow, of Cunnin ham, a member of the committee on medical ser ice from Carlisle County. The doctor sums up report of an investigating committee, as follow

"They call attention to Governor Sampson message to the 1929 session of the General Asse bly, in which he recommends establishing a Sta Medical School, and the subsequent introducti in the House, of a bill for such a school. Th and other suggestions in their pamphlet, leads t to feel that their final solution to the problem state medicine.

(*Continued on page 1557—Adv. xxiii*)

GASTRIC ULCER
Needs More than Neutralization

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(*Continued from page* 1556—*Adv. xxii*)

"The time is short. The Legislature will meet ain very shortly and this pamphlet is propa- nda, getting ready for measures for state medi- ie during the next session." . . . . . "It is up the profession to find something better than ite medicine, and so inform our Legislature fore their next meeting. The scarcity exists, t state medicine will make it worse by driving t the independent doctors.

"I am suggesting Health Units, Group Practice, d *Community Hospitals as the remedy, hoping* it the membership of this society presents it, or nething better, to our state society, so that the ofession will be ready for united action to pre- it state medicine."

After listing the equipment which a young doc- needs (including an electrocardograph), the author says:

"Give the young graduate a chance to join a oup where his outlay for equipment will be ly his proportionate part of the group, and iny will leave the crowded cities, where there one doctor to every three or four hundred ople, and locate in the rural districts, where ere is only one physician to every two thousand people, and where specializing would not be drawn to such narrow limits.

"Community hospitals, with an adequate number of nurses, would figure largely in relieving the scarcity of physicians in rural districts (and the supply of nurses seems to be adequate for all needs.) The hospital should belong to the community, and should not be maintained or operated for profit. Let the group of doctors be required to furnish the equipment as listed above. It matters little how the hospital is built, whether by fiscal appropriation from county or state, or both, or church, or by public subscription. It would be far cheaper on the state to appropriate money for community hospitals, the amount of such appropriation to be matched by an equal sum from the county or community, than it would be for the state to build and finance state medical schools. It would do far more toward furnishing efficient medical service. State medical schools would do but little good toward meeting the issue without the community hospital, but give us community hospitals and it will be a long time before there will be a lack of physicians to run them.

"Carlisle County has one physician to every

(*Continued on page* 1558—*Adv. xxiv*)



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(*Continued from page* 1557—*Adv. xxvii*)

fourteen hundred population, and no one ever suffers for lack of medical attention, unless it is the 'dead-beat.' Those deserving of charity are not allowed to suffer. Give us a hospital, the necessary equipment mentioned above, the help of technicians and nurses, and one doctor can render efficient service to a population of two thousand, and at a price they are able to pay."

POPULAR MEDICAL PUBLICITY IN IOWA

The first report of the special committee on Publicity of the Medical Society of the State of New York (see this Journal, December 1, 1931, page 1469) calls to mind what other State Societies are doing in popular health publicity. The Journal of the Iowa State Medical Society for November, 1931, page 640, contains the following summary of the work of the Speakers' Bureau:

"The Bureau established a new record last month in sending forty-five speakers to thirty-one meetings. This number compares very favorably with that of long established bureaus. In order to keep this comparison favorable, however, we must make this number of talks an average month instead of a record one. To do this, we need help. The Bureau is still a new project in the state. There is a tremendous lot of work to be done in educating the public to secure its health speakers from proper sources. Here is where the individual physician, the county medical society, and the woman's auxiliary can be of infinite value to us. Let people know that the Iowa State Medical Society maintains a Speakers' Bureau, and that the list of speakers is carefully selected and kept up to a certain definite standard. Only part of this can be done by correspondence. Repetition of this information will make the Bureau a familiar name to the public. We are anxious to reach the schools, service clubs, luncheon clubs, women's clubs, Y. M. C. A., Y. W. C. A., and Farm Bureaus, in every locality in Iowa. This lay education program is one of the most important activities in the state society and is fundamental to the success of many others.

"The Bureau is always anxious to promote programs among the county medical societies. With the beginning of the fall programs, there are being presented many new interesting and valuable facts gleaned from the study during the summer months. The county medical society secretaries are urged to send in the names of any of their members who have presented especially good papers which should be shared and enjoyed by the members of other societies. Now is a good time to schedule competitive exchange programs between county medical societies of similar size."

ANNUAL REGISTRATION IN COLORADO

The November issue of Colorado Medicine eports the appointment of a special committee a annual registration, as follows:—

"Considerable discussion of the annual regis- ation fee law in the House of Delegates at e Colorado Springs meeting resulted in crea- on of a new special committe for this year, e Committee on Investigation of the State egistration Fee. In the creation of this com- ittee it was directed that a thorough study the annual registration plan be made, both regards its comparatively recent establish- ent in Colorado by the 1929 legislature, and ncerning its operation, successful or other- ise, in such other states as have similar laws.

"The committee is asking that it be given e help and cooperation of every member of e Society in the collection of such informa- on, so that the committee may be accurately formed as to the operation of the law in all rts of the state."

The article also contains the text of the gistration law passed in 1929. The annual e is two dollars, and is to be deposited in a ecial fund known as the "Medical Board egistration Fund," from which disbursements e to be made by the proper officers of the ate Board of Medical Examiners. The article es not state the purposes for which the fund ay be used.

INANCES OF THE MEDICAL SOCIETY OF PENNSYLVANIA

The annual reports of the officers and committees of the Medical Society of the State of ennsylvania are printed in the September num- r of the Journal of the Society The principal ems may be summarized as follows:

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Annual session (exhibits).....	4,159 50
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Journal	$21,250 97
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Editor's Salary	2,500 00
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Secretary's salary	3,500 00
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ECONOMICS IN ARKANSAS

The economic status of Arkansas doctors is discussed on the President's page of the November Journal of the Arkansas Medical Society by Dr. D. A. Rhinehart is follows:—

"When asked about his practice, a physician from one of the smaller towns of the State said that the last he had was fine. Others, when asked the same question, have most often replied that the business of practicing medicine has gone on about as usual, but that the financial remuneration is considerably below average.

"In traveling over the State I find few signs of bad effects of the flood, the drought, or the industrial depression. In an agricultural district there is little unemployment during a crop-growing period. Arkansas certainly has been blessed with one of the best feed and food-growing seasons ever experienced. There is an abundance of produce of all kinds.

"In the immediate future in Arkansas, people will have plenty to eat, but there will be little money to pay for pleasures, luxuries, and unusual expenses such as medical care. The economic status of physicians is, on the average, the same as that of the communities in which they live and practice. During the coming year, in most parts of the State, physicians may expect as many calls as usual for their services, but they must not expect so great a monetary return. Such money as they receive must be expected from those financially in better circumstances than the average and from those whose income is from various sources."

MEDICAL EDITORSHIP IN NEBRASKA

An editor's work is the same in Nebraska as in New York, as is shown by the following editorial in the December issue of the *Nebraska State Medical Journal:*

"This number completes Vol. XVI of the *Nebraska State Medical Journal* and the editor leaves it to the reader to say whether t *Journal* is worth while. An edito has his ideas and his conceit about the work he does on a jour nal. This editor has long sinc learned that one cannot expect ap plause from the medical reade The profession takes a lot fo granted and as long as the reade sees nothing special to kick abou he says nothing audibly withi hearing of the editor, leaving hir to form his own conclusions.

"This editor likes state medica journalism, he gives the best h has to the work and he hopes th reader likes the resultant produc He pleads for continued and in creasing cooperation of the profes sion and welcomes suggestions an constructive criticism."

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COLORADO LOOKS AT NEW YORK

The October number of *Colo rado Medicine* has this to sa about a chiropractor on Lon Island:

"Chiropractic took a hard slug ging in a Jamaica, L. I., court la week. William H. Werner, pres dent of the American Bureau c Chiropractic, was on trial fc practicing medicine without a l cense. His income from chir practic treatments and teachin was figured to be $70,000 a yea Some 200 of his patients, who b lieved him a martyr, jammed int the courtroom where they cause so much disturbance that the tri judges had them ejected.

"Chiropractor Werner was martyr to his cause in one sens Regular medicine, including hon eopathy, uses drugs, surger physical therapeutics, every po sible means to prevent and cur disease. Chiropractic in essenc believes that spinal manipulatio (one form of physical therapy) sufficient to prevent and cure.

"In New York when rich Wi liam H. Werner, doctor of chir practic, treats the sick for pay, h has no more legal standing tha a Pennsylvania 'hexer.' He trie to harangue the judges on chir practic. They squelched him an sentenced him to six months in th workhouse."